



Switching & Controls

► Catalogue

OUR COMMITMENT MAKES THE DIFFERENCE ►

BACO[®]

Baco fully committed into the future

A Key player on the market for control and signalling units, cam switches and switch disconnectors, Baco is recognized for its professional expertise and compliance with safety standards. Baco is committed to a quality charter based on the quality and reliability of its numerous and flexible solutions.

CONTROL AND SIGNALLING UNITS

► **A wide range**

- Excellent modularity for a large choice of combinations with a minimum number of items
- Customised products to meet the most specific needs



CAM SWITCHES

► **A reference on the market**

- A worldwide reputation of know-how for more than 50 years
- A range from 10 to 250 A (panel mount or enclosed)
- More than 50,000 different electrical diagrams available
- Numerous specific functions and special engravings



SWITCH DISCONNECTORS

► **Great flexibility in use**

- Compactness
- Infinite number of combinations for customised applications
- Reversible terminal blocks for front or rear mounting saving valuable time during installation



THE BACO QUALITY REQUIREMENT

Our products have a 10-year guarantee and are exceptionally reliable, that is why they are ideal for integration into systems that do not tolerate any failure (military, aeronautical, space exploration, medical research equipment, etc.). Moreover, BACO product ranges offer ingenious and reliable solutions that are fast and easy to implement.

That's why Baco is now providing a 10-year guarantee on all products. This guarantee strengthens the assurance of having a solid and committed brand by your side. With Baco, you can be sure that you have made the right choice.



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NZ11GXQ		165	Q91		265	WE45		281	172199	222239	309	174249	222269	315
NZ13GQ1		171	Q91		283	WE47		281	172199	222239	312	174259	222271	309
NZ13GXQ		172	Q93		265	WE60		281	172199	222239	315	174259	222271	312
NZ51BQ1		176	Q93		283	WE61		281	172200	222140	310	174259	222271	315
NZ51BXQ		176	Q95		265	WE63		281	172201	222104	295	174261	222120	305
NZ52BQ1		182	Q95		283	WE65		281	172202	222124	296	174269	222273	309
NZ52BXQ		182	Q96		283	WE67		281	172221	222114	295	174269	222273	312
NZ52CQ1		182	Q96GC60		264	WE70		281	172261	222174	299	174269	222273	315
NZ52CXQ		182	Q96GN60		264	WE71		281	172265	222214	310	174301	222167	301
PC50		280	Q98		265	WE73		281	172267	222270	309	174302	222191	302
PC51		266	SB01AQ1		136	WE75		281	172267	222270	312	174305	222198	304
PC51		280	SB01AXQ		137	WE77		281	172267	222270	315	174361	222121	305
PC53		266	SB02AQ1	227406	136	WE90		281	172275	222204	310	174399	222243	308
PC53		280	SB02AXQ		137	WE91		281	172277	222272	309	174401	222168	301
PC60		280	SB03AQ1	227407	136	WE93		281	172277	222272	312	174402	222192	302
PC61		266	SB03AXQ		137	WE95		281	172277	222272	315	174405	222199	304
PC61		280	SB03EQ1	227592	136	WR01		269	172300	222150	310	174449	222299	309
PC63		266	SB04AQ1	227408	136	WR02		269	172301	222105	295	174461	222128	305
PC63		280	SB04AXQ		137	WR03		269	172302	222125	296	174501	222169	301
PCD50		280	SB04EQ1	227593	136	WR04		269	172321	222115	295	174502	222193	302
PCD51		280	SC01GQ1	227435	149	ZB01AQ7	227415	138	172361	222175	299	174505	222200	304
PCD53		280	SC01GXQ		150	ZB01AXQ		138	172365	222215	310	174559	222285	309
PCD60		280	SC02GQ1		149	ZB02AQ7		138	172367	222233	312	174561	222129	304
PCD61		280	SC02GXQ		150	ZB02AXQ		138	172375	222205	310	174569	222286	309
PCD63		280	SC03GQ1		149	ZB03AQ7	227417	138	172377	222236	312	174599	222284	309
PN50		279	SC03GXQ		150	ZB03AXQ		138	172385	222223	310	174601	222255	307
PN51		266	SC04GQ1	227438	149	ZB03EQ7	227596	138	172395	222226	310	174601	222255	311
PN51		279	SC04GXQ		150	ZB04AQ7	227418	138	172399	222242	308	174621	222257	314
PN53		266	SC51DQ1		158	ZB04AXQ		138	172400	222170	313	174901	222163	300
PN53		279	SC51DXQ		159	ZC01GQ7		151	172401	222106	295			
PND50		279	SC52DQ1		158	ZC01GXQ		152	172402	222126	296			
PND51		279	SC52DXQ		159</									

Heads, blocks and connection...

designed to last!



LOCKING RING

► HEAD

“Cleverly designed to be both ergonomic and clearly visible”

- Insulating material ensures electrical safety
- Integrated anti-rotation tab
- Legend holder frame keeps IP 66 + IP 69K protection
- Optimised ergonomic design
- Choice of bezels: black or chrome plastic
- Innovative and varied functions
- Optimised dimensions

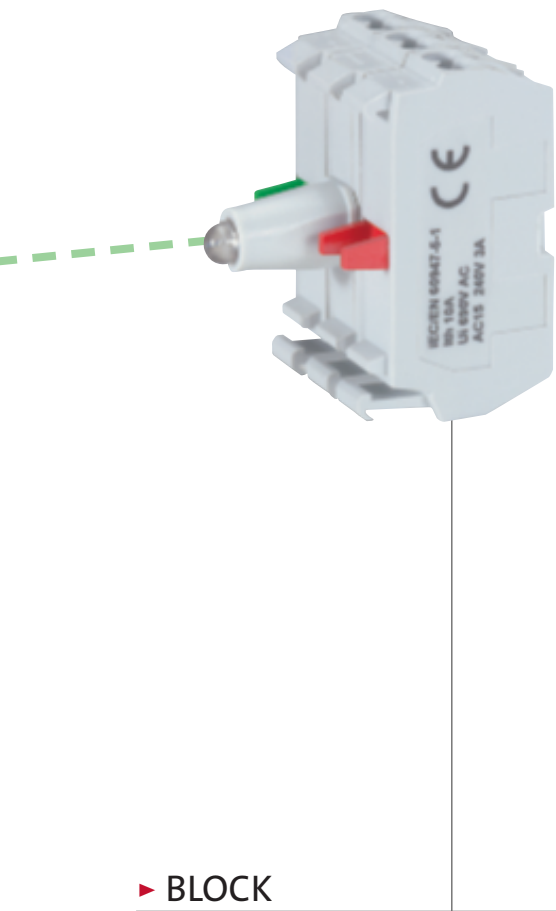
See pages 23 to 50

► CLIP

*“Flexibility of configuration: 1, 3 or 5 position clips
Contact blocks can be assembled in any order...”*

- Enhanced rigidity
- For 1, 3 and 5 blocks
- Blocks are simply snapped onto the clip

See page 69



► **BLOCK**

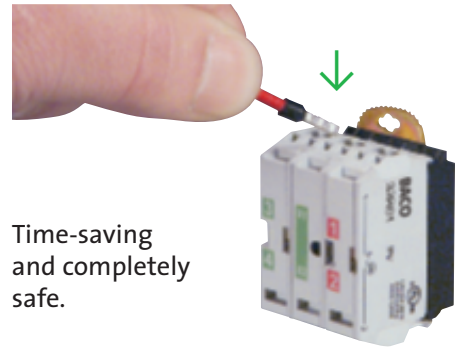
“Imaginatively designed to be safe, robust and durable”

- Securely fixed by clipping into place
- Stackable
- Grade protection: IP 20 as “finger safe” on screw and plug-in terminals
- Electrical insulation
- LED blocks combining long life and economy (100,000 hours)
- Corrosion resistant to some chemicals and sea air, etc
- Conform to standard EN/IEC 60947-5-1
- Compliant with RoHS European directive (concerning restriction of hazardous substances)

See pages 52 to 68

► **CONNECTION**

PLUG-IN TERMINALS

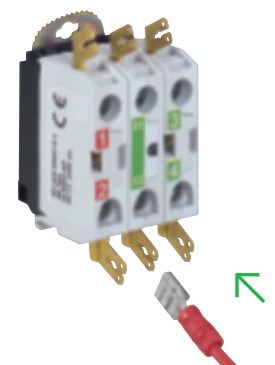


Time-saving and completely safe.

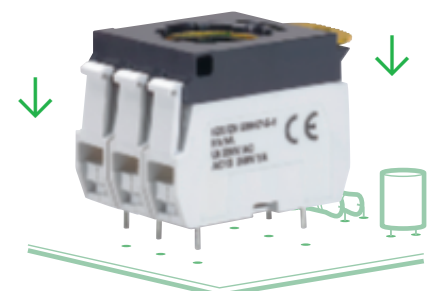
SCREW TERMINALS



FASTON TERMINALS



PIN STYLE TERMINALS (FOR PCB)



New heads...

robust and clearly marked!



► ADVANTAGES

We're full of innovative ideas from listening to your needs, and watching you work

- On all heads, rotation is prevented by a tab which retracts when not required
- Insulating material ensures electrical safety
- Design and shape help avoid build-up of dirt and make the switch easy to clean
- ISO 13850 illuminated mushroom head with yellow collar for side-on visual indication
- Optimised ergonomic design
- Innovative functions: illuminated emergency stop mushroom head, etc
- Optimised dimensions: low-profile heads

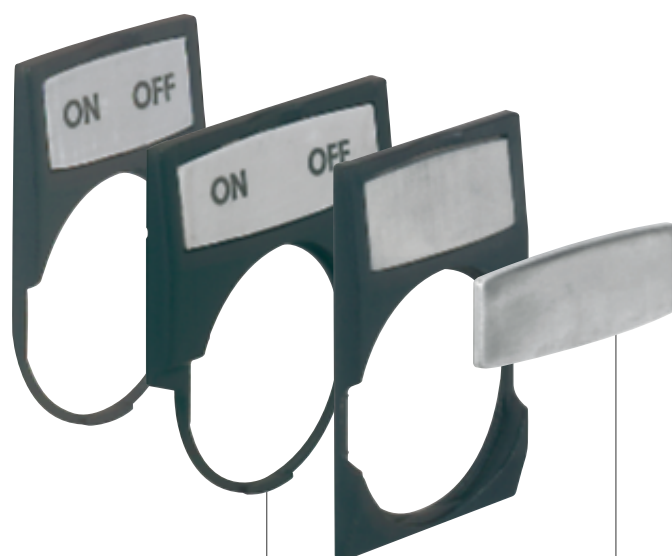
► **MARKING WITH LEGENDS**

- Frame can be turned to 4 positions (0° ; 90° ; 180° and 270°)
- Special legend plate for double touch
- Legend plates: choice between 5 colours, blank or pre-engraved



Bezels

Choice between:
black or chrome



Frame

round or square shape,
30 or 40 mm wide

Legend plate

can be clipped into
place after installation

Engraving

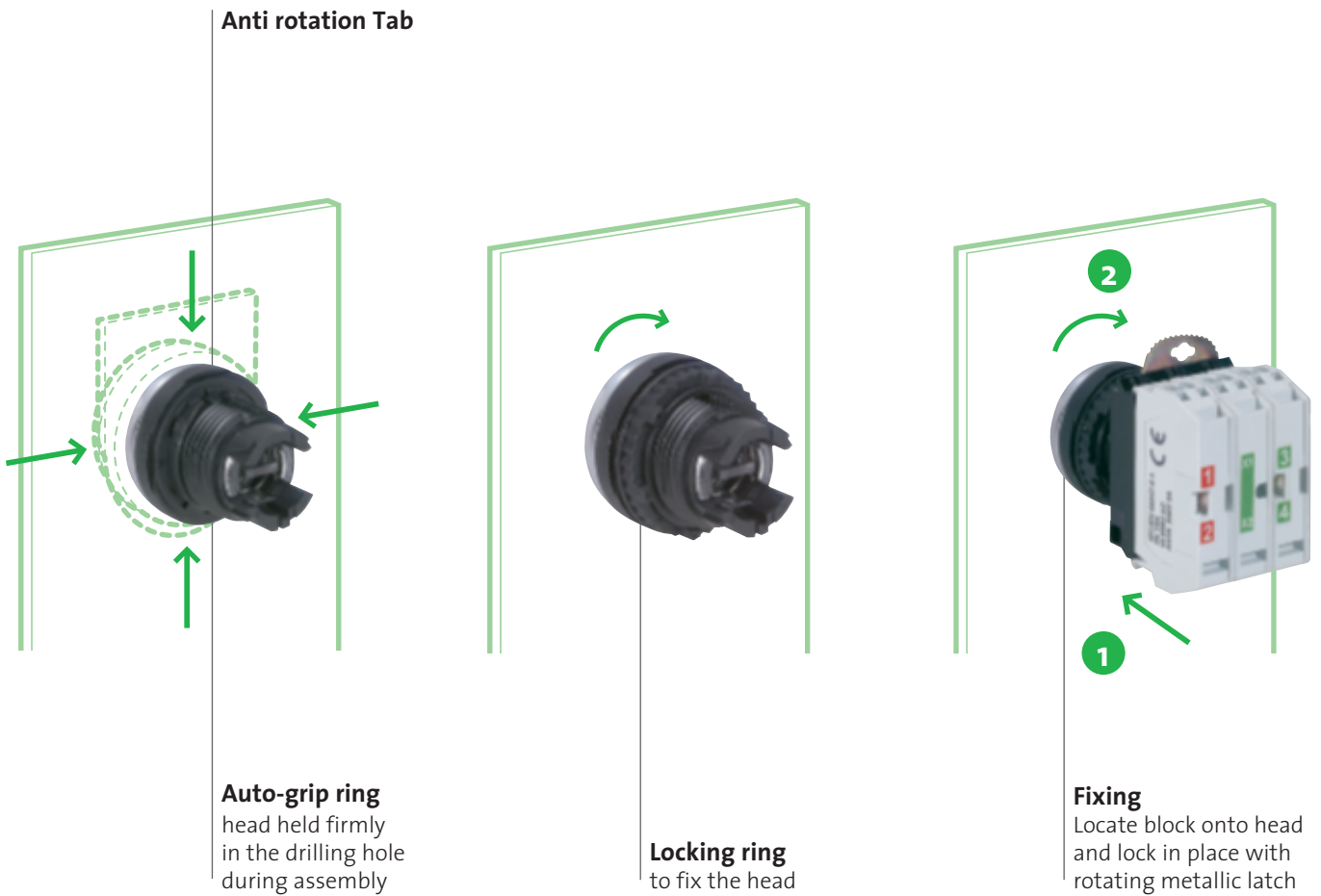
Button plate can be mounted in
4 positions (0° ; 90° ; 180° and 270°)

► **READY-ASSEMBLED CONTROL STATION**

- Innovative design
 - 1, 2 or 3 buttons
- See page 86



Simplicity, speed, choice!



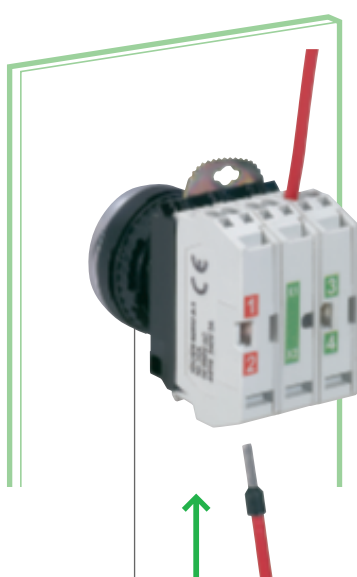
► ADVANTAGES

Our objective is to simplify and shorten time of installation:

- Head held firmly in place by auto-grip ring, allows single-hand mounting
- Foolproof method of positioning the block sub-assembly correctly on the head
- Rotating metallic latch easily accessible with a screwdriver where space is limited
- Anti rotation tab to be aligned with notch of panel cut-out (p. 95), retracts when not required

Method for tightening the locking ring:

Tightening torque: 3 Nm or tightened with fixing tool (p. 82) to hand tight after pressure point plus another half turn.



Quick connection

No tool required for wires with ferrules.
New plug-in terminals

► CONFIGURATIONS

“A range designed to meet adapt to all requirements and all situations”

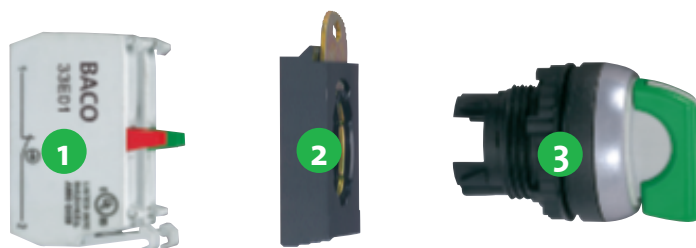
COMPLETE UNITS

- Control and signalling units are supplied ready for use with head and pre-assembled block/clip
- A single product code provides a solution for the most common needs



SEPARATE UNITS

- Maximum flexibility
- For numerous possible solutions



CUSTOMISED SOLUTIONS (request form p. 83)

- Custom assemblies to suit your needs
- The Baco response for specific requirements: pre-assembly, aesthetic design, engraving, etc

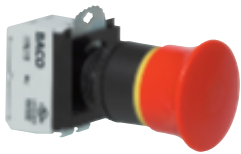


Products for industrial environments

► BACO PROVIDES SOLUTIONS FOR HARSH INDUSTRIAL ENVIRONMENTS

BACO push buttons Ø 22mm are available in plastic bodies and can be fitted with an external shroud to protect against liquid and dust ingress into the head itself.

All front elements are rated to a minimum IP 66 environmental rating, protecting against high seas, sprayed water and dirt. Many standard operators have more stringent IP 67 and IP 69K ratings, protecting from submersion and high-pressure/high-temperature wash down environments.



IP 66 - IP 69K E-Stops



IP 66 - IP 69K operators



IP 66 - IP 69K selectors



IP 66 - IP 69K pilot devices



► ACCESSORIES TO PERFORM

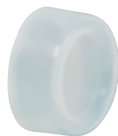
BACO Ø 22mm control and signalling devices can be equipped with protective shrouds which guarantee a degree of protection to IP 67 shrouds prevent ingress of water and dust.



Shrouds for Twin touch operator



Shrouds for projected operator



Shrouds for flush operator



IP 67 Shrouded Twin touch operator



IP 67 Shrouded projected operator

BACO operators to meet the needs of industries such as:

- | | |
|-------------------|-------------------------|
| Outdoor Machinery | Trucking/Transportation |
| Food processing | Mobile Machines |
| Pharmaceutical | Material Handling |
| Petrochemical | Marine |
| Waste Treatment | Metal Forming |
| Bottling | Mining |
| Car Wash Centers | Oil & Gas |

Degree of ingress protection

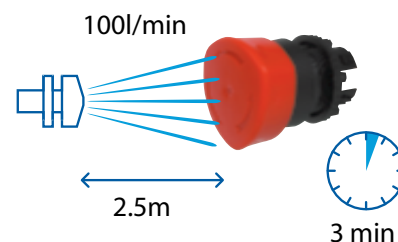
► WHAT IS THE MEANING OF IP 66/67/69K PROTECTION DEGREE?

IP 66/IP 67 protection degrees are degrees of protection provided by the standard (respectively against strong water jets and temporary water immersion). BACO has introduced on its products IP 69K protection degree (against water jets with high temperature and pressure), to offer the maximum achievable and testable performances, fulfilling more strict standards.

Illuminated or non-illuminated, momentary or maintained action pushbuttons, selector switches, emergency stop buttons and pilot devices for harsh environments, sealed to IP 67 or IP 69K when manufactured after week 36_2015.

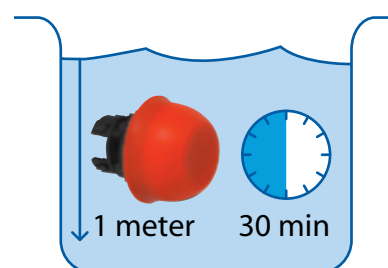
► WATERPROOF ACCORDING TO IP 66

BACO's control & pilot devices are protected from total dust ingress. Protected from high pressure water jets from any direction too.



► WATERPROOF ACCORDING TO IP 67

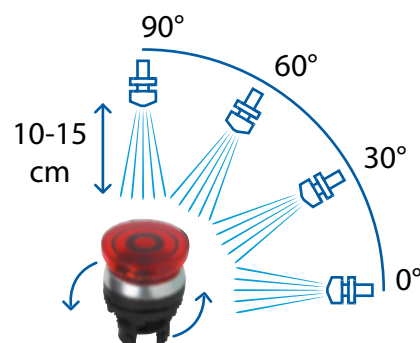
BACO's control & pilot devices are perfect for tough environments where a waterproof enclosure is required. Shrouded modular devices are approved according to IP 67. The products are protected against the effects of temporary immersion in water, one meter down, for up to 30 minutes.



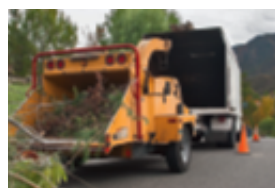
► TOUGH AND ROBUST ACCORDING TO IP 69K

The IP 69K certification was initially developed for applications that need regular intensive cleaning (dump trucks, cement mixers, etc.).

BACO's control devices are certified according to IP 69K meaning you do not have to worry about treating them rough. Spray them with water or leave them out in the snow. They will stay reliable and functional.



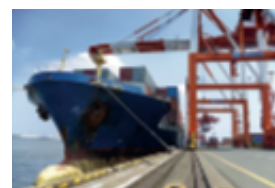
Industrial vehicles



Outdoor machinery



Mining



Marine

Complete units: Push-buttons \varnothing 22

IP 66 - IP 69K
 Complete units consisting of:
 - head
 - clip and screw electrical blocks assembled
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

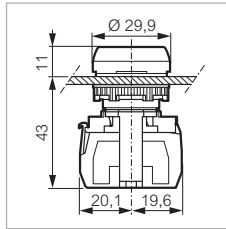
► SPRING RETURN - NON ILLUMINATED

FLUSH

Cat. No.

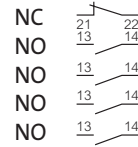


L21AA02A



Without engraving

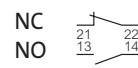
- Red
- Green
- Black
- Yellow
- Blue



- L21AA01B**
- L21AA02A**
- L21AA03A**
- L21AA04C**
- L21AA06A**

With engraving

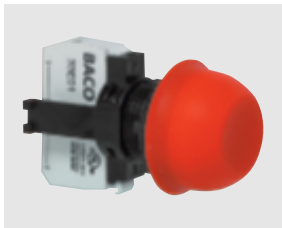
- Red
- Green



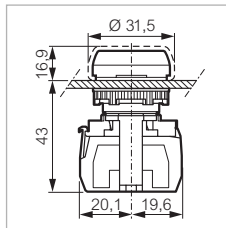
- L21AA81B**
- L21AA82B**

FLUSH

Reinforced degree of protection: IP 67

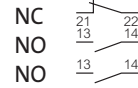


L22AF01A



Supplied with opaque shroud

- Red
- Green
- Black

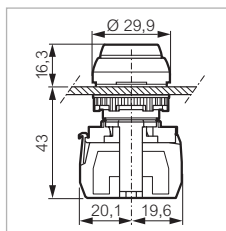


- L22AF01A**
- L22AF02A**
- L22AF03A**

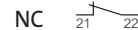
PROJECTING



L21AB01A



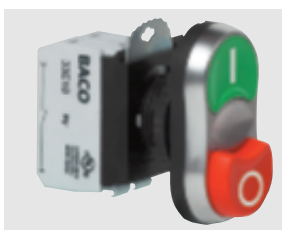
- Red



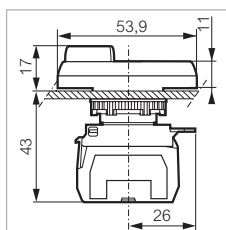
- L21AB01A**

FLUSH-PROJECTING

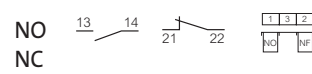
Double touch - degree of protection: IP 66



L61QB21A



- Green - Flush
- Red - Projecting



- L61QB21A**

Complete units: Selector switches \varnothing 22

IP 66 - IP 69K
 Complete units consisting of:
 - head
 - clip and screw electrical blocks assembled
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1

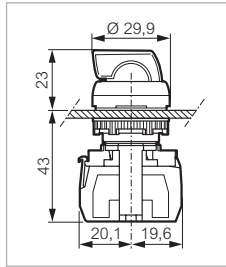
 Characteristics (p. 98)

▶ SELECTOR SWITCHES - NON ILLUMINATED

WITH HANDLE

2 positions

Cat. No.



Stay-put positions - 90°

● Black



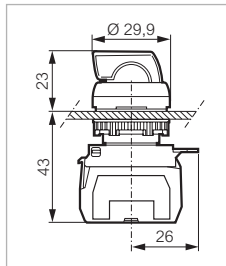
L21KE03B

L21KE03B

WITH HANDLE

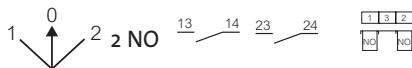
3 positions

Cat. No.



Stay-put positions - 45°

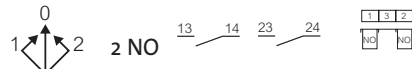
● Black



L21MA03A

Spring return to 0 - 45°

● Black



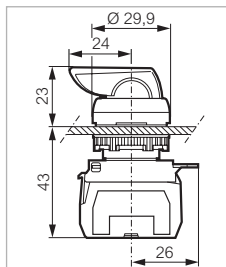
L21MD03A

L21MA03A

WITH LONG HANDLE

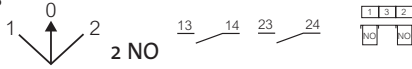
3 positions

Cat. No.



Stay-put positions - 45°

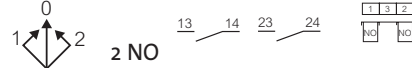
● Black



L21MR03A

Spring return to 0 - 45°

● Black



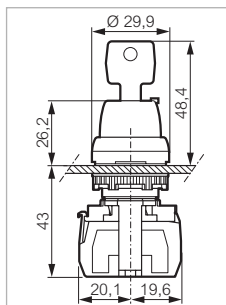
L21MU03B

L21MR03A

WITH KEY

2 positions

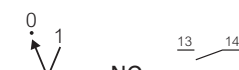
Cat. No.



Supplied with 2 keys profile n° 455

Stay-put positions - 45°

Key free
in position 0



L21LA00G

L21LA00G

Complete units: Mushroom heads \varnothing 22

IP 66 - IP 69K
 Complete units consisting of:
 - head
 - clip and screw electrical blocks assembled
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► MUSHROOM HEADS - NON ILLUMINATED

\varnothing 40 - SPRING RETURN

Push

Cat. No.



L21AD01C

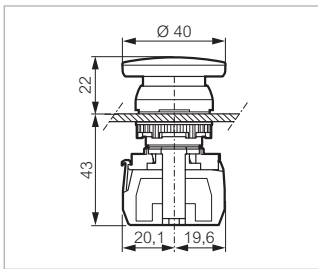
Plastic chrome bezel
 Black bezel on request (form p. 83)

● Red

NC



L21AD01C



\varnothing 40 - STAY-PUT

Push-turn to reset

Cat. No.



L22ED01D

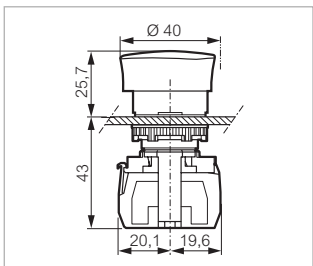
Black bezel

● Red

NC



L22ED01D



Complete units: Mushroom heads \varnothing 22

IP 66 - IP 69K
 Complete units consisting of:
 - head
 - clip and screw electrical blocks assembled
 Plastic black bezel
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► MUSHROOM HEADS - NON ILLUMINATED (CONTINUED)


\varnothing 40 - STAY-PUT

Push-pull to reset

Cat. No.

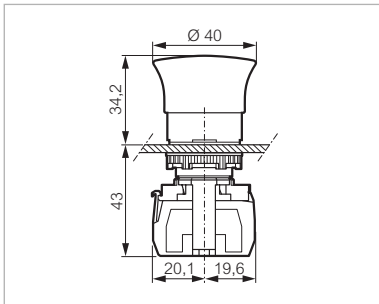


● Red

NC 

L22DD01A

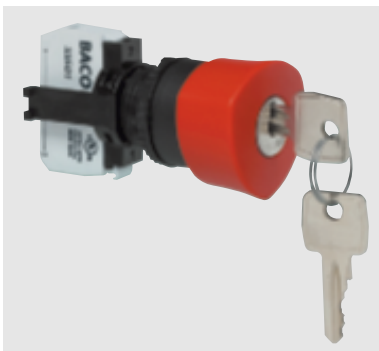
L22DD01A



\varnothing 40 - STAY-PUT


Key to reset

Cat. No.



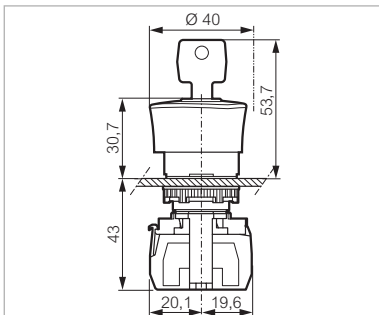
Supplied with 2 keys profile n°455

● Red

NC 

L22GM01E

L22GM01E



Complete units: Mushroom heads \varnothing 22

IP 66 - IP 69K
 Complete units consisting of:
 - head
 - clip and screw electrical blocks assembled
 Plastic black bezel
 Conform to IEC 60947-5-1



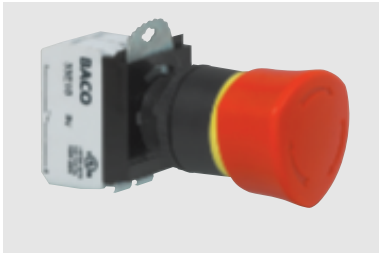
Characteristics (p. 98)

► ISO 13850 EMERGENCY STOP - NON ILLUMINATED

\varnothing 40 ISO 13850 - STAY-PUT

Push-turn to reset

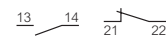
Cat. No.



L22ER01D

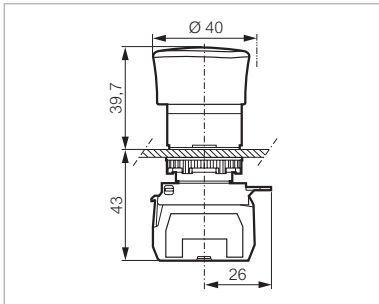
Head position visible from the side with yellow collar
 Compliant with the requirements of emergency stop:
 IEC 60947-5-5 / ISO 13850

● Red

NO + NC 



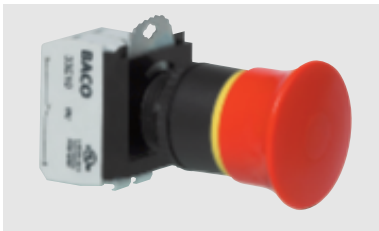
L22ER01D



\varnothing 40 ISO 13850 - STAY-PUT

Push-pull to reset

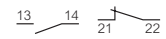
Cat. No.



L22DR01B

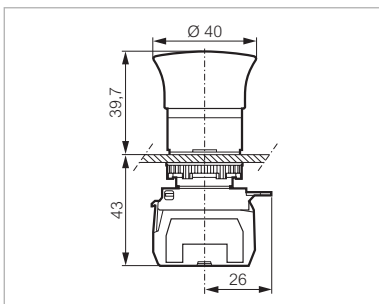
Head position visible from the side with yellow collar
 Compliant with the requirements of emergency stop:
 IEC 60947-5-5 / ISO 13850

● Red

NO + NC 



L22DR01B



Complete units: Mushroom heads \varnothing 22

IP 66 - IP 69K
 Complete units consisting of:
 - head
 - clip and screw electrical blocks assembled
 Plastic black bezel
 Conform to IEC 60947-5-1



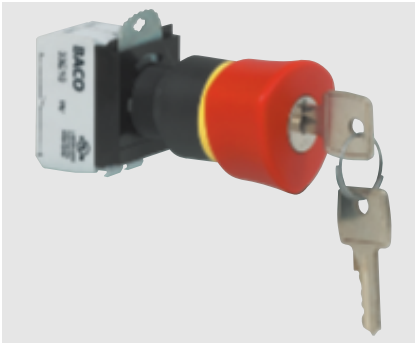
Characteristics (p. 98)

► ISO 13850 EMERGENCY STOP - NON ILLUMINATED

Ø 40 ISO 13850 - STAY-PUT

Key to reset

Cat. No.

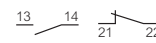


L22GR01B

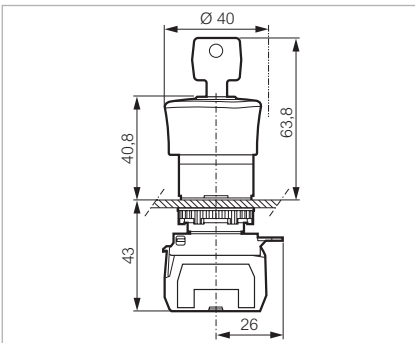
Double position indicator: head and collar
 Compliant with the requirements of emergency stop:
 IEC 60947-5-5 / ISO 13850
 Supplied with 2 keys profile n°455

● Red

NO + NC



L22GR01B



Ø 54 ISO 13850 - STAY-PUT

Push-pull to reset with flag indicator

Cat. No.



L22DU01G

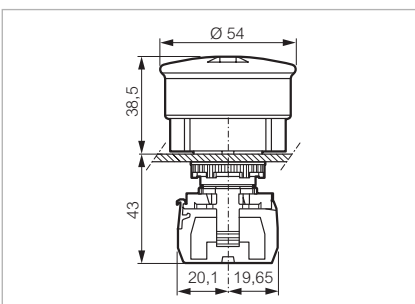
Double position indicator: head and collar
 Compliant with the requirements of emergency stop:
 IEC 60947-5-5 / ISO 13850
 Flag indicator: Engraving STOP and I

● Red

NC



L22DU01G



Complete units: Pushbuttons \varnothing 22

IP 66 - IP 69K
 Complete units consisting of:
 - head
 - clip and screw electrical blocks assembled
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

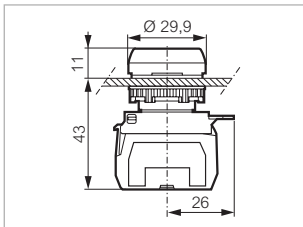
► SPRING RETURN - ILLUMINATED

FLUSH

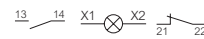
Cat. No.



L21AH20L



LED blocks



24V

- Red
- Green
- Yellow
- White
- Blue

NO+NC
 NO+NC
 NO+NC
 NO+NC
 NO+NC

L21AH10L
L21AH20L
L21AH40L
L21AH50L
L21AH60L

130 V

- Red
- Green

NO+NC
 NO+NC

L21AH10M
L21AH20M

230 V

- Red
- Green

NO+NC
 NO+NC

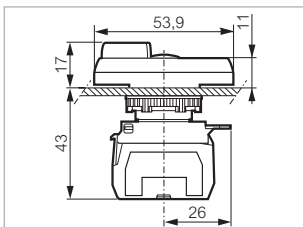
L21AH10H
L21AH20H

TWIN TOUCH - FLUSH-PROJECTING

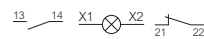
Degree of protection: IP 66



L61QK21H



LED blocks
 Central part illuminated



24 V

- Green
- Red

NO
 NC

L61QK21L

130 V

- Green
- Red

NO
 NC

L61QK21M

230 V

- Green
- Red

NO
 NC

L61QK21H

Complete units: Selector switches \varnothing 22

IP 66 - IP 69K
 Complete units consisting of:
 - head
 - clip and screw electrical blocks assembled
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

▶ SELECTOR SWITCHES - ILLUMINATED

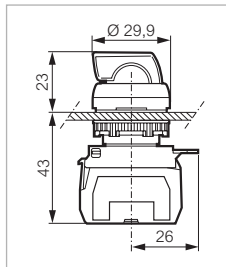
WITH HANDLE

2 positions

Cat. No.



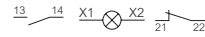
L21KG10C



LED blocks

Stay-put positions - 45°
 24 V

- Red
- Green
- Black



NO + NC
 NO + NC
 NO + NC



L21KG10C
L21KG20E
L21KG30B

Complete units: Pilot lights \varnothing 22

IP 66 - IP 69K
 Complete units consisting of:
 - head
 - clip and screw electrical blocks assembled
 Conform to IEC 60947-5-1



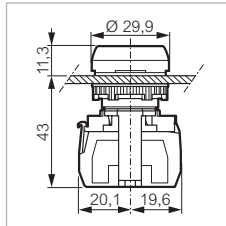
Characteristics (p. 98)

▶ PILOT LIGHTS

Cat. No.



L20SE20L



LED blocks



24 V

- Red
- Green
- Yellow
- White
- Blue

L20SE10L
L20SE20L
L20SE40L
L20SE50L
L20SE60L

130 V

- Red
- Green
- Yellow
- White
- Blue

L20SE10M
L20SE20M
L20SE40M
L20SE50M
L20SE60M

230V

- Red
- Green
- Yellow
- White
- Blue

L20SE10H
L20SE20H
L20SE40H
L20SE50H
L20SE60H

One-piece pilot lights (p. 49-50)

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 Equipped with a locking ring
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

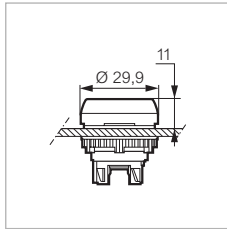
► PUSH-BUTTONS - NON ILLUMINATED

SPRING RETURN - FLUSH

Cat. No.



L21AA02



Without engraving

- Red
- Green
- Black
- Yellow
- White
- Blue

- L21AA01**
- L21AA02**
- L21AA03**
- L21AA04**
- L21AA05**
- L21AA06**

With engraving

- ⊙ Red
- ⊓ Green
- ⊓ Black

- L21AA81**
- L21AA82**
- L21AA83**

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- Red
- Green
- Black
- Yellow
- White
- Blue

- L21AA31**□□□□
- L21AA32**□□□□
- L21AA33**□□□□
- L21AA34**□□□□
- L21AA35**□□□□
- L21AA36**□□□□

(Other colours and engraving: fill in the form p. 83)

Without button plate

L21AA00

Button plates (see p. 78)



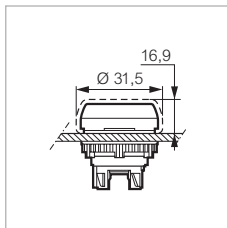
L21AA00

SPRING RETURN - FLUSH

Reinforced degree of protection: IP 67



L22AF01



Supplied with shroud

Opaque

- Red
- Green
- Black

- L22AF01**
- L22AF02**
- L22AF03**

Transparent

- Yellow
- White
- Blue

- L22AG04**
- L22AG05**
- L22AG06**

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 Equipped with a locking ring
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► PUSH-BUTTONS - NON ILLUMINATED (CONTINUED)

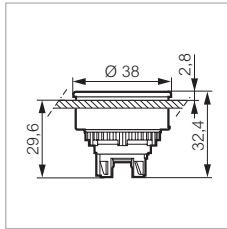
SPRING RETURN - SUPER FLUSH

Degree of protection: IP 66

Cat. No.



L23AA02



Metallic chrome bezel
 Cut-out \varnothing 30,5 mm

Without engraving

- Red
- Green
- Black
- Yellow
- White
- Blue

- L23AA01**
- L23AA02**
- L23AA03**
- L23AA04
- L23AA05
- L23AA06

With engraving

- ⊙ Red
- ⊓ Green

- L23AA81
- L23AA82

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- Red
- Green
- Black
- Yellow
- White
- Blue

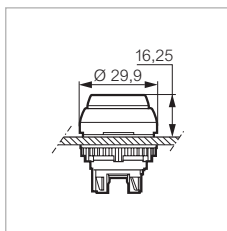
- L23AA31
- L23AA32
- L23AA33
- L23AA34
- L23AA35
- L23AA36

(Other colours and engraving: fill in the form p. 83)

SPRING RETURN - PROJECTING



L21AB01



- Red
- Green
- Black
- Yellow
- White
- Blue

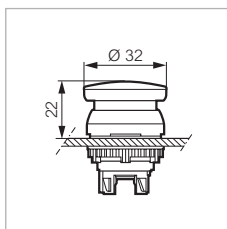
- L21AB01**
- L21AB02**
- L21AB03**
- L21AB04**
- L21AB05**
- L21AB06**

SPRING RETURN - MUSHROOM HEAD \varnothing 32

Push



L21AC03



- Red
- Green
- Black
- Yellow

- L21AC01**
- L21AC02**
- L21AC03**
- L21AC04

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 Equipped with a locking ring
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



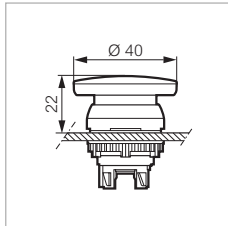
Characteristics (p. 98)

► PUSH-BUTTONS - NON ILLUMINATED (CONTINUED)

SPRING RETURN - MUSHROOM HEAD \varnothing 40

Push

Cat. No.



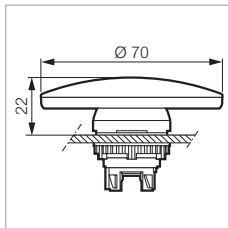
- Red
- Green
- Black
- Yellow
- Blue

- L21AD01**
- L21AD02**
- L21AD03**
- L21AD04**
- L21AD06**

L21AD01

SPRING RETURN - MUSHROOM HEAD \varnothing 70

Push



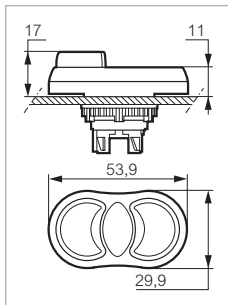
- Red
- Black

- L21AE01**
- L21AE03**

L21AE03

SPRING RETURN - FLUSH-PROJECTING

Double touch - degree of protection: IP 66



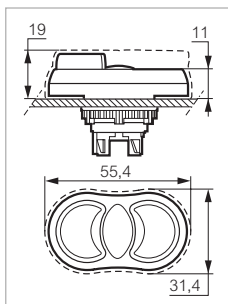
- Green
- Red
- Green engraving START
- Red engraving STOP

- L61QB21**
- L61QB21B**

L61QB21

SPRING RETURN - FLUSH-PROJECTING

Double touch - reinforced degree of protection: IP 67



Supplied with transparent shroud

- Green
- Red

- L62QM21**

L62QM21

Catalogue No. in bold: normally in stock at distribution outlets

Separate units ø 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 Equipped with a locking ring
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1

 Characteristics (p. 98)

► PUSH-BUTTONS - NON ILLUMINATED (CONTINUED)

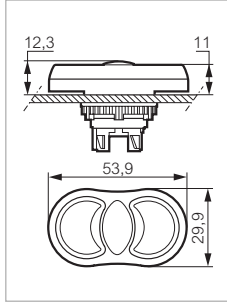
SPRING RETURN - FLUSH-FLUSH









Double touch - degree of protection: IP 66

Cat. No.



L61QA21



-  Green
-  Red
-  Green engraving \triangleleft
-  Green engraving \triangleright
-  Green
-  Green
-  Black
-  Black

L61QA21

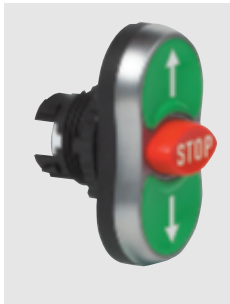
L61QA22

L61QA22K

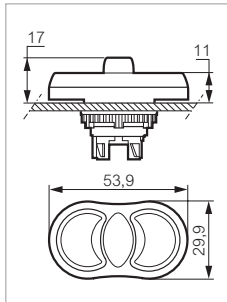
L61QA33C







SPRING RETURN - FLUSH-PROJECTING-FLUSH

Triple touch - degree of protection: IP 66



L61BA22



-  Green
-  Red engraving STOP
-  Green
-  Green
-  Red engraving STOP
-  Green

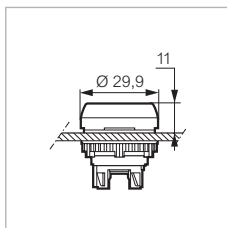
L61BA22

L61BA22B

STAY-PUT - FLUSH



L21CA01



-  Red
-  Green
-  Black
-  Yellow
-  White
-  Blue

L21CA01
L21CA02
L21CA03
L21CA04
L21CA05
L21CA06

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 Equipped with a locking ring
 Plastic black bezel
 Conform to IEC 60947-5-1



Characteristics (p. 98)

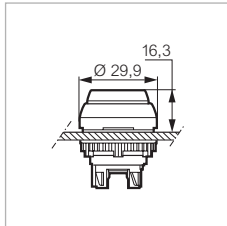
► PUSH-BUTTONS - NON ILLUMINATED (CONTINUED)

STAY-PUT - PROJECTING

Cat. No.



L21CB02



Plastic chrome bezel
 Black bezel on request (form p. 83)

- Red
- Green
- Black
- Yellow
- White
- Blue

- L21CB01**
- L21CB02**
- L21CB03**
- L21CB04
- L21CB05
- L21CB06

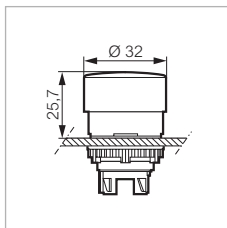
► MUSHROOM HEADS - NON ILLUMINATED

\varnothing 32 - STAY-PUT

Push-turn to reset



L22EC01



- Red
- Green
- Black
- Yellow

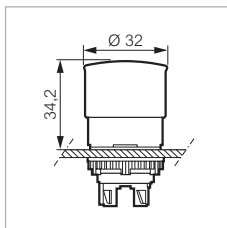
- L22EC01**
- L22EC02
- L22EC03**
- L22EC04

\varnothing 32 - STAY-PUT

Push-pull to reset



L22DC01



- Red

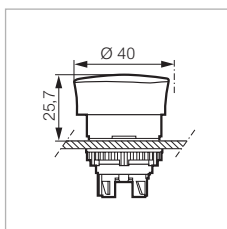
L22DC01

\varnothing 40 - STAY-PUT

Push-turn to reset



L22ED01



Without engraving

- Red
- Green
- Black
- Yellow

- L22ED01**
- L22ED02
- L22ED03**
- L22ED04

With engraving

- Red - engraving STOP - STOP - STOP

L22ED01B

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 Equipped with a locking ring
 Plastic black bezel
 Conform to IEC 60947-5-1



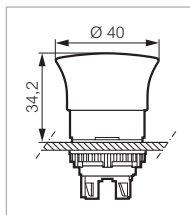
Characteristics (p. 98)

► MUSHROOM HEAD - NON ILLUMINATED (CONTINUED)

\varnothing 40 - STAY-PUT

Push-pull to reset

Cat. No.



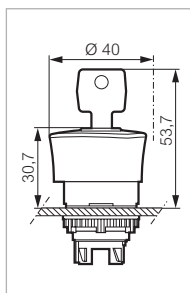
- Red
- Black

L22DD01
L22DD03

L22DD01

\varnothing 40 - STAY-PUT

Key to reset



Supplied with 2 keys profile n° 455

- Red

L22GM01

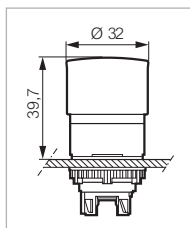
L22GM01

► ISO 13850 EMERGENCY STOP - NON ILLUMINATED

\varnothing 32 ISO 13850 - STAY-PUT

Push-pull

Cat. No.



Head position visible from the side with yellow collar
 Compliant with the requirements of emergency stop:
 IEC 60947-5-5 / ISO 13850

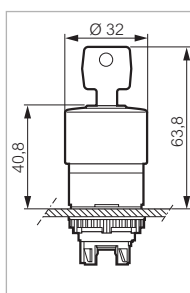
- Red

L22DQ01

L22DQ01

\varnothing 32 ISO 13850 - STAY-PUT

Key to reset



Supplied with 2 keys profile n° 455
 Head position visible from the side with yellow collar
 Compliant with the requirements of emergency stop:
 IEC 60947-5-5 / ISO 13850

- Red

L22GQ01

L22GQ01

Catalogue No. in bold: normally in stock at distribution outlets

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 Equipped with a locking ring
 Plastic black bezel
 Conform to IEC 60947-5-1



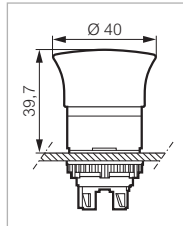
Characteristics (p. 98)

► ISO 13850 EMERGENCY STOP - NON ILLUMINATED (CONTINUED)

\varnothing 40 ISO 13850 - STAY-PUT

Push-pull to reset

Cat. No.



Head position visible from the side with yellow collar
 Compliant with the requirements of emergency stop:
 IEC 60947-5-5 / ISO 13850

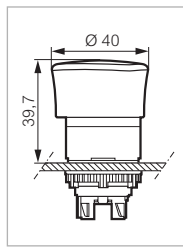
● Red

L22DR01

L22DR01

\varnothing 40 ISO 13850 - STAY-PUT

Push-turn to reset



Head position visible from the side with yellow collar
 Compliant with the requirements of emergency stop:
 IEC 60947-5-5 / ISO 13850

● Red

▼ Red with symbol IEC 60417-5638 / ISO 13850

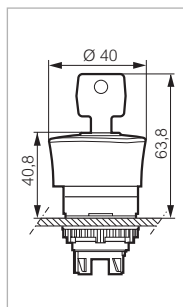
L22ER01

L22ER01K

L22ER01

\varnothing 40 ISO 13850 - STAY-PUT

Key to reset



Supplied with 2 keys profile n° 455
 Head position visible from the side with yellow collar
 Compliant with the requirements of emergency stop:
 IEC 60947-5-5 / ISO 13850

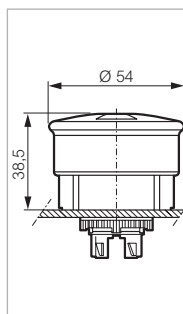
● Red

L22GR01

L22GR01

\varnothing 54 ISO 13850 - STAY-PUT

Push-pull to reset with flag indicator



Double position indicator: head and collar
 Compliant with the requirements of emergency stop:
 IEC 60947-5-5 / ISO 13850

● Red - engraving O- I

● Red - engraving STOP - I

L22DU01A

L22DU01

L22DU01

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 Equipped with a locking ring
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► SELECTOR SWITCHES - NON ILLUMINATED

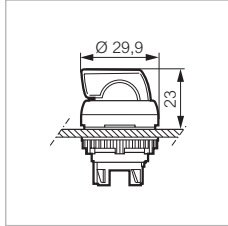
WITH HANDLE

2 positions

Cat. No.



L21KA03



Stay-put positions - 45°

- Red
- Green
- Black
- Grey



L21KA01
L21KA02
L21KA03
L21KA08

Spring return - 45°

- Red
- Green
- Black
- Grey



L21KB01
 L21KB02
L21KB03
 L21KB08

Stay-put positions - 45°

- Red
- Green
- Black
- Grey



L21KC01
L21KC02
L21KC03
L21KC08

Spring return - 45°

- Red
- Green
- Black
- Grey



L21KD01
 L21KD02
L21KD03
 L21KD08

Stay-put positions - 90°

- Red
- Green
- Black
- Grey



L21KE01
 L21KE02
L21KE03
 L21KE08

Stay-put positions - 90°

- Red
- Green
- Black
- Grey



L21KF01
 L21KF02
L21KF03
 L21KF08

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

▶ SELECTOR SWITCHES - NON ILLUMINATED (CONTINUED)

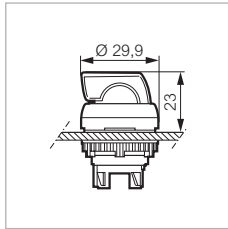
WITH HANDLE

3 positions

Cat. No.



L21MA03



Stay-put positions - 45°

- Red
- Green
- Black
- Grey



L21MA01
L21MA02
L21MA03
L21MA08

Spring return from left to 0 - 45°

- Red
- Green
- Black
- Grey



L21MB01
L21MB02
L21MB03
L21MB08

Spring return from right to 0 - 45°

- Red
- Green
- Black
- Grey



L21MC01
L21MC02
L21MC03
L21MC08

Spring return to 0 - 45°

- Red
- Green
- Black
- Grey



L21MD01
L21MD02
L21MD03
L21MD08

Stay-put positions - 90°

- Red
- Green
- Black
- Grey



L21MK01
L21MK02
L21MK03
L21MK08



L21MA08

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

▶ SELECTOR SWITCHES - NON ILLUMINATED (CONTINUED)

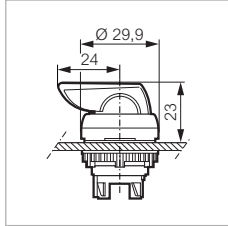
WITH LONG HANDLE

2 positions

Cat. No.



L21KP03



Stay-put positions - 45°

- Red
- Green
- Black
- Grey



L21KP01
 L21KP02
L21KP03
 L21KP08

Spring return - 45°

- Red
- Green
- Black



L21KQ01
 L21KQ02
L21KQ03

Stay-put positions - 45°

- Red
- Green
- Black



L21KR01
 L21KR02
L21KR03

Spring return - 45°

- Red
- Green
- Black



L21KS01
 L21KS02
L21KS03

Stay-put positions - 90°

- Red
- Green
- Black



L21KT01
 L21KT02
L21KT03

Stay-put positions - 90°

- Red
- Green
- Black



L21KU01
 L21KU02
L21KU03

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

▶ SELECTOR SWITCHES - NON ILLUMINATED (CONTINUED)

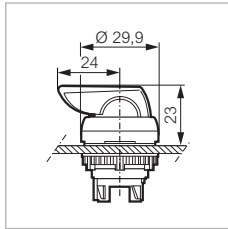
WITH LONG HANDLE

3 positions

Cat. No.



L21MR03



Stay-put positions - 45°

- Red
- Green
- Black
- Grey



L21MR01
 L21MR02
L21MR03
 L21MR08

Spring return from left to 0 - 45°

- Red
- Green
- Black
- Grey



L21MS01
 L21MS02
L21MS03
 L21MS08

Spring return from right to 0 - 45°

- Red
- Green
- Black
- Grey



L21MT01
 L21MT02
L21MT03
 L21MT08

Spring return to 0 - 45°

- Red
- Green
- Black
- Grey



L21MU01
 L21MU02
L21MU03
 L21MU08

Separate units \varnothing 22: Heads

IP 66
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► SELECTOR SWITCHES - NON ILLUMINATED (CONTINUED)

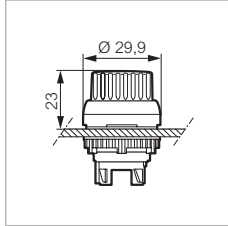
WITH KNOB

2 positions - degree of protection: IP 66

Cat. No.



L21TF03



Stay-put positions - 45°

● Black



L21TA03

Spring return - 45°

● Black



L21TB03

Stay-put positions - 90°

● Black



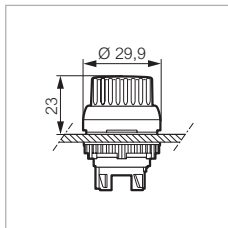
L21TF03

WITH KNOB

3 positions - degree of protection: IP 66



L21UA03



Stay-put positions - 45°

● Black



L21UA03

Spring return from left to 0 - 45°

● Black



L21UB03

Spring return from right to 0 - 45°

● Black



L21UC03

Spring return to 0 - 45°

● Black



L21UD03

Stay-put positions - 90°

● Black



L21UK03

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

▶ SELECTOR SWITCHES - NON ILLUMINATED (CONTINUED)

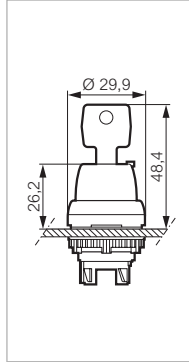
WITH KEY

2 positions

Cat. No.



L21LG00



Key free in position:

Supplied with 2 keys profile n° 455

Stay-put positions - 45°

● Black



0

L21LA00

Spring return - 45°

● Black



0

L21LB00

Stay-put positions - 45°

● Black



0

L21LC00

Spring return - 45°

● Black



0

L21LD00

Stay-put positions - 90°

● Black



0

L21LF00

Stay-put positions - 90°

● Black



0 - 1

L21LG00

Stay-put positions - 90°

● Black



0 - 1

L21LH00

Stay-put positions - 90°

● Black



1

L21LK00

Key profile n° 1424 A and others (form p. 83)

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1

 Characteristics (p. 98)

► SELECTOR SWITCHES - NON ILLUMINATED (CONTINUED)

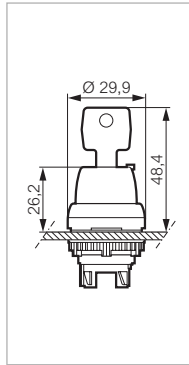
WITH KEY

3 positions

Cat. No.



L21NA00



Key free in position:

Supplied with 2 keys profile n° 455

Stay-put positions - 45°

● Black



0

L21NA00

Spring return from left to 0 - 45°

● Black



0

L21NB00

Spring return from right to 0 - 45°

● Black



0

L21NC00

Spring return to 0 - 45°

● Black



0

L21ND00

Stay-put positions - 45°

● Black



1 - 2

L21NE00

Spring return from right to 0 - 45°

● Black



1

L21NJ00

Stay-put positions - 90°

● Black



1 - 0 - 2

L21NK00

Stay-put positions - 90°

● Black



0

L21NL00

Key profile n° 1424 A and others (form p. 83)

Separate units \varnothing 22: Heads

IP 65
 With locking ring
 Plastic chrome bezel
 Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

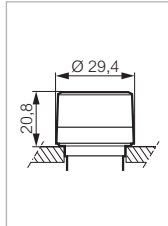
► ADJUSTABLE MECHANICAL PUSH/RESET BUTTON - NON ILLUMINATED

SPRING RETURN - FLUSH

Cat. No.



L21HA01



To be used without electrical block
 Stroke 11 mm
 Adjustable: 26 mm min to 46 mm max / front side of panel

Without engraving

- Red
- Green
- Black
- Yellow
- White
- Blue

- L21HA01**
- L21HA02**
- L21HA03**
- L21HA04
- L21HA05
- L21HA06**

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

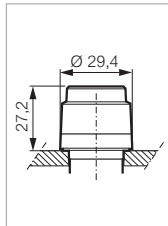
- Red
- Green
- Black
- Yellow
- White
- Blue

- L21HA31
- L21HA32
- L21HA33
- L21HA34
- L21HA35
- L21HA36

SPRING RETURN - PROJECTING



L21HB01



To be used without electrical block
 Stroke 11 mm
 Adjustable: 26 mm min to 46 mm max / front side of panel

- Red
- Green
- Black
- Yellow
- White
- Blue

- L21HB01**
- L21HB02**
- L21HB03**
- L21HB04**
- L21HB05**
- L21HB06**

Separate units ø 22: Heads

IP 66 - IP 69K

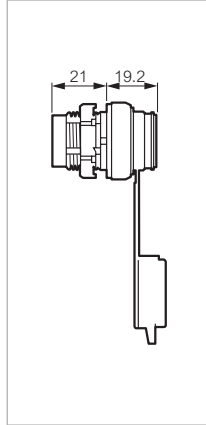


Characteristics (p. 98)

▶ USB INTERFACE 3.0 TYPE A/A CONNECTION

Degree of protection: IP 65

Cat. No.



USB interface 3.0 type A/A connection
 USB class: 3.0 (backward compatible with USB class 2.0)

L21VB03

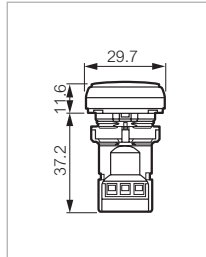
Recommended fixing tool: Tightening flat wrench size 26 mm

L21VB03

▶ AUDIBLE WARNING BUZZERS

Degree of protection: IP 66, IP 69K

Cat. No.



24 V AC/DC Buzzer pulse or continuous sound
 130 V AC/DC Buzzer pulse or continuous sound
 230 V AC/DC Buzzer pulse or continuous sound

L22VA03L
L22VA03M
L22VA03H

Recommended fixing tool: Tightening flat wrench size 26 mm

L22VA03L

Separate units \varnothing 22: Heads

IP 65 - IP 66
With locking ring
Conform to IEC 60947-5-1

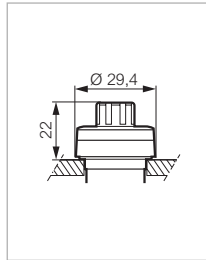


Characteristics (p. 98)

▶ BUTTON FOR POTENTIOMETER - NON ILLUMINATED

Degree of protection: IP 65

Cat. No.



Head + mounting base for potentiometer
Plastic chrome bezel

Shaft \varnothing 6 or 6.35 mm
Potentiometer length 46 to 51 mm

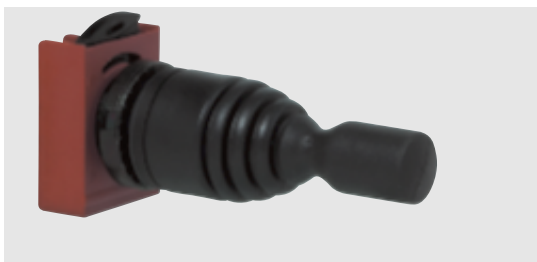
L21RP03

L21RP03

▶ JOYSTICKS - NON ILLUMINATED

Degree of protection: IP 66

Cat. No.



LM2F

Heads supplied with a 3 position clip
Specific electrical blocks (p. 67)

Head does not lock in position 0

2 directions - 3 positions

2 maintained (stay-put) A - 0 - B
2 spring-return A → 0 ← B

LM2F
LM2A

4 directions - 5 positions

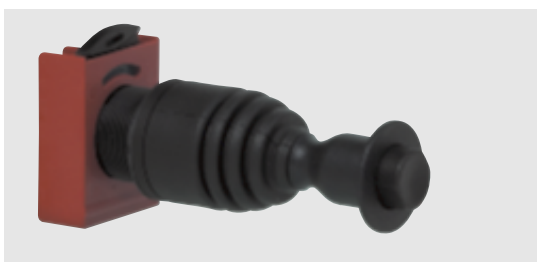
4 maintained (stay-put) A
 |
 C - 0 - D
 |
 B

LM4F

4 spring-return

A
|
C → 0 ← D
|
B

LM4A



LMV4F

Head locks in position 0

2 directions - 3 positions

2 maintained (stay-put) A - 0 - B
2 spring-return A → 0 ← B

LMV2F
LMV2A

4 directions - 5 positions

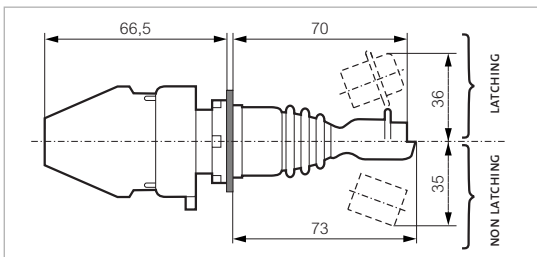
4 maintained (stay-put) A
 |
 C - 0 - D
 |
 B

LMV4F

4 spring-return

A
|
C → 0 ← D
|
B

LMV4A



Separate units ø 22: Heads

IP 66 - IP 69K
 To be combined with a clip, LED block and contact blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Black bezel on request (form p. 86)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

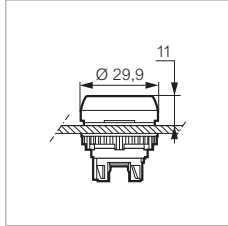
► PUSH-BUTTONS - ILLUMINATED

SPRING RETURN - FLUSH

Cat. No.



L21AH20



Without engraving

- Red
- Green
- Yellow
- White
- Blue

L21AH10
L21AH20
L21AH40
L21AH50
L21AH60

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- Red
- Green
- Yellow
- White
- Blue

L21AH31
 L21AH32
 L21AH34
 L21AH35
 L21AH36



L21AH00

Without button plate

L21AH00

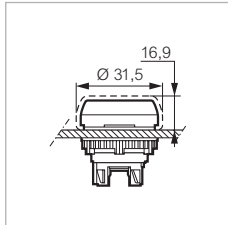
Button plates (p. 78)

SPRING RETURN - FLUSH

Reinforced degree of protection: IP 67



L22AP40



Supplied with transparent shroud

- Red
- Green
- Yellow
- White
- Blue

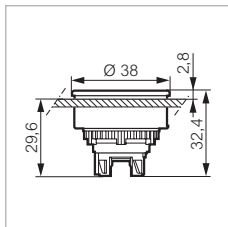
L22AP10
L22AP20
L22AP40
L22AP50
L22AP60

SPRING RETURN - SUPER FLUSH

Degree of protection: IP 66



L23AH10



Metallic chrome bezel
 Drilling ø 30,5 mm

Without engraving

- Red
- Green
- Yellow
- White
- Blue

L23AH10
L23AH20
L23AH40
L23AH50
L23AH60

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- Red
- Green
- Yellow
- White
- Blue

L23AH31
 L23AH32
 L23AH34
 L23AH35
 L23AH36

Catalogue No. in bold: normally in stock at distribution outlets

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip, LED block and contact blocks (p. 52)
 With locking ring
 Plastic chrome bezel
 Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1

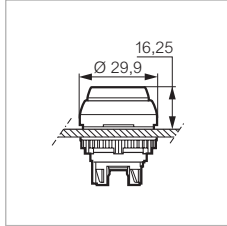


Characteristics (p. 98)

► PUSH-BUTTONS - ILLUMINATED (CONTINUED)

SPRING RETURN - PROJECTING

Cat. No.



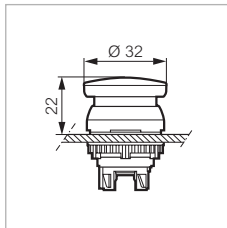
- Red
- Green
- Yellow
- White
- Blue

- L21AK10**
- L21AK20**
- L21AK40**
- L21AK50**
- L21AK60**

L21AK20

SPRING RETURN - MUSHROOM HEAD \varnothing 32

Push



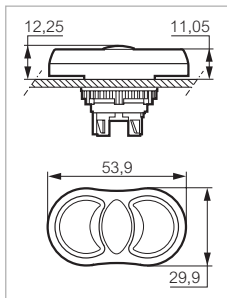
- Red
- Green
- Yellow
- White

- L21AL10**
- L21AL20**
- L21AL40**
- L21AL50**

L21AL10

SPRING RETURN - FLUSH-FLUSH

Double touch - degree of protection: IP 66



Central part illuminated

- Green
- Red
- Green
- Green
- Green engraving START
- Red engraving STOP

L61QH21

L61QH22V

L61QH21A

L61QH21

Separate units \varnothing 22: Heads

IP 66
 To be combined with a clip, LED block and contact blocks (p. 52)
 With locking ring
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► PUSH-BUTTONS - ILLUMINATED (CONTINUED)

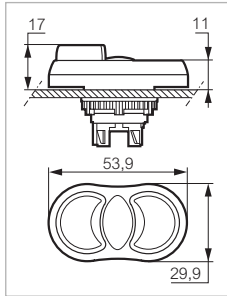
SPRING RETURN - FLUSH-PROJECTING

Double touch - degree of protection: IP 66







Cat. No.



L61QK21



Central part illuminated

-  Green
-  Red
-  White
-  Black
-  Green engraving START
-  Red engraving STOP

L61QK21

L61QK53

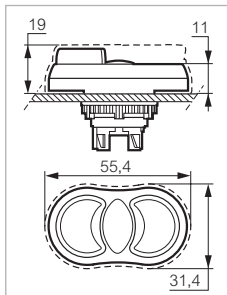
L61QK21A

SPRING RETURN - FLUSH-PROJECTING

Double touch - reinforced degree of protection: IP 67



L62QN21



Supplied with transparent shroud
 Central part illuminated

-  Green
-  Red

L62QN21

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip, LED block and contact blocks (p. 52)
 With locking ring
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

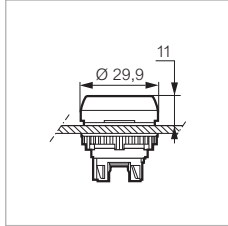
► PUSH-BUTTONS - ILLUMINATED (CONTINUED)

STAY-PUT - FLUSH

Cat. No.



L21CH20



- Red
- Green
- Yellow
- White
- Blue

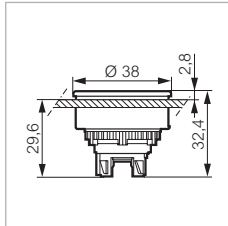
- L21CH10**
- L21CH20**
- L21CH40**
- L21CH50**
- L21CH60**

STAY-PUT - SUPER FLUSH

Degree of protection: IP 66



L23CH10



Metallic chrome bezel
 Drilling \varnothing 30,5 mm

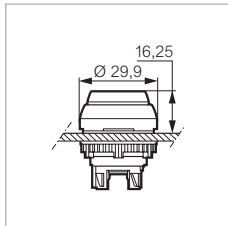
- Red
- Green
- Yellow
- White
- Blue

- L23CH10**
- L23CH20**
- L23CH40**
- L23CH50**
- L23CH60**

STAY-PUT - PROJECTING



L21CK20



- Red
- Green
- Yellow
- White
- Blue

- L21CK10**
- L21CK20**
- L21CK40**
- L21CK50**
- L21CK60**

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip, LED block and contact blocks (p. 52)
 With locking ring
 Black bezel
 Conform to IEC 60947-5-1

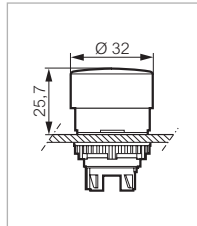
 Characteristics (p.98)

► MUSHROOM HEADS - ILLUMINATED

\varnothing 32 - STAY-PUT

Push-turn to reset

Cat. No.



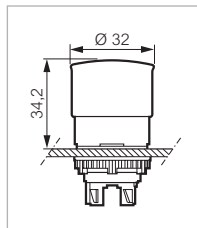
● Red

L22EL10

L22EL10

\varnothing 32 - STAY-PUT

Push-pull to reset



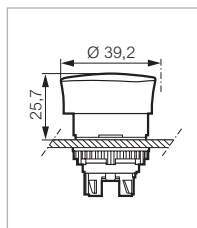
● Red

L22DL10

L22DL10

\varnothing 40 - STAY-PUT

Push-turn to reset



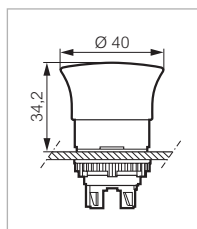
● Red
 ● Green
 ● Yellow

L22EM10
L22EM20
L22EM40

L22EM10

\varnothing 40 - STAY-PUT

Push-pull to reset



● Red
 ● Green
 ● Yellow
 ○ White

L22DM10
L22DM20
L22DM40
L22DM50

L22DM10

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip, LED block and contact blocks (p. 52)
 With locking ring
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



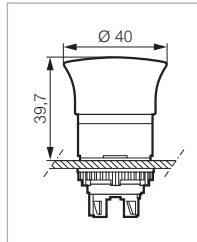
Characteristics (p. 98)

► ISO 13850 EMERGENCY STOP - ILLUMINATED

\varnothing 40 ISO 13850 - STAY-PUT

Push-pull to reset

Cat. No.



Black bezel
 Head position visible from the side with yellow collar
 Compliant with the requirements of emergency stop:
 IEC 60947-5-5 / ISO 13850

● Red

L22DN10

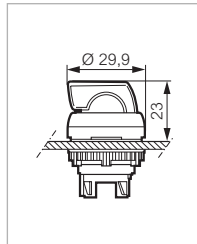
L22DN10

► SELECTOR SWITCHES - ILLUMINATED

WITH HANDLE

2 positions

Cat. No.



Stay-put positions - 45°

● Red
 ● Green
 ● Black



L21KG10
L21KG20
L21KG30

Spring return- 45°

● Red
 ● Green
 ● Black



L21KH10
L21KH20
L21KH30

Stay-put positions - 45°

● Red
 ● Green
 ● Black



L21KJ10
L21KJ20
L21KJ30

Spring return- 45°

● Red
 ● Green
 ● Black



L21KK10
L21KK20
L21KK30

Stay-put positions - 90°

● Red
 ● Green
 ● Black



L21KL10
L21KL20
L21KL30

Stay-put positions - 90°

● Red
 ● Green
 ● Black



L21KM10
L21KM20
L21KM30

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip, LED block and contact blocks (p. 52)
 With locking ring
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

▶ SELECTOR SWITCHES - ILLUMINATED

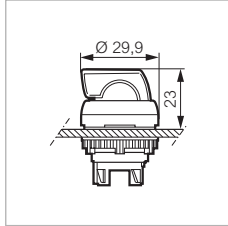
WITH HANDLE

3 positions

Cat. No.



L21ME10



Stay-put positions - 45°

- Red
- Green
- Black



L21ME10
L21ME20
L21ME30

Spring return from left to 0 - 45°

- Red
- Green
- Black



L21MF10
L21MF20
L21MF30

Spring return from right to 0 - 45°

- Red
- Green
- Black



L21MG10
L21MG20
L21MG30

Spring return to 0 - 45°

- Red
- Green
- Black



L21MH10
L21MH20
L21MH30

Stay-put positions - 90°

- Red
- Green
- Black



L21MJ10
L21MJ20
L21MJ30

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip, LED block and contact blocks (p. 52)
 With locking ring
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

▶ SELECTOR SWITCHES - ILLUMINATED (CONTINUED)

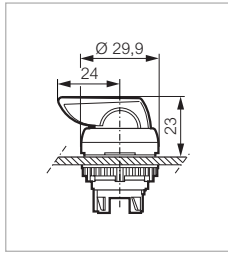
WITH LONG HANDLE

2 positions

Cat. No



L21KV30



Stay-put positions - 45°

● Black



L21KV30

Stay-put positions - 45°

● Black



L21KX30

Spring return - 45°

● Black



L21KY30

Separate units \varnothing 22: Heads

IP 66 - IP 69K
 To be combined with a clip, LED block and contact blocks (p. 52)
 With locking ring
 Plastic chrome bezel - Black bezel on request (form p. 83)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

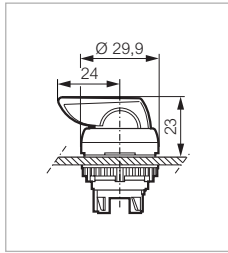
▶ SELECTOR SWITCHES - ILLUMINATED (CONTINUED)

WITH LONG HANDLE

3 positions



L21ML30



Stay-put positions - 45°

● Black



L21ML30

Spring return from left to 0 - 45°

● Black



L21MM30

Spring return from right to 0 - 45°

● Black



L21MN30

Spring return to 0 - 45°

● Black



L21MP30

Pilot lights \varnothing 22

IP 66 - IP 69K
 To be combined with a clip, LED block (p. 55)
 With locking ring
 Conform to IEC 60947-5-1



Characteristics (p. 98)

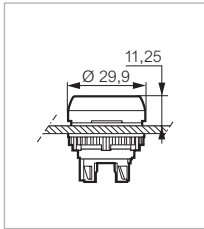
▶ PILOT LIGHTS - SEPARATE UNITS

FLUSH

Cat. No



L20SE20



To be combined with a clip and LED block (p. 55)

Without engraving

- Red
- Green
- Yellow
- White
- Blue

L20SE10
L20SE20
L20SE40
L20SE50
L20SE60

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- Red
- Green
- Yellow
- White
- Blue

L20SE31
 L20SE32
 L20SE34
 L20SE35
 L20SE36

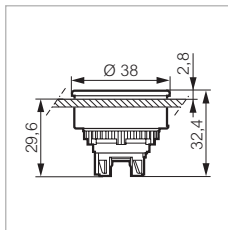
SUPER FLUSH

Degree of protection: IP 66

Cat. No



L23SE10



Metallic chrome bezel
 Drilling \varnothing 30,5 mm
 To be combined with a clip and LED block (p. 55)

Without engraving

Ribbed lens

- Red
- Green
- Yellow
- White
- Blue

L23SE10
L23SE20
L23SE40
L23SE50
L23SE60

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- Red
- Green
- Yellow
- White
- Blue

L23SE31
 L23SE32
 L23SE34
 L23SE35
 L23SE36

Pilot lights \varnothing 22

IP 66 - IP 69K
Direct supply



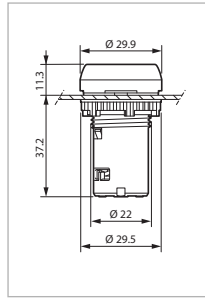
Characteristics (p. 98)

▶ ONE-PIECE PILOT LIGHTS

Cat. No.



L20SC20L



24V Without engraving

- Red
- Green
- Yellow
- White
- Blue

- L20SC10L**
- L20SC20L**
- L20SC40L**
- L20SC50L**
- L20SC60L**

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- Red
- Green
- Yellow
- White
- Blue

- L20SC31L [] [] [] []
- L20SC32L [] [] [] []
- L20SC34L [] [] [] []
- L20SC35L [] [] [] []
- L20SC36L [] [] [] []

130V Without engraving

- Red
- Green
- Yellow
- White
- Blue

- L20SC10M**
- L20SC20M**
- L20SC40M**
- L20SC50M**
- L20SC60M**

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- Red
- Green
- Yellow
- White
- Blue

- L20SC31M [] [] [] []
- L20SC32M [] [] [] []
- L20SC34M [] [] [] []
- L20SC35M [] [] [] []
- L20SC36M [] [] [] []

230V Without engraving

- Red
- Green
- Yellow
- White
- Blue

- L20SC10H**
- L20SC20H**
- L20SC40H**
- L20SC50H**
- L20SC60H**

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- Red
- Green
- Yellow
- White
- Blue

- L20SC31H [] [] [] []
- L20SC32H [] [] [] []
- L20SC34H [] [] [] []
- L20SC35H [] [] [] []
- L20SC36H [] [] [] []

Block holder clips for assembly as you require

1, 3 or 5-position clips

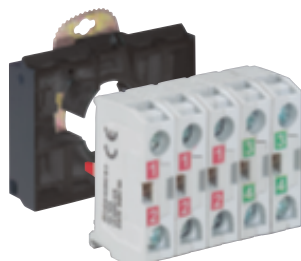
▶ CLIP

"A flexible configuration for assembly in any order..."

▶ 3 BLOCKS



▶ 5 BLOCKS



▶ MODULAR

Stacking without accessories



- Snap fit, tools not required to attach contact blocks
- Cost effective solution: 1 position clip
- Blocks can be stacked on 2 levels, up to 3 blocks wide
- Blocks can be assembled in any order (except pilot light)
- Optimised dimensions: reduced depth of blocks

▶ BLOCK

"Imaginatively designed to be safe, robust and durable"

▶ MATERIAL

- IP20 as "finger safe"
- Electrical insulation
- Corrosion-resistant



▶ ENVIRONMENT

- Respect for the environment, RoHS compliant



- LED blocks: combine long life and economy
- Corrosion resistant to some chemicals and sea air, etc
- Conform to standard IEC 60947-5-1
- Conform to RoHS European directive concerning restriction of hazardous substances

Separate units: Blocks sub-assemblies

IP 20
 Clip and electrical blocks assembled
 To be combined with a head (p. 23)
 Mounting (p. 96)
 Conform to IEC 60947-5-1



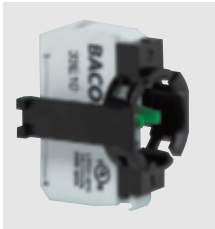
Characteristics (p. 98)

▶ CONTACT BLOCKS - FOR NON ILLUMINATED HEADS

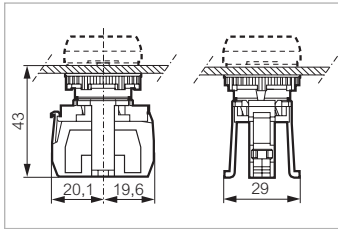
SCREW TERMINALS

1 position clip

Cat. No.



331E10



331E10

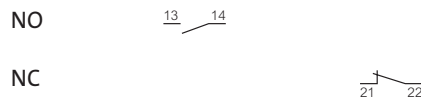
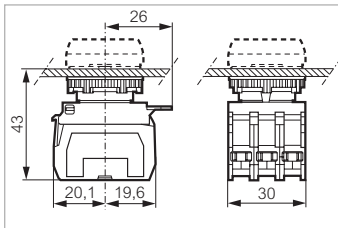
331E01

SCREW TERMINALS

3 position clip

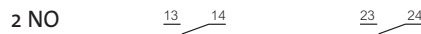


333E21



333E10

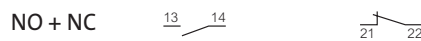
333E01



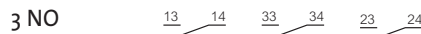
333E20



333E02



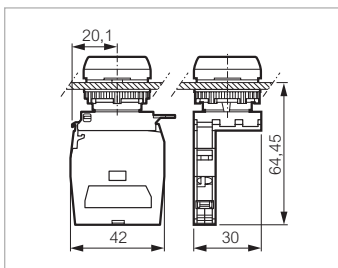
333E11



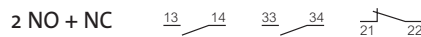
333E30



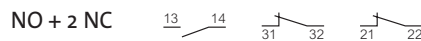
333E03



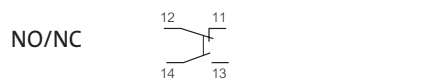
NO/NC



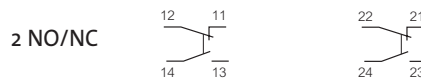
333E21



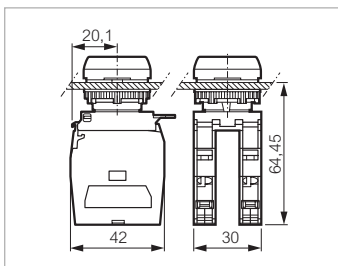
333E12



334E11



334E22



2 NO/NC

Separate units: Blocks sub-assemblies

IP 20
 Clip and electrical blocks assembled
 To be combined with a head (p. 23)
 Mounting (p. 96)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► CONTACT BLOCKS - FOR NON ILLUMINATED HEADS (CONTINUED)

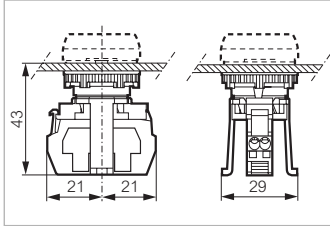
PLUG-IN TERMINALS

1 position clip

Cat. No.



331ER01



NO 
 NC 

331ER10

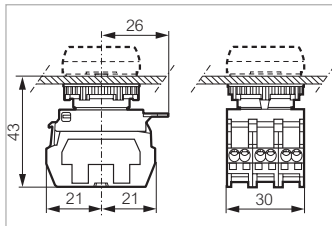
331ER01



PLUG-IN TERMINALS



3 position clip




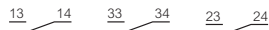
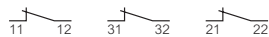
333ER11



NO 
 NC 

2 NO 
 2 NC 

NO+NC 

3 NO 
 3 NC 

333ER10

333ER01

333ER20

333ER02

333ER11

333ER30

333ER03

Separate units: Blocks sub-assemblies

IP 20
 Clip and electrical blocks assembled
 To be combined with a head (p. 23)
 Mounting (p. 96)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► CONTACT BLOCKS - FOR NON ILLUMINATED HEADS (CONTINUED)

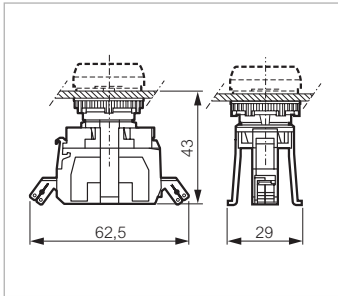
FASTON TERMINALS

1 position clip

Cat. No.



331ED10



NO  13 14
 NC  21 22

331ED10

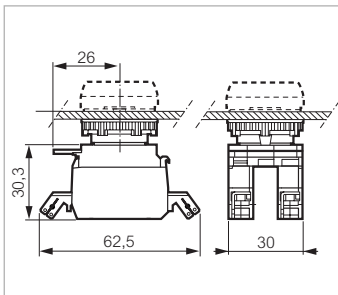
331ED01



FASTON TERMINALS

3 position clip



333ED11



NO + NC  13 14  21 22

333ED11

Separate units: Blocks sub-assemblies

IP 20
 Clip and electrical blocks assembled
 To be combined with a head (p. 23)
 Mounting (p. 96)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► ELECTRICAL BLOCKS - FOR ILLUMINATED HEADS

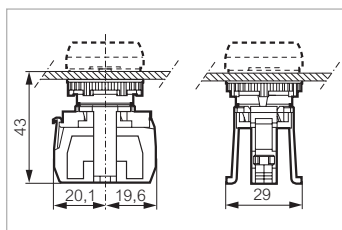
SCREW TERMINALS

1 position clip: LED block

Cat. No.



331EAGL



24 V

- White
- Red
- Green
- Blue
- Yellow

331EAWL
331EARL
331EAGL
331EABL
331EAYL

130 V

- White
- Red
- Green
- Blue
- Yellow

331EAWM
331EARM
331EAGM
331EABM
331EAYM

230 V

- White
- Red
- Green
- Blue
- Yellow

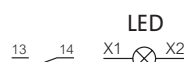
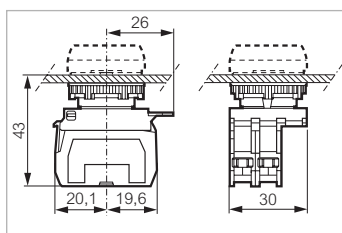
331EAWH
331EARH
331EAGH
331EABH
331EAYH

SCREW TERMINALS

3 position clip: NO + LED block



333EAWM10



24 V

- White
- Red
- Green
- Blue
- Yellow

333EAWL10
333EARL10
333EAGL10
333EABL10
333EAYL10

130 V

- White
- Red
- Green
- Blue
- Yellow

333EAWM10
333EARM10
333EAGM10
333EABM10
333EAYM10

230 V

- White
- Red
- Green
- Blue
- Yellow

333EAWH10
333EARH10
333EAGH10
333EABH10
333EAYH10

Catalogue No. in bold: normally in stock at distribution outlets

Separate units: Blocks sub-assemblies

IP 20
 Clip and electrical blocks assembled
 To be combined with a head (p. 23)
 Mounting (p. 96)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► ELECTRICAL BLOCKS - FOR ILLUMINATED HEADS (CONTINUED)

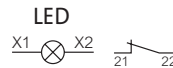
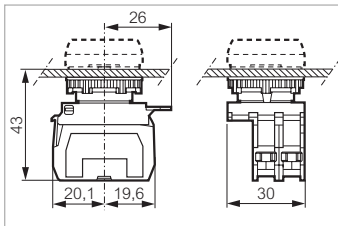
SCREW TERMINALS

3 position clip: LED block + NC

Cat. No.



333EAWL01



24 V

- White
- Red
- Green
- Blue
- Yellow

333EAWL01
333EARL01
333EAGL01
333EABL01
333EAYL01

130 V

- White
- Red
- Green
- Blue
- Yellow

333EAWM01
333EARM01
333EAGM01
333EABM01
333EAYM01

230 V

- White
- Red
- Green
- Blue
- Yellow

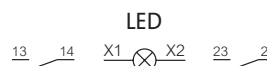
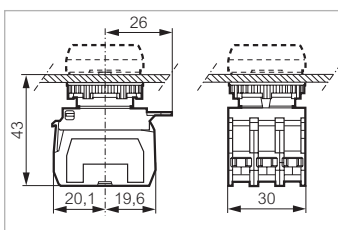
333EAWH01
333EARH01
333EAGH01
333EABH01
333EAYH01

SCREW TERMINALS

3 position clip: NO + LED block + NO



333EARL20



24 V

- White
- Red
- Green
- Blue
- Yellow

333EAWL20
333EARL20
333EAGL20
333EABL20
333EAYL20

130 V

- White
- Red
- Green
- Blue
- Yellow

333EAWM20
333EARM20
333EAGM20
333EABM20
333EAYM20

230 V

- White
- Red
- Green
- Blue
- Yellow

333EAWH20
333EARH20
333EAGH20
333EABH20
333EAYH20

Catalogue No. in bold: normally in stock at distribution outlets

Separate units: Blocks sub-assemblies

IP 20
 Clip and electrical blocks assembled
 To be combined with a head (p. 23)
 Mounting (p. 96)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► ELECTRICAL BLOCKS - FOR ILLUMINATED HEADS (CONTINUED)

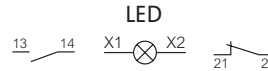
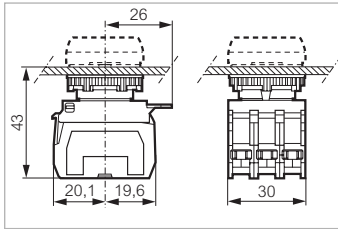
SCREW TERMINALS

3 position clip: NO + LED block + NC

Cat. No.



333EARL11



24 V

- White
- Red
- Green
- Blue
- Yellow

- 333EAWL11**
- 333EARL11**
- 333EAGL11**
- 333EABL11**
- 333EAYL11**

130 V

- White
- Red
- Green
- Blue
- Yellow

- 333EAWM11**
- 333EARM11**
- 333EAGM11**
- 333EABM11**
- 333EAYM11**

230 V

- White
- Red
- Green
- Blue
- Yellow

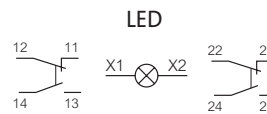
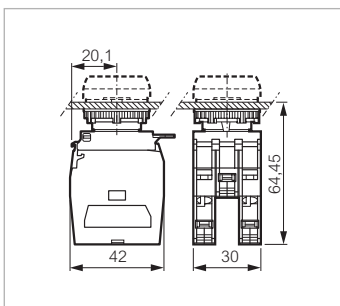
- 333EAWH11**
- 333EARH11**
- 333EAGH11**
- 333EABH11**
- 333EAYH11**

SCREW TERMINALS

3 position clip: NO/NC + LED block + NO/NC



334EARL22



24 V

- White
- Red
- Green
- Blue
- Yellow

- 334EAWL22**
- 334EARL22**
- 334EAGL22**
- 334EABL22**
- 334EAYL22**

130 V

- White
- Red
- Green
- Blue
- Yellow

- 334EAWM22**
- 334EARM22**
- 334EAGM22**
- 334EABM22**
- 334EAYM22**

230 V

- White
- Red
- Green
- Blue
- Yellow

- 334EAWH22**
- 334EARH22**
- 334EAGH22**
- 334EABH22**
- 334EAYH22**

Catalogue No. in bold: normally in stock at distribution outlets

Separate units: Blocks sub-assemblies

IP 20
 Clip and electrical blocks assembled
 To be combined with a head (p. 23)
 Mounting (p. 96)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► ELECTRICAL BLOCKS - FOR ILLUMINATED HEADS (CONTINUED)

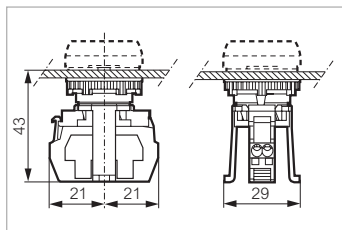
PLUG-IN TERMINALS

1 position clip: LED block

Cat. No.



331ERAGH



24 V

- White
- Red
- Green
- Blue
- Yellow

331ERAWL
331ERARL
331ERAGL
331ERABL
331ERAYL

130 V

- White
- Red
- Green
- Blue
- Yellow

331ERAWM
331ERARM
331ERAGM
331ERABM
331ERAYM

230 V

- White
- Red
- Green
- Blue
- Yellow

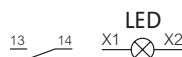
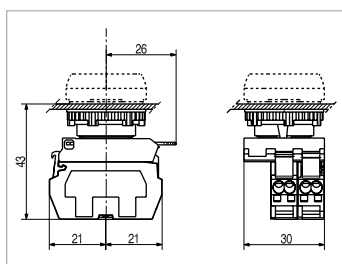
331ERAWH
331ERARH
331ERAGH
331ERABH
331ERAYH

PLUG-IN TERMINALS

3 position clip: NO + LED block



333ERAGL10



24 V

- White
- Red
- Green
- Blue
- Yellow

333ERAWL10
333ERARL10
333ERAGL10
333ERABL10
333ERAYL10

130 V

- White
- Red
- Green
- Blue
- Yellow

333ERAWM10
333ERARM10
333ERAGM10
333ERABM10
333ERAYM10

230 V

- White
- Red
- Green
- Blue
- Yellow

333ERAWH10
333ERARH10
333ERAGH10
333ERABH10
333ERAYH10

Separate units: Blocks sub-assemblies

IP 20
 Clip and electrical blocks assembled
 To be combined with a head (p. 23)
 Mounting (p. 96)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► ELECTRICAL BLOCKS - FOR ILLUMINATED HEADS (CONTINUED)

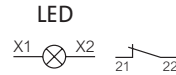
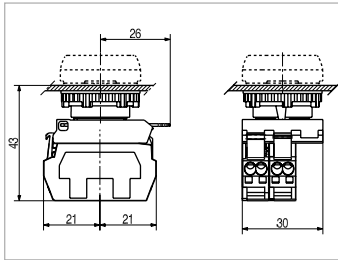
PLUG-IN TERMINALS

3 position clip: LED block + NC

Cat. No.



333ERAGH01



24 V

- White
- Red
- Green
- Blue
- Yellow

333ERAWL01
 333ERARL01
 333ERAGL01
 333ERABL01
 333ERAYL01

130 V

- White
- Red
- Green
- Blue
- Yellow

333ERAWM01
 333ERARM01
 333ERAGM01
 333ERABM01
 333ERAYM01

230 V

- White
- Red
- Green
- Blue
- Yellow

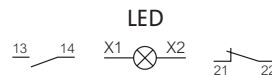
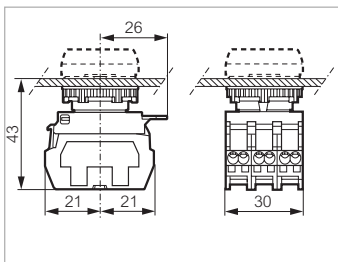
333ERAWH01
 333ERARH01
 333ERAGH01
 333ERABH01
 333ERAYH01

PLUG-IN TERMINALS

3 position clip: NO + LED block + NC



333ERAGH11



24 V

- White
- Red
- Green
- Blue
- Yellow

333ERAWL11
 333ERARL11
 333ERAGL11
 333ERABL11
 333ERAYL11

130 V

- White
- Red
- Green
- Blue
- Yellow

333ERAWM11
 333ERARM11
 333ERAGM11
 333ERABM11
 333ERAYM11

230 V

- White
- Red
- Green
- Blue
- Yellow

333ERAWH11
 333ERARH11
 333ERAGH11
 333ERABH11
 333ERAYH11

Catalogue No. in bold: normally in stock at distribution outlets

Separate units: Blocks sub-assemblies

IP 20
 Clip and electrical blocks assembled
 To be combined with a head (p. 23)
 Mounting (p. 96)
 Conform to IEC 60947-5-1

 Characteristics (p. 98)

► ELECTRICAL BLOCKS - FOR ILLUMINATED HEADS (CONTINUED)

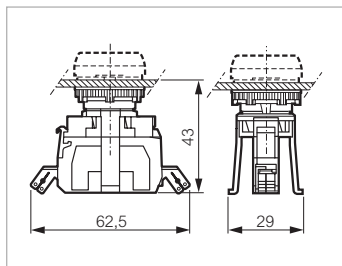
FASTON TERMINALS

1 position clip: LED block

Cat. No.



331EDARL



24 V

- White
- Red
- Green
- Blue
- Yellow

331EDAWL
 331EDARL
 331EDAGL
 331EDABL
 331EDAYL

130 V

- White
- Red
- Green
- Blue
- Yellow

331EDAWM
 331EDARM
 331EDAGM
 331EDABM
 331EDAYM

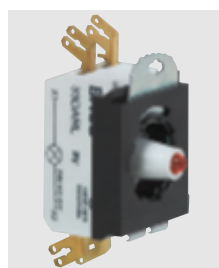
230 V

- White
- Red
- Green
- Blue
- Yellow

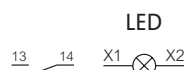
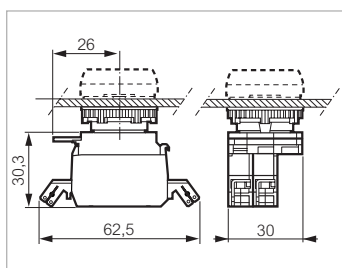
331EDAWH
 331EDARH
 331EDAGH
 331EDABH
 331EDAYH

FASTON TERMINALS

3 position clip: NO + LED block



333EDARL10



24 V

- White
- Red
- Green
- Blue
- Yellow

333EDAWL10
 333EDARL10
 333EDAGL10
 333EDABL10
 333EDAYL10

130 V

- White
- Red
- Green
- Blue
- Yellow

333EDAWM10
 333EDARM10
 333EDAGM10
 333EDABM10
 333EDAYM10

230 V

- White
- Red
- Green
- Blue
- Yellow

333EDAWH10
 333EDARH10
 333EDAGH10
 333EDABH10
 333EDAYH10

Catalogue No. in bold: normally in stock at distribution outlets

Separate units: Blocks sub-assemblies

IP 20
 Clip and electrical blocks assembled
 To be combined with a head (p. 23)
 Mounting (p. 96)
 Conform to IEC 60947-5-1



Characteristics (p. 98)

► ELECTRICAL BLOCKS - FOR ILLUMINATED HEADS (CONTINUED)

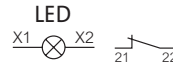
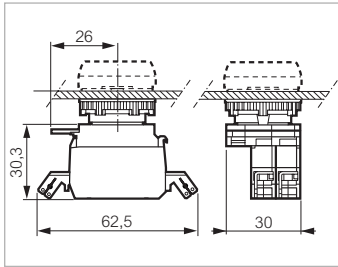
FASTON TERMINALS

3 position clip: LED block + NC

Cat. No.



333EDARM01



24 V

- White
- Red
- Green
- Blue
- Yellow

333EDAWL01
 333EDARL01
 333EDAGL01
 333EDABL01
 333EDAYL01

130 V

- White
- Red
- Green
- Blue
- Yellow

333EDAWM01
 333EDARM01
 333EDAGM01
 333EDABM01
 333EDAYM01

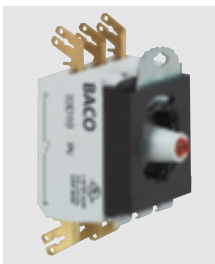
230 V

- White
- Red
- Green
- Blue
- Yellow

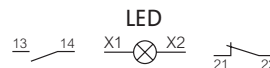
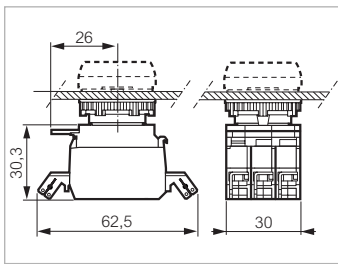
333EDAWH01
 333EDARH01
 333EDAGH01
 333EDABH01
 333EDAYH01

FASTON TERMINALS

3 position clip: NO + LED block + NC



333EDARL11



24 V

- White
- Red
- Green
- Blue
- Yellow

333EDAWL11
 333EDARL11
 333EDAGL11
 333EDABL11
 333EDAYL11

130 V

- White
- Red
- Green
- Blue
- Yellow

333EDAWM11
 333EDARM11
 333EDAGM11
 333EDABM11
 333EDAYM11

230 V

- White
- Red
- Green
- Blue
- Yellow

333EDAWH11
 333EDARH11
 333EDAGH11
 333EDABH11
 333EDAYH11

Catalogue No. in bold: normally in stock at distribution outlets

Separate units: Blocks

IP 20
To be combined with a 1, 3 or 5 position clip (p. 69)

 Characteristics (p. 98)

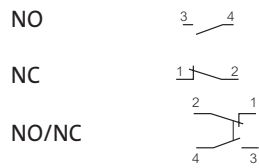
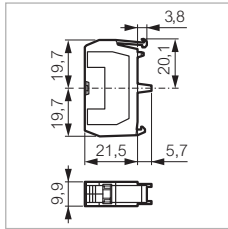
▶ CONTACT BLOCKS

SCREW TERMINALS

Cat. No.



33E10



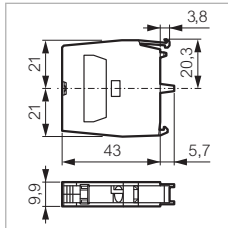
33E10

33E01

33E11



33E11



**Golden contacts
for low current**



33E10Y7

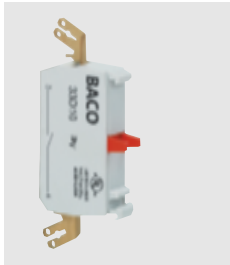
33E01Y7

Contact with delayed opening

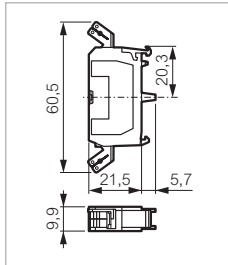


33E01C

FASTON TERMINALS



33D01



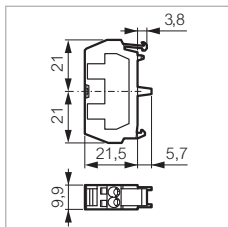
33D10

33D01

PLUG-IN TERMINALS



33R01



33R10

33R01

Separate units: Blocks

IP 20
To be combined with a 1, 3 or 5 position clip (p. 69)



Characteristics (p. 98)

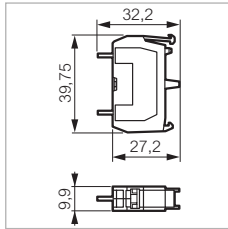
▶ CONTACT BLOCKS (CONTINUED)

FOR PCB (PIN-STYLE TERMINALS)

Cat. No.



33P10



NO 

33P10

NC 

33P01

**Golden contacts
for low current**

NO 

33P10Y7

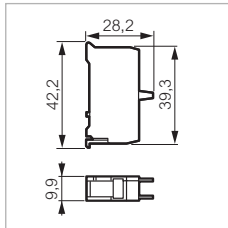
NC 

33P01Y7


FOR CONTROL STATIONS (SCREW TERMINALS)




33S01



For un-equipped control stations (p. 90)
Base mounted

NO 

33S10

NC 

33S01

Separate units: Blocks

IP 20
To be combined with a 1, 3 or 5 position clip (p. 69)



Characteristics (p. 98)

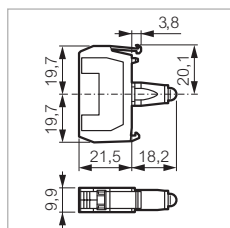
▶ LED BLOCKS

SCREW TERMINALS

Cat. No.



33EARL



24 V AC + DC

- White
- Red
- Green
- Blue
- Yellow

33EAWL
33EARL
33EAGL
33EABL
33EAYL

48 V AC + DC

- White
- Red
- Green
- Blue
- Yellow

33EAWL4
33EARL4
33EAGL4
33EABL4
33EAYL4

130 V AC

- White
- Red
- Green
- Blue
- Yellow

33EAWM
33EARM
33EAGM
33EABM
33EAYM

230 V AC

- White
- Red
- Green
- Blue
- Yellow

33EAWH
33EARH
33EAGH
33EABH
33EAYH

110 V DC

- White

33EAWDM

Separate units: Blocks

IP 20
To be combined with a 1, 3 or 5 position clip (p. 69)



Characteristics (p. 98)

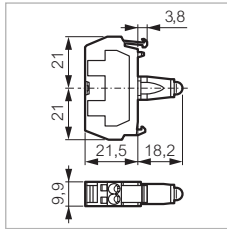
► LED BLOCKS (CONTINUED)

PLUG-IN TERMINALS

Cat. No.



33RAGH



24 V AC + DC

- White
- Red
- Green
- Blue
- Yellow

33RAWL
33RARL
33RAGL
33RABL
33RAYL

130 V AC

- White
- Red
- Green
- Blue
- Yellow

33RAWM
33RARM
33RAGM
33RABM
33RAYM

230 V AC

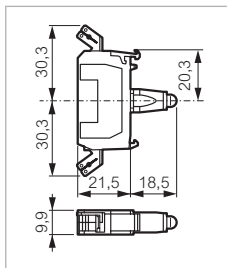
- White
- Red
- Green
- Blue
- Yellow

33RAWH
33RARH
33RAGH
33RABH
33RAYH

FASTON TERMINALS



33DARL



24 V AC + DC

- White
- Red
- Green
- Blue
- Yellow

33DAWL
33DARL
33DAGL
33DABL
33DAYL

130 V AC

- White
- Red
- Green
- Blue
- Yellow

33DAWM
33DARM
33DAGM
33DABM
33DAYM

230 V AC

- White
- Red
- Green
- Blue
- Yellow

33DAWH
33DARH
33DAGH
33DABH
33DAYH

Catalogue No. in bold: normally in stock at distribution outlets

Separate units: Blocks

IP 20
To be combined with a 1, 3 or 5 position clip (p. 69)



Characteristics (p. 98)

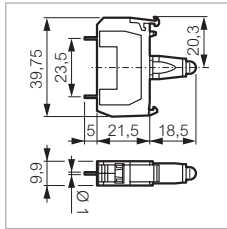
▶ LED BLOCKS (CONTINUED)

FOR PCB (PIN STYLE)

Cat. No.



33PAWL



24 V AC + DC

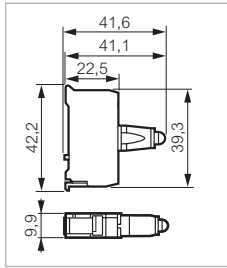
- White
- Red
- Green
- Blue
- Yellow

33PAWL
33PARL
33PAGL
33PABL
33PAYL

FOR CONTROL STATIONS (SCREW TERMINALS)



33SAGH



For un-equipped control stations (p. 90)
Base mounted



24 V AC + DC

- White
- Red
- Green
- Blue
- Yellow

33SAWL
33SARL
33SAGL
33SABL
33SAYL

130 V AC

- White
- Red
- Green
- Blue
- Yellow

33SAWM
33SARM
33SAGM
33SABM
33SAYM

230 V AC

- White
- Red
- Green
- Blue
- Yellow

33SAWH
33SARH
33SAGH
33SABH
33SAYH

Separate units: Blocks

IP 20
To be combined with a 1, 3 or 5 position clip (p. 69)

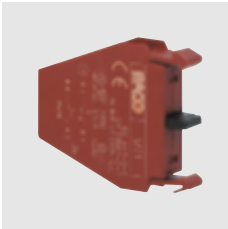


Characteristics (p. 98)

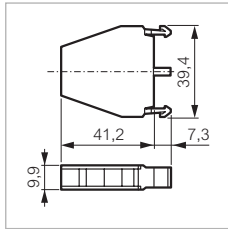
► SPECIFIC BLOCKS

FOR JOYSTICKS (SCREW TERMINALS)

Cat. No.



LM11



Joysticks (p. 39)

NO - NC

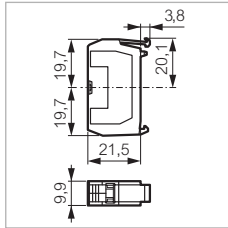


LM11

LAMP-TEST BLOCKS (SCREW TERMINALS)

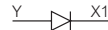


33ET



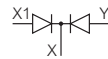
For 24 and 48 V

1 diod



33ET

2 diods



33ETT

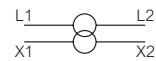
For 130 and 230 V (form p. 83)

TRANSFORMER BLOCKS (SCREW TERMINALS)

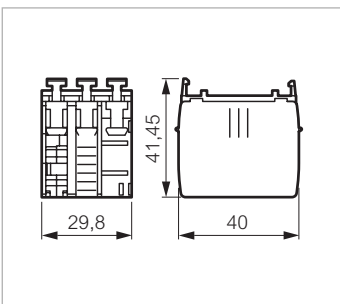


33EHC

230/24 V
400/24V



33EHC
33ELC



Separate units: Blocks

IP 20
To be combined with a 1, 3 or 5 position clip (p. 69)

 Characteristics (p. 98)

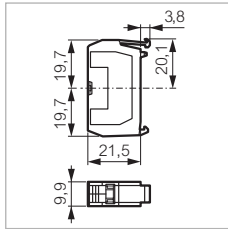
► SPECIFIC BLOCKS

FILTER BLOCKS (SCREW TERMINALS)

Cat. No.



33EFH



Prevents from voltage peaks for LED block
To be wired in parallel of with the LED block

130 V
230 V

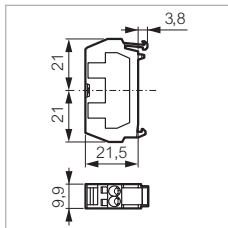


33EFM
33EFH

FILTER BLOCKS (PLUG-IN TERMINALS)

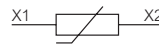


33RFH



Prevents from voltage peaks for LED block
To be wired in parallel of the LED block

130 V
230 V

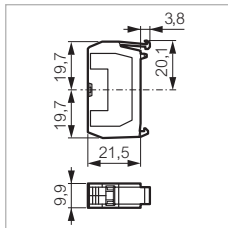


33RFM
33RFH

JUNCTION BLOCK (SCREW TERMINALS)



33EY



2 interconnected
terminals

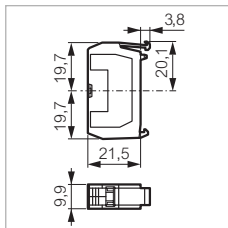


33EY

EMPTY BLOCK



33EX




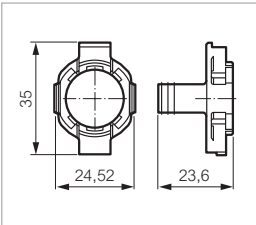
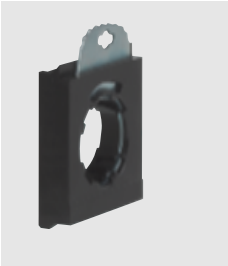
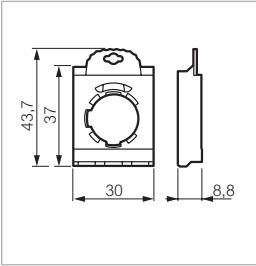
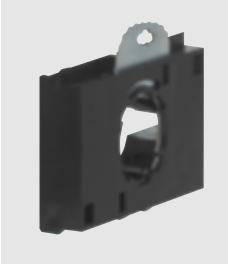
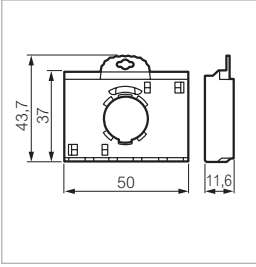
For empty positions on 3 or 5 position clip

33EX









Accessories

 Characteristics (p. 98)

▶ CLIPS

CLIPS		Cat. No.
		To be combined with blocks (p. 62 to 68) 1 position
331E		331E
		3 positions
333E		333E
		5 positions (only for \varnothing 22 heads)
335E		335E

▶ ROUND LEGEND PLATE

FOR MUSHROOM HEAD	Cat. No.
	According to ISO 13850, Text + Symbol 
\varnothing 60	
ARRET D'URGENCE + 	LWE16100
NOT-HALT + 	LWE16232
EMERGENCY STOP + 	LWE16300
\varnothing 80	
ARRET D'URGENCE + 	LWE00100
NOT-HALT + 	LWE00232
EMERGENCY STOP + 	LWE00300
\varnothing 60 Without symbol, text only	
ARRET D'URGENCE	LWE16152
NOT AUS	LWE16200
EMERGENCY STOP	LWE16352
\varnothing 80 Without symbol, text only	
ARRET D'URGENCE	LWE00152
NOT AUS	LWE00200
EMERGENCY STOP	LWE00352

Catalogue No. in bold: normally in stock at distribution outlets



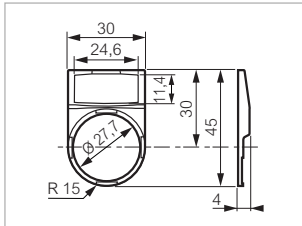
▶ COMPLETE FRAMES

Standard model - 30 x 45 mm

Cat. No.



LWP31



Round shape
Black frame and legend plate unassembled
2 lines maximum, 13 characters per line

Without engraving

- White
- Red
- Alu
- Black

LWP35
LWP31
LWP39
LWP33

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- White
- Red
- Alu
- Black

LWP35
LWP31
LWP39
LWP33

Protective mask for legend plate (paper or other ...)

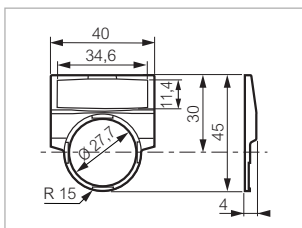
- Transparent

LWP37

Large model - 40 x 45 mm



LWG33



Round shape
Black frame and legend plate unassembled
2 lines maximum, 18 characters per line

Without engraving

- White
- Red
- Alu
- Black

LWG35
LWG31
LWG39
LWG33

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- White
- Red
- Alu
- Black

LWG35
LWG31
LWG39
LWG33

Protective mask for legend plate (paper or other ...)

- Transparent

LWG37

► LEGEND PLATES

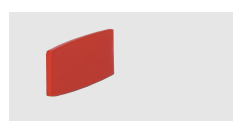
TO BE ENGRAVED

Standard model

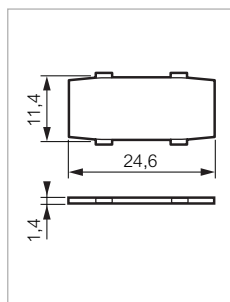
Cat. No.



LIA5



LIA1



2 lines maximum
13 characters per line
For round and square frames cat. nos. LWP3, LWP4 et LWP2 (p. 73)

Without engraving

- White LIA5
- Red LIA1
- Alu LIA9
- Black LIA3

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- White - black engraving LIA5 □□□□
- Red - white engraving LIA1 □□□□
- Alu - black engraving LIA9 □□□□
- Black - white engraving LIA3 □□□□

Protective mask for legend plate (paper or other ...)

- Transparent LIA7

TO BE ENGRAVED

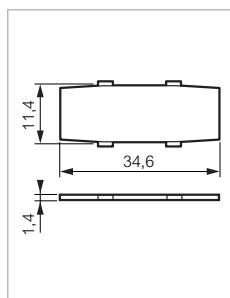
Large model



LIB9



LIB3



2 lines maximum
18 characters per line
For round frame cat. no. LWG3 (p. 73)

Without engraving

- White LIB5
- Red LIB1
- Alu LIB9
- Black LIB3

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- White - black engraving LIB5 □□□□
- Red - white engraving LIB1 □□□□
- Alu - black engraving LIB9 □□□□
- Black - white engraving LIB3 □□□□

Protective mask for legend plate (paper or other ...)

- Transparent LIB7

Accessories ø 22

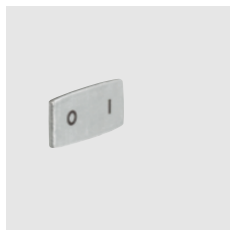
 Characteristics (p. 98)

▶ LEGEND PLATES

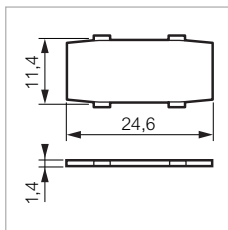
ENGRAVED

Small model

Cat. No.



LIA9081



Alu legend plate, black engraving
For round and square frames cat. nos. LWP3, LWP4 et LWP2 (p. 73)

With standard engraving

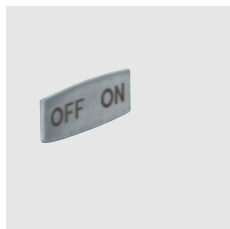
O-I	LIA9081
I-II	LIA9082
I-O-II	LIA9091
MANU-O-AUTO	LIA9191
HAND-O-AUTO	LIA9291
START	LIA9301
ON	LIA9303
OFF	LIA9304
RESET	LIA9315
RUN	LIA9327
HAND-AUTO	LIA9383

On demand engraving (p. 74)

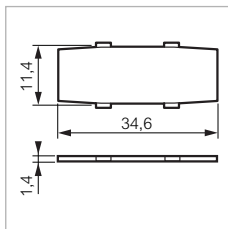
Symbol code to be added at the end of the catalogue number LIA9□□□

ENGRAVED

Large model



LIB9382



Alu legend plate, black engraving
For round frame cat. no. LWG3 (p. 73)

OFF-ON	LIB9382
O-I-START	LIB9093

Accessories ø 22

 Characteristics (p. 98)

▶ FRAMES

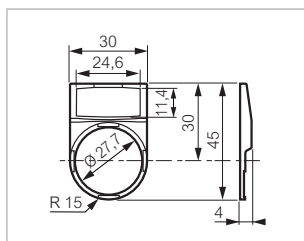
ROUND

Standard model

Cat. No.



LWP3



For legend plates cat. nos. LIA5, LIA1, LIA 9, LIA 3 (p. 71)

● Black

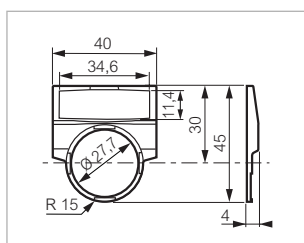
LWP3

ROUND

Large model



LWG3



For legend plates cat. nos. LIB5, LIB1, LIB 9, LIB 3 (p. 71)

● Black

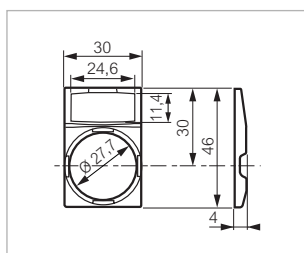
LWG3

SQUARE

Standard model



LWP4



For legend plates cat. nos. LIA5, LIA1, LIA 9, LIA 3 (p. 71)

● Black

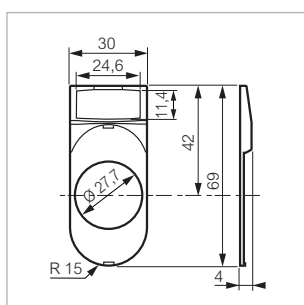
LWP4

FOR DOUBLE AND TRIPLE TOUCH

Standard model



LWP2



For legend plates cat. nos. LIA5, LIA1, LIA 9, LIA 3 (p. 71)

● Black

LWP2

Engravings

Symbol code to be added at the end of the catalogue number

▶ STANDARD TEXTS

UNIVERSAL TEXT

Cat. No.

For selector switches and legend plates

O-I	081
I-II	082
I-O-II	091
I-II-III	092
O-I-START	093
O-I-II	094

ENGLISH TEXT

For buttons, pilot lights and legend plates

CLOSE	314
DOWN	336
FAST	310
FORWARD	305
INCH	329
JOG	328
LEFT	311
LOWER	308
OFF	304
ON	303
OPEN	313
POWER-ON	330
RAISE	307
RESET	315
REVERSE	306
RIGHT	312
RUN	327
SLOW	309
START	301
STOP	302
UP	335

For selector switches and legend plates

FORW.-OFF-REV.	392
HAND-AUTO	383
HAND-OFF-AUTO	391
LOCAL-OFF-REMOTE	393
OFF-ON	382
STOP-START	381

Engravings

Symbol code to be added at the end of the catalogue number

▶ STANDARD TEXTS (CONTINUED)

GERMAN TEXT

Cat. No.

For buttons, pilot lights and legend plates

AB	208
AUF	207
AUS	204
BETRIEB	224
BREMSEN	225
EIN	203
EINRICHTEN	223
FEINHEBEN	221
FEINSENKEN	222
HALT	202
HEBEN	219
LANGSAM	209
LINKS	211
RECHTS	212
RÜCKWÄRTS	206
SENKEN	220
SCHNELL	210
VORWÄRTS	205
VORRÜCKEN	226
ZU	214

For selector switches and legend plates

AUS-EIN	281
HAND-AUTO	283
HAND-O-AUTO	291
ZURÜCK-O-VOR	292

FRENCH TEXT

For buttons, pilot lights and legend plates

ALARME	133
ARRÊT	102
ARRÊT GÉNÉRAL	116
ARRIÈRE	106
AVANT	105
DÉCLENCHEMENT	131
DÉFAUT	132
DESCENTE	108
DROITE	112
EN SERVICE	103
FERMETURE	114
GAUCHE	111
HORS SERVICE	104
KLAXON	118
LENT	109
MARCHE	101
MONTÉE	107
OUVERTURE	113
RÉARMEMENT	115
SOUS TENSION	117
VITE	110






















For selector switches and legend plates

ARRÊT-MARCHE	181
AVANT -O- ARRIÈRE	192
C.P.C.-NORMAL	184
HORS-EN	182
MANU-AUTO	183
MANU -O- AUTO	191

Symbols

Symbol code to be added at the end of the catalogue number

STANDARD SYMBOLS ISO/DIN

Description	Symbol	Cat. No.
Continuous straight-line movement ISO 1		A01
Alternating straight-line movement ISO 5		A05
Continuous rotating movement clockwise ISO 7A - DIN 100		A07
Continuous rotating mov. anti-clockwise ISO 7B		B07
Forward ISO 16		A16
Increase in value ISO 28		A28
Decrease in value ISO 29		A29
Adjustable ISO 62		A62
Clamp, block apply pressure ISO 63A		A63
Clamp, block apply pressure ISO 63B		B63
Unclamp, release ISO 64A		A64
Unclamp, release ISO 64B		B64
Brake ISO 65		A65
Release brake ISO 66		A66
Automatic cycle (or semi-automatic) ISO 67		A67
Manual control ISO 68		A68
"ON" close circuit ISO 69		A69
"STOP" close circuit ISO 70		A70
ON/OFF close + open circuit ISO 71		A71
Close circuit manual impulse ISO 72		A72
Clutch ISO 74 - DIN 46		A74

Symbols

Symbol code to be added at the end of the catalogue number

▶ STANDARD SYMBOLS ISO/DIN (CONTINUED)

Description	Symbol	Cat. No.
De-clutch ISO 75 - DIN 45		A75
Warning "live" (energized) ISO 92 - DIN 131		A92
Main switch ISO 94		A94
Lubrification jet ISO 101		C01
Machine lighting ISO 102 - DIN 139		C02
Greasing ISO 107 - DIN 175		C07
Blow ISO 108 - DIN 263		C08
Suction ISO 109 - DIN 264		C09
Sound alarm DIN 155		D01
Emergency stop IEC 60417-5638 / ISO 13850		6964

▶ ADDITIONAL STANDARD SYMBOLS

Symbol	Cat. No.
	B01
	E01
	F01
	B62
	E62
	F62
	003
	004
	005

Catalogue No. in bold: normally in stock at distribution outlets

Accessories ø 22



Characteristics (p. 98)

▶ BUTTON PLATES - FOR HEADS WITHOUT BUTTON PLATE

NON ILLUMINATED

Cat. No.



LT05

For use with spring return button cat. no. L21AA00 (p. 23)

Without engraving

- Red
- Green
- Black
- Yellow
- White
- Blue

- LT01
- LT02
- LT03
- LT04
- LT05
- LT06



LT21302

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- Red
- Green
- Black
- Yellow
- White
- Blue

- LT21 [] [] [] []
- LT22 [] [] [] []
- LT23 [] [] [] []
- LT24 [] [] [] []
- LT25 [] [] [] []
- LT26 [] [] [] []

ILLUMINATED



LT20

For use with spring return button cat. no. L21AH00 (p. 40)

Without engraving

- Red
- Green
- Yellow
- White
- Blue

- LT10
- LT20
- LT40
- LT50
- LT60



LT34308

On demand engraving (p. 74)

Symbol code to be added at the end of the catalogue number

- Red
- Green
- Yellow
- White
- Blue

- LT31 [] [] [] []
- LT32 [] [] [] []
- LT34 [] [] [] []
- LT35 [] [] [] []
- LT36 [] [] [] []

Accessories ø 22



Characteristics (p. 98)

► SHROUDS - REINFORCED DEGREE OF PROTECTION: IP 67

FOR PUSH-BUTTONS PROJECTING

Cat. No.



LWA0203

For spring return or stay-put buttons

○ Transparent

LWA0228

For non illuminated spring return buttons

● Red opaque

● Green opaque

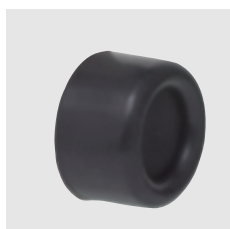
● Black opaque

LWA0203

LWA0204

LWA0205

FOR PUSH-BUTTONS FLUSH



LWA0253

For spring return or stay-put buttons

○ Transparent

LWA0255

For non illuminated spring return buttons

● Red opaque

● Green opaque

● Black opaque

LWA0251

LWA0252

LWA0253

DOUBLE TOUCH



LWA0223

For double touch flush-projecting and triple touch

○ Transparent

LWA0223

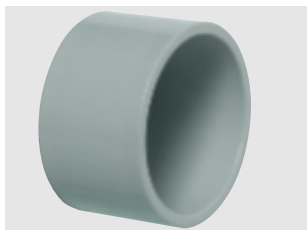
Accessories ø 22

 Characteristics (p. 98)

► MISCELLANEOUS

GUARD

Cat. No.



LWA0225

For spring return button and spring return mushroom head
(maxi ø 40)

- Grey

LWA0225

PADLOCKABLE GUARD



LWA0240

For stay-put mushroom head
● Yellow

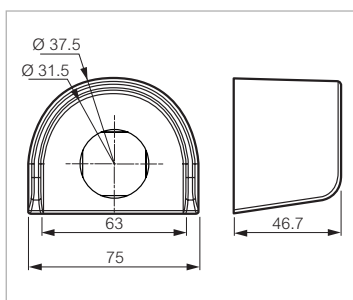
High (Height: 40 mm)

LWA0240

YELLOW GUARD RING



LWA0242



For emergency stop button
● Yellow

LWA0242

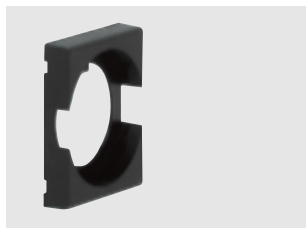
Accessories ø 22

 Characteristics (p. 98)

► MISCELLANEOUS (CONTINUED)

SQUARE FRAME

Cat. No.



LWA0230

For turning a round shape button or a pilot light into a square shape

- Black

LWA0230

RELAY TERMINAL (EARTH OR NEUTRAL)



LWA0216

For control station
Base mounted

LWA0216

ANTI-ROTATION RING



LWA0237

For selector switches

LWA0237

BLANKING PLUG



LWA0229

- Black
- Grey

LWA0229
LWA0215

Accessories ø 22

 Characteristics (p. 98)

► MISCELLANEOUS (CONTINUED)

FIXING TOOL

Cat. No.

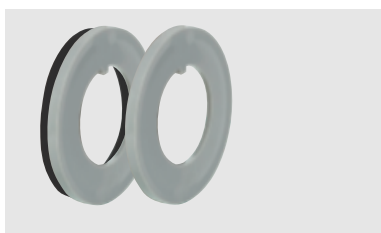


Fixing tool for locking ring

LWA0234

LWA0234

REDUCTION RING ø 30/22



Converts ø 30 mm cut-out to 22 mm hole

● Grey

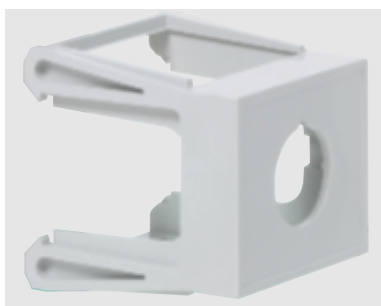
LWA0219

● Yellow

LWA0220

LWA0219

PUSH BUTTON SUPPORT CLIP-ON TO DIN RAIL



For pilot lights, spring return buttons and selector switches

LWA0238

LWA0238

PADLOCKABLE SHROUD



For spring return push-buttons

LWA0226

LWA0226

Catalogue No. in bold: normally in stock at distribution outlets

Control stations

solution boxes



Control stations with mushroom heads
pre-assembled



Control stations with buttons
1, 2 or 3 buttons

► ADVANTAGES

"All types of control station applications can be achieved"

- Multipurpose, pre-equipped with mushroom head or pushbuttons
- Enclosures for custom assembly 1,2,3,4 or 5 holes
- Up to 3 blocks per position
- Innovative design



Enclosures
1, 2, 3, 4 or 5 holes

► **SPECIAL REQUEST**

Custom assemblies and engraving options



See page 94



Control stations ø 22

IP 66
 Base mounted contact- screw terminals
 Conform to IEC 60947-5-1
 Marking on control station
 Frames and legend plates (p. 70)
 Special engraving on enclosure and mounting (form p. 94)



Characteristics (p. 98)

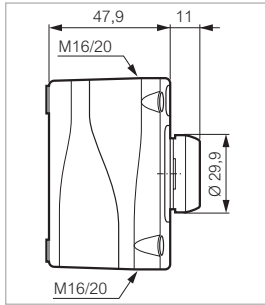
▶ CONTROL STATIONS WITH 1 BUTTON - NON ILLUMINATED

SPRING RETURN - FLUSH

Cat. No.



LBX10110



- Green
- Red

NO
 NC



Marking

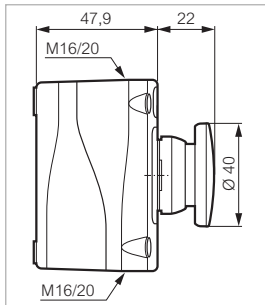


LBX10110
LBX10610

MUSHROOM HEAD ø 40 - SPRING RETURN



LBX10210



- Red

NC



Marking

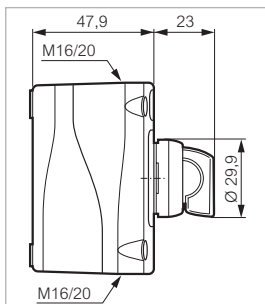


LBX10210

SELECTOR SWITCH - WITH HANDLE



LBX12510



2 stay-put positions - 45°

- Black

NO



Marking



LBX12510

Control stations ø 22

IP66
 Base mounted contact- screw terminals
 Conform to IEC 60947-5-1
 Marking on control station
 Frames and legend plates (p. 70)
 Special marking and mounting (form p. 94)

 Characteristics (p. 98)

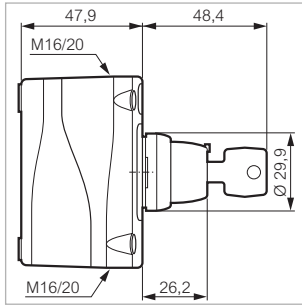
▶ CONTROL STATIONS WITH 1 BUTTON (CONTINUED)

SELECTOR SWITCH - WITH KEY

Cat. No.



LBX12610



Supplied with 2 keys profile n° 455

2 stay-put positions - 45°
 Key free in position 0-1

● Black NO 

Marking

○
|

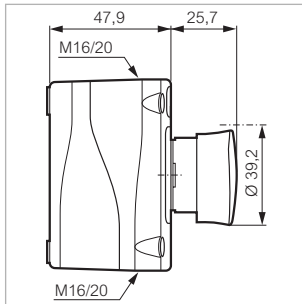
LBX12610




MUSHROOM HEAD Ø 40 - STAY-PUT

Push-turn to reset



LBX10510



● Red NC 
 ● Red NC 
 ● Red NC 

ARRÊT D'URGENCE
 NOT AUS
 EMERGENCY STOP

LBX10310
LBX10410
LBX10510

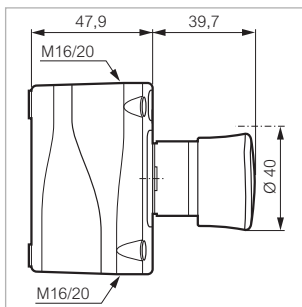
Contact blocks fixed behind cover (form p. 94)

MUSHROOM HEAD Ø 40 ISO 13850 - STAY-PUT


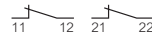

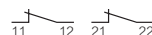

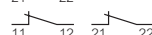
Push-turn to reset









LBX17201



Compliant with the requirements of emergency stop:
 IEC 60947-5-5 / ISO 13850

● Red NC 
 ● Red 2 NC 
 ● Red NC 
 ● Red 2 NC 
 ● Red NC 
 ● Red 2 NC 

ARRÊT D'URGENCE +  LBX17101
 ARRÊT D'URGENCE +  LBX17102
 NOT-HALT +  LBX17201
 NOT-HALT +  LBX17202
 EMERGENCY STOP +  **LBX17301**
 EMERGENCY STOP +  **LBX17302**

Contact blocks fixed behind cover (form p. 94)

Control stations ø 22

IP 66
 Base mounted contact- screw terminals
 Conform to IEC 60947-5-1
 Marking on control station
 Frames and legend plates (p. 70)
 Special engraving and mounting (form p. 94)

Characteristics (p. 98)

► CONTROL STATIONS WITH 1 BUTTON (CONTINUED)

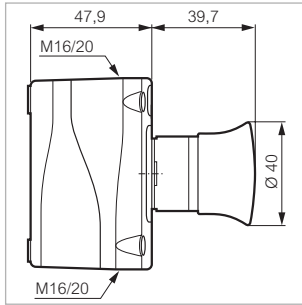
MUSHROOM HEAD Ø 40 ISO 13850 - STAY-PUT

Push-pull to reset

Cat. No.



LBX15101



Compliant with the requirements of emergency stop: IEC 60947-5-5 / ISO 13850

● Red	NC		ARRÊT D'URGENCE +	LBX15101
● Red	2 NC		ARRÊT D'URGENCE +	LBX15102
● Red	NC		NOT-HALT +	LBX15201
● Red	2 NC		NOT-HALT +	LBX15202
● Red	NC		EMERGENCY STOP +	LBX15301
● Red	2 NC		EMERGENCY STOP +	LBX15302

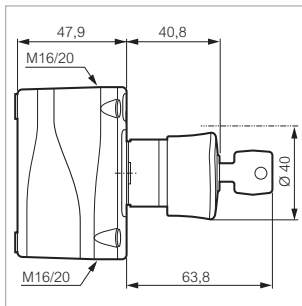
Contact blocks fixed behind cover (form p. 94)

MUSHROOM HEAD Ø 40 ISO 13850 - STAY-PUT

Key to reset



LBX11302



Compliant with the requirements of emergency stop: IEC 60947-5-5 / ISO 13850
 Supplied with 2 keys profile n° 455

● Red	NC		ARRÊT D'URGENCE +	LBX11101
● Red	2 NC		ARRÊT D'URGENCE +	LBX11102
● Red	NC		NOT-HALT +	LBX11201
● Red	2 NC		NOT-HALT +	LBX11202
● Red	NC		EMERGENCY STOP +	LBX11301
● Red	2 NC		EMERGENCY STOP +	LBX11302

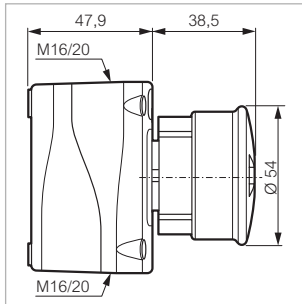
Contact blocks fixed behind cover (form p. 94)

MUSHROOM HEAD Ø 54 ISO 13850 - STAY-PUT

Push-pull to reset with flag indicator



LBX14201



Compliant with the requirements of emergency stop: IEC 60947-5-5 / ISO 13850
 Double position indicator: head and collar

● Red	NC		STOP -	LBX14201
● Red	2 NC		STOP -	LBX14202

Contact blocks fixed behind cover (form p. 94)

Control stations ø 22

IP 66
 Base mounted contact- screw terminals
 Conform to IEC 60947-5-1
 Marking on control station
 Frames and legend plates (p. 70)
 Special engraving and mounting (form p. 94)



Characteristics (p. 98)

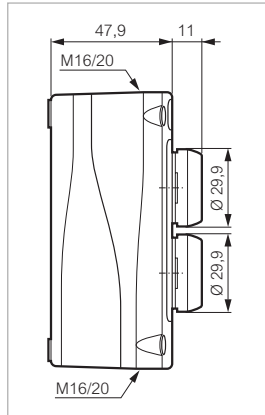
▶ CONTROL STATIONS WITH 2 BUTTONS

SPRING RETURN - FLUSH

Cat. No.



LBX20120



● Green
 ● Red

NO
 NC



Marking



LBX20120

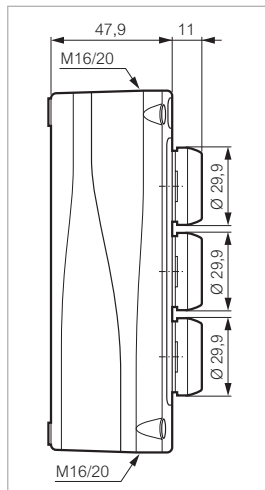
▶ CONTROL STATIONS WITH 3 BUTTONS

SPRING RETURN - FLUSH

Cat. No.



LBX30430



● Green
 ● Red
 ● Green

NO
 NC
 NO



LBX30430

Control stations with 4 or 5 buttons (form p. 94)

Control stations ø 22

Empty enclosures to be equipped with:
 - illuminated or non illuminated heads p. 23-49
 - specific blocks for control stations (base mounted) p. 66
 - frames and legend plates p. 70
 Other control stations to be equipped (form p. 94)



Characteristics (p. 98)

► ENCLOSURES

1 HOLE

Cat. No.

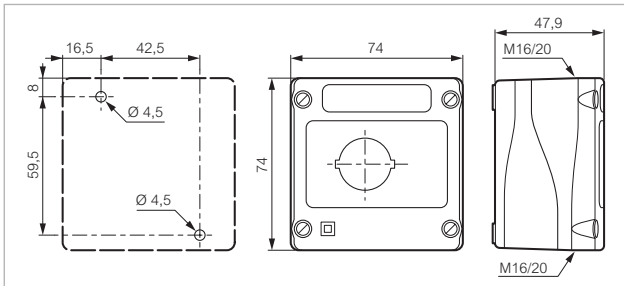


LBX0100J

Black base

- Grey cover
- Yellow cover
- Black cover
- Red cover
- Yellow cover with symbol IEC 60417 - 5438 / ISO 13850

LBX0100
LBX0100J
 LBX0100N
 LBX0100RN
 LBX130167



2 HOLES

Cat. No.

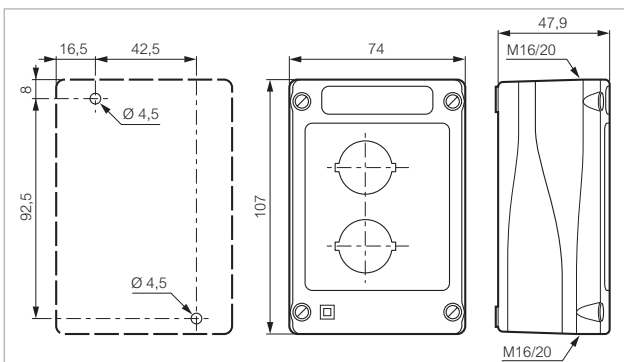


LBX0200

Black base

- Grey cover
- Yellow cover

LBX0200
LBX0200J



Catalogue No. in bold: normally in stock at distribution outlets

Control stations \varnothing 22

Empty enclosures to be equipped with:
 - illuminated or non illuminated heads p. 23-49
 - specific blocks for control stations (base mounted) p. 66
 - frames and legend plates p. 70
 Other enclosures (form p. 94)



Characteristics (p. 98)

► ENCLOSURES (CONTINUED)

3 HOLES

Cat. No.

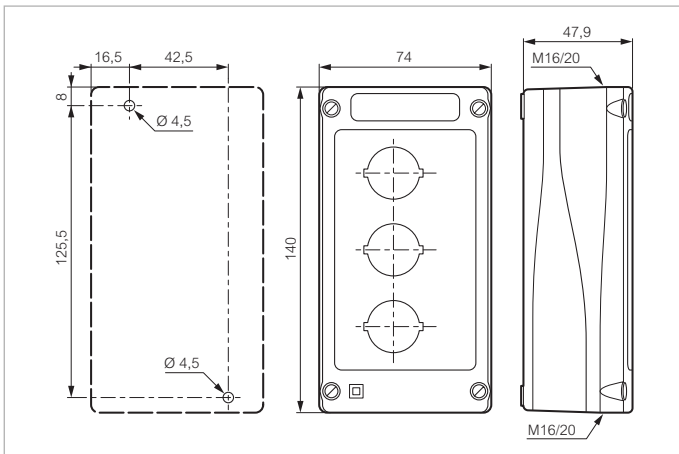


Black base

● Grey cover

LBX0300

LBX0300



Control stations \varnothing 22

Empty enclosures to be equipped with:
 - illuminated or non illuminated heads p. 23-49
 - specific blocks for control stations (base mounted) p. 66
 - frames and legend plates p. 70
 Other enclosures (form p. 94)



Characteristics (p. 98)

► ENCLOSURES (CONTINUED)

4 HOLES

Cat. No.

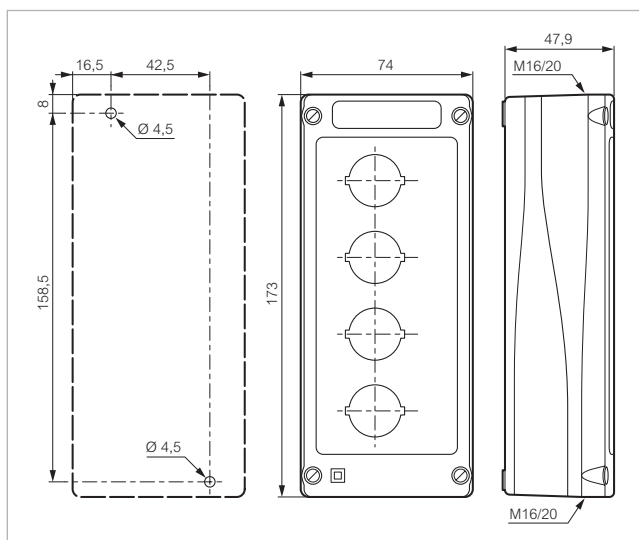


Black base

● Grey cover

LBX0400

LBX0400



Control stations \varnothing 22

Empty enclosures to be equipped with:
 - illuminated or non illuminated heads p. 23-49
 - specific blocks for control stations (base mounted) p. 66
 - frames and legend plates p. 70
 Other enclosures (form p. 94)



Characteristics (p. 98)

► ENCLOSURES (CONTINUED)

5 HOLES

Cat. No.

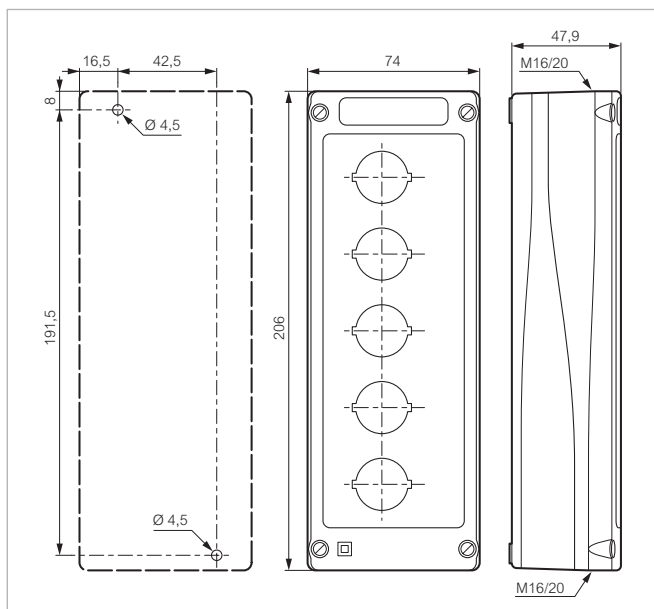


Black base

● Grey cover

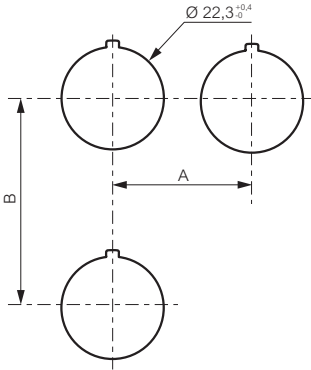
LBX0500

LBX0500



Panel cut-out

DRILLING

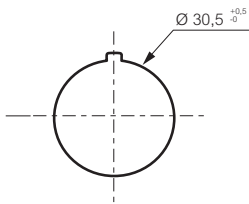


For heads equipped with electrical blocks with screw or plug-in terminals

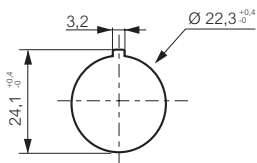
Minimum interval (mm)

	= 30	With or without legend (usual case)
	= 33	IP 67 (silicon shroud)
	= 40	With large legend plate
A	> 40	For mushroom head \varnothing 40
	> 45	For selector switch with long handle
	= 38	For super-flush button
	= 50	With 5 position clip
B	= 45	With or without legend plate (usual case)
	= 54	With double touch
	= 77	With double touch + legend plate
	= 50	Joystick

DRILLING FOR SUPER-FLUSH BUTTON

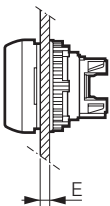


DRILLING WHEN USING THE ANTI-ROTATION RING (OPTIONAL)



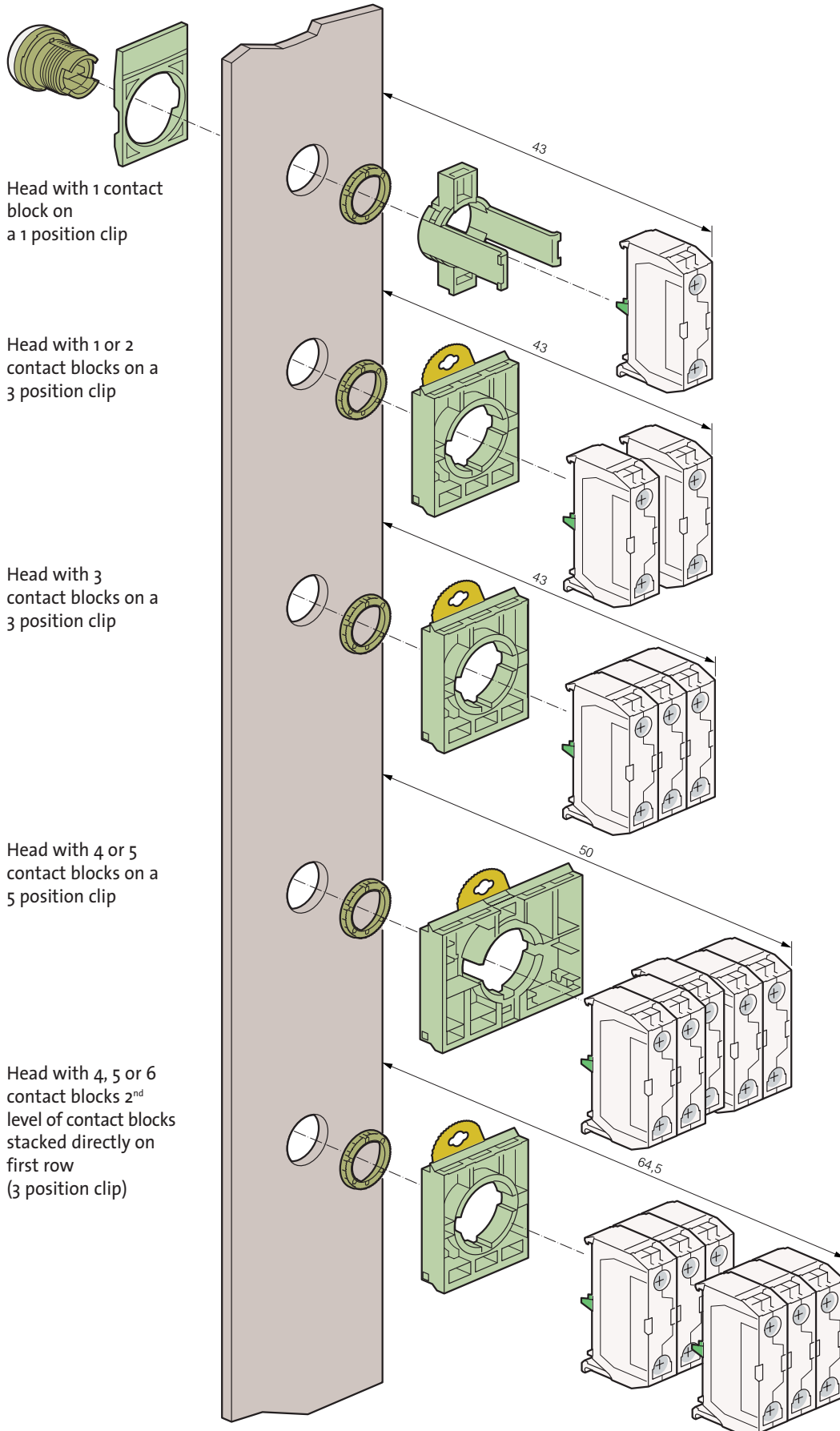
THICKNESS OF PANEL (E)

E = 1 to 6 mm



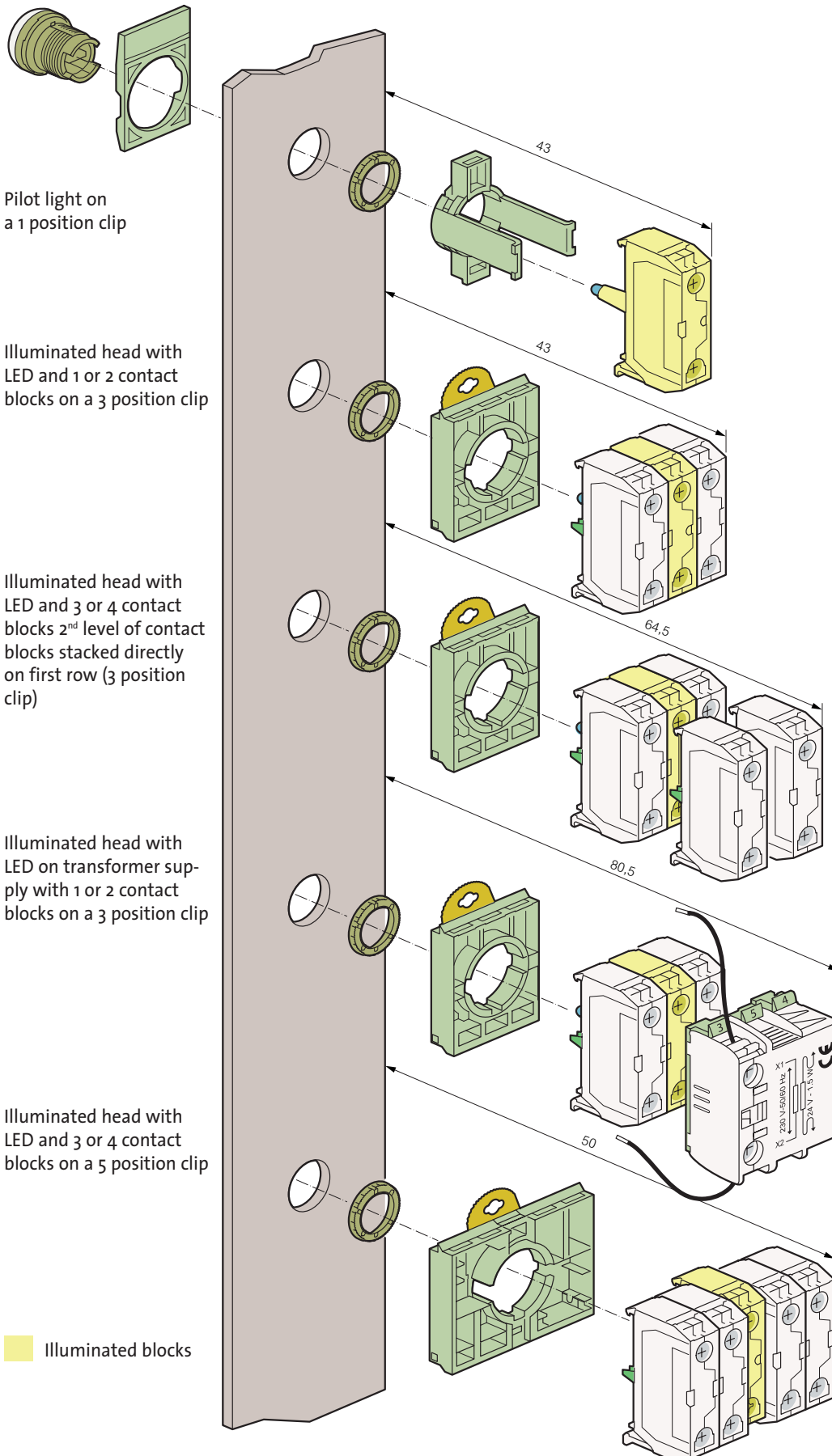
Mounting blocks \varnothing 22

NON ILLUMINATED



Mounting blocks $\varnothing 22$

ILLUMINATED



Technical characteristics

▶ GENERAL

Characteristics	Data	Standards
▶ Storage temperature	- 40 °C to + 70 °C	
▶ Operating temperature	- 25 °C to + 70 °C	
▶ Climatic resistance	Constant humid heat Cyclic damp heat Resistance to sea air	IEC 60068-2-3 IEC 60068-2-30 IEC 60068-2-52
▶ Degree of protection	IP 65 for adjustable mechanical push button IP 65 for USB interface IP 66 for standard heads IP 67 for shrouded heads IP 66 for equipped control stations IP 69 and IP 69K for push buttons IP 69 and IP 69K for selector switches IP 69 and IP 69K for pilot devices IP 69 and IP 69K for emergency stops IP 69 and IP 69K for audible warning buzzers IP 20 at the rear of the panel for contact blocks and one piece pilot lights Type 1, 2, 3, 3R, 3S, 4, 4X, 12, and 13 for heads and control stations	IEC 60529 IEC 60529 IEC 60529 IEC 60529 IEC 60529 IEC 60529 - ISO 20653 IEC 60529 - ISO 20653 IEC 60529 - ISO 20653 IEC 60529 - ISO 20653 IEC 60529 - ISO 20653 NEMA standard
▶ Protection against mechanical impacts	IK 05 illuminated and non illuminated heads IK 07 empty control station	IEC 62262
▶ Electrical insulation	Class II - heads and control station	IEC 60947-5-1
▶ Terminal marking		IEC 60947-1
▶ Tightening torques	Locking ring: recommended 3 N.m or tightened with the fixing tool to hand tight after pressure point plus another half turn Terminals: max. 1.2 N.m	
▶ Approvals	UL United states and Canada BV Bureau Véritas Certification OC/CB	UL 508, CSA 22.2 Marine rules IEC 60947-5-1 IEC 60947-5-5 IEC 60947-5-4
▶ Vibrations	withstand vibration Fc test: 2 to 25 Hz, 1.6 mm; 25-100 Hz, 4 g	IEC 60068-2-6

Technical characteristics

▶ CONTACT BLOCKS

Screw and plug-in connection characteristics	Data	Standards	
▶ Rated insulation voltage	690 V AC 600 V AC	IEC 60947-1 UL 508	
▶ NC contacts	Positive opening	IEC 60947-5-1	
▶ Rated impulse voltage Uimp Pollution degree	6kV 3		
▶ Conventional thermal current in free air conditions	AC15: 10 A DC13: 2,5 A	IEC 60947-5-1	
▶ Electrical ratings	<p>Alternating current AC15 - A 600 Ue = 120 V, Ie = 6 A Ue = 240 V, Ie = 3 A Ue = 380 V, Ie = 1,9 A Ue = 480 V, Ie = 1,5 A Ue = 500 V, Ie = 1,4 A Ue = 600 V, Ie = 1,2 A</p> <p>Minimum operating current - standard blocks Ue = 24 V DC and Ie = 5 mA Failure rate < 10⁻⁸</p>	<p>Direct current DC13 - Q 600 Ue = 125 V, Ie = 0,55 A Ue = 250 V, Ie = 0,27 A Ue = 400 V, Ie = 0,15 A Ue = 500 V, Ie = 0,13 A Ue = 600 V, Ie = 0,1 A</p> <p>- golden contacts Ue = 5 V DC and Ie = 1 mA Failure rate < 10⁻⁸</p>	IEC 60947-5-1
▶ Electrical operating life	<p>1 million cycles for: - AC15 - B 300 Ue = 120 V, Ie = 3 A Ue = 240 V, Ie = 1,5 A</p> <p>- DC13 - R 300 Ue = 125 V, Ie = 0,22 A Ue = 250 V, Ie = 0,1 A</p>		
▶ Applicable wire sizes	Rigid or flexible wire without ferrule: 0,5 mm ² to 2 x 2,5 mm ² Rigid or flexible wire with ferrule: 0,5 mm ² to 2 x 1,5 mm ²		

Faston connection	Data	Standards	
▶ Rated insulation voltage	320 V AC 300 V AC	IEC 60947-1 UL 508	
▶ NC contacts	Positive opening	IEC 60947-5-1	
▶ Rated impulse withstanding voltage Uimp Pollution degree	6 kV 3		
▶ Conventional thermal current in free air conditions	AC 15: 10 A DC 13: 2,5 A	IEC 60947-5-1	
▶ Electrical ratings	<p>Alternating current AC15 - A 300 Ue = 120 V, Ie = 6 A Ue = 240 V, Ie = 3 A</p> <p>Minimum current of use Ue = 24 V DC and Ie = 5 mA Failure rate < 10⁻⁸</p>	<p>Direct current DC13 - Q 300 Ue = 125 V, Ie = 0,55 A Ue = 250 V, Ie = 0,27 A</p> <p>- DC13 - R 300 Ue = 125 V, Ie = 0,22 A Ue = 250 V, Ie = 0,1 A</p>	IEC 60947-5-1
▶ Electrical operating life	<p>1 million cycles for: - AC15 - B 300 Ue = 120 V, Ie = 3 A Ue = 240 V, Ie = 1,5 A</p> <p>- DC13 - R 300 Ue = 125 V, Ie = 0,22 A Ue = 250 V, Ie = 0,1 A</p>		
▶ Faston size	6,35 mm or 2 x 2,8 mm		

Technical characteristics

▶ CONTACT BLOCKS

Pin-style connection (for PCB)	Data		Standards
▶ Rated insulation voltage	250 V AC 250 V AC		IEC 60947-1 UL 508
▶ NC contacts	Positive opening		IEC 60947-5-1
▶ Rated impulse withstanding voltage Uimp Pollution degree	4 kV 3		
▶ Conventional thermal current in free air conditions	AC 15: 5 A DC 13: 1 A		IEC 60947-5-1
▶ Electrical ratings	Alternating current AC 15 - B 300 Ue = 120 V, Ie = 3 A Ue = 240 V, Ie = 1,5 A	Direct current DC13 - R 300 Ue = 125 V, Ie = 0,22 A Ue = 250 V, Ie = 0,1 A	IEC 60947-5-1 IEC 60947-5-4
	Minimum current of use - standard blocks Ue = 24 V DC and Ie = 5 mA Failure rate < 10 ⁻⁸	- golden contacts Ue = 5 V DC and Ie = 1 mA Failure rate < 10 ⁻⁸	
▶ Electrical operating life	1 million cycles for: - AC15 - B 300 Ue = 120 V, Ie = 3 A Ue = 240 V, Ie = 1,5 A	- DC13 - R 300 Ue = 125 V, Ie = 0,22 A Ue = 250 V, Ie = 0,1 A	
▶ Pin diameter	ø 1 mm		

Technical characteristics

▶ LED BLOCKS FOR ILLUMINATED HEADS AND ONE PIECE LED PILOT LIGHTS

Characteristics	Data	Standards
▶ Rated insulation voltage	300 V	IEC 60947-5-1
▶ Rated impulse voltage Uimp Pollution degree	4 kV (with filter block see p. 68) 3	IEC 60947-1
▶ Operating voltage	12 to 24 V AC/DC 48 V AC/DC (for LED block) 110 V DC 130 V AC 230 V AC	
▶ Frequency	50 or 60 Hz	
▶ Lifetime at rated supply voltage	Red and yellow: 100 000 hours at 25 °C Other colours: 50 000 hours at 25 °C	
▶ Consumption of LED blocks	Voltage: - 24 V: 25 mA ± 20% - 48 V: 15 mA ± 5% - 110 V: 20 mA ± 10% - 130 V: 20 mA ± 10% - 230 V: 16 mA ± 30%	

▶ ONE PIECE PILOT LIGHT

Characteristics	Data	Standards
▶ Rated insulation voltage	300 V	IEC 60947-5-1
▶ Rated impulse withstand voltage Uimp	4 kV	IEC 60947-1
▶ Operating voltage	24 V AC/DC (± 10%) 130 V AC/DC (± 10%) 230 V AC/DC (± 10%)	
▶ Frequency	50 or 60 Hz	
▶ Lifetime at rated supply voltage	Red: 100 000 hours at 25° C Other colours: 50 000 hours at 25° C	
▶ Consumption	24 V: 4,6 mA 130 V: 5,2 mA 230 V: 4,6 mA	

Technical characteristics

▶ USB INTERFACE 3.0

Characteristics	Data	Standards
▶ Rated insulation voltage	5 V AC/DC	IEC 60947-5-1
▶ Rated current	1,8 A	IEC 60947-5-1
▶ Insulation resistance	$\geq 100 \text{ M}\Omega$	
▶ Contact resistance	$\leq 30 \text{ M}\Omega$	
▶ USB class	3.0 (backward compatible with USB class 2.0)	
▶ Transmission characteristics for	5 Gbps (625 MB/sec)	
▶ Recommended fixing tool	Tightening flat wrench size 26 mm	

▶ AUDIBLE WARNING BUZZERS

Characteristics	Data	Standards
▶ Supply voltage	18 to 30 V AC/DC 85 to 140 V AC/DC 185 to 265 V AC/DC	IEC 60947-5-1
▶ Rated impulse voltage Uimp	4 KV	IEC 60947-5-1
▶ Sound Power	80 dB @ 10 cm	
▶ Frequency	50 or 60 Hz	
▶ Maximum power consumption	$\leq 20 \text{ mA}$	
▶ Service life	30000 hours (continuously powered)	
▶ Recommended fixing tool	Tightening flat wrench size 26 mm	

Technical characteristics

▶ HEADS

Characteristics	Data	Standards
▶ Mechanical endurance (in million cycles)	Spring return: 5 Push-push: 0,5 Selector switches: 0,3 Mushroom head maintained function ISO 13850: 0,10 Mushroom head maintained function: 0,15	
▶ Activation force in N	Spring return + NO: 6,5 Spring return + NC: 4,5 Additional NO contact: 4,5 Additional NC contact: 3,0 Push-pull mushroom head + NO + NC: 27 Push-turn mushroom head + NO + NC: 22 Push-pull mushroom head ISO 13850 + NO + NC: 37 Push-turn mushroom head ISO 13850 + NO + NC: 60	
▶ Activation force in Nm	Selector switch + NO: 0,04 Additional NO contact: 0.03	

▶ EMERGENCY STOP ACTUATORS - ISO 13850:

According to IEC 60947-5-5, the emergency stop function can be provided by an ISO 13850 mushroom head combined with a «positive opening» NC contact block.

The mechanism of our ISO 13850 mushroom heads is so designed that a «push» action of sufficient force to open the contact systematically triggers an irreversible locking of this opening. This generates an «emergency stop» signal which can be cancelled only by deliberate manual resetting of the mushroom head (pull and turn or unlocking by key).

This function allows to generate an «emergency stop» signal for any equipment subject to directive 98/37CE (machinery safety) completed by the IEC 60204-1 standard.

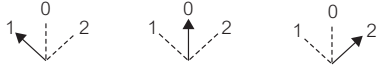
The ISO 13850 mushroom heads also comply with the safety requirements detailed in standard ISO 13850.

Diagrams

MECHANICAL OPERATION

For 3 position selector switches

Handle
(View from front of panel)



Contacts block actuation
(View from front of panel)



Back side view

Non operated block



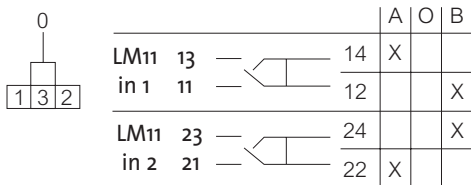
Operated block



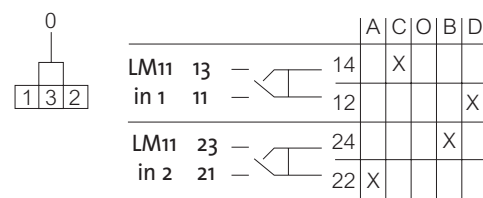
MECHANICAL OPERATION

For Joysticks

2 positions

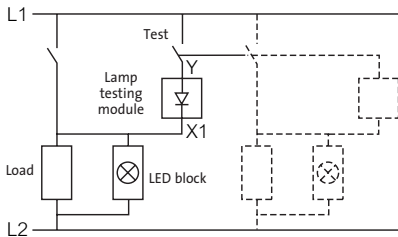


4 positions

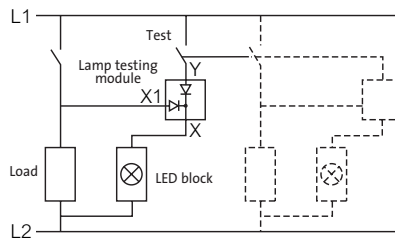


PUSH-TO-TEST LED PILOT LIGHT DIAGRAMS

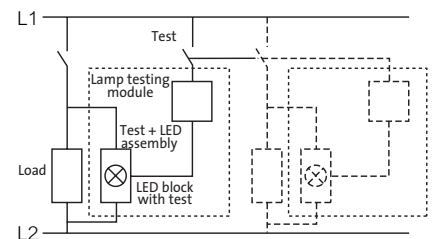
Lamp-testing module with 1 diode (33ET) for direct supply 24 V and 48V



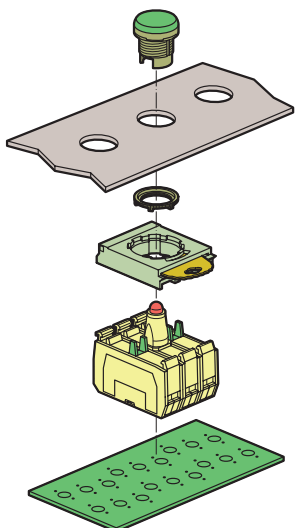
Lamp-testing module with 2 diodes (33ETT) for direct supply 24 V and 48 V



Lamp-testing assembly for direct supply 130 V and 240 V (Consult us - see page 79)

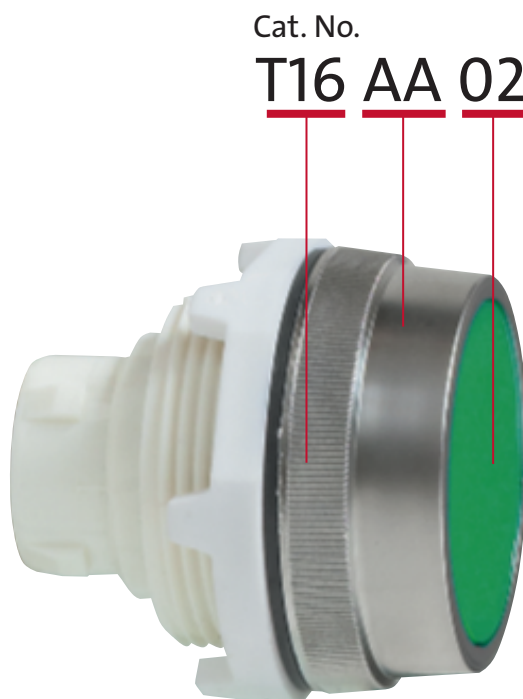


PRINTED CIRCUIT BOARD MOUNTING



Ø 30 heads:

Baco simplifies your choice



--- **AA** --- definition of function

T16 AA --- choice of bezel

T16 AA **02** colour of head

▶ HEAD COLOUR CODES

01 ● red	04 ● yellow
02 ● green	05 ○ white
03 ● black	06 ● blue

▶ BEZEL CODES

T11	chrome brilliant plastic
T12	black plastic
T13	grey plastic
T14	chrome brass
T16	matt chrome plastic

▶ AVANTAGES

- Ø 30 heads use the same clips and blocks as Ø 22 heads
- Fully compatible with the new Ø 22 range
- Wide choice of bezels

Separate units \varnothing 30: Heads

IP 65
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Other bezel on request (form p. 123)
 \varnothing 30 blocks use the same blocks and clips (except for the 5 position clip) as \varnothing 22 mm heads (see p. 52-69)
 Conform to IEC 60947-5-1



Characteristics (p. 125)

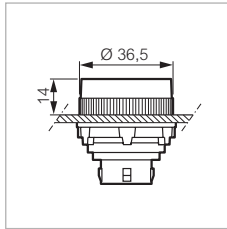
► PUSH-BUTTONS - NON ILLUMINATED

SPRING RETURN - FLUSH

Cat. No.



T16AA01



Without engraving

- Red
- Green
- Black
- Yellow
- White
- Blue

- T16AA01
- T16AA02
- T16AA03
- T16AA04
- T16AA05
- T16AA06

With engraving

- ⊙ Red
- ⊙ Green
- ⊙ Black

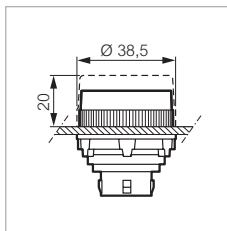
- T16AA81
- T16AA82
- T16AA83

SPRING RETURN - FLUSH

Reinforced degree of protection: IP 67



T12AG03



Supplied with transparent shroud
 Marking possible
 (engravings and symbols p. 76)

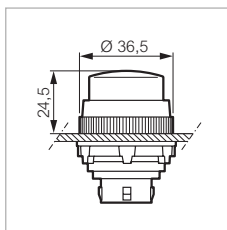
- Red
- Green
- Black
- Yellow
- White
- Blue

- T12AG01
- T12AG02
- T12AG03
- T12AG04
- T12AG05
- T12AG06

SPRING RETURN - PROJECTING



T16AB01



- Red
- Green
- Black
- Yellow
- White
- Blue

- T16AB01
- T16AB02
- T16AB03
- T16AB04
- T16AB05
- T16AB06

Separate units \varnothing 30: Heads

IP 65
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Other bezel on request (form p. 123)
 \varnothing 30 blocks use the same blocks and clips (except for the 5 position clip) as \varnothing 22 mm heads (see p. 52-69)
 Conform to IEC 60947-5-1



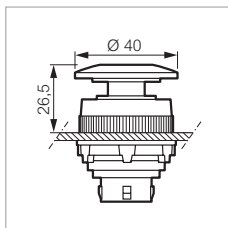
Characteristics (p. 125)

► PUSH-BUTTONS - NON ILLUMINATED (CONTINUED)

SPRING RETURN - MUSHROOM HEAD \varnothing 40

Push

Cat. No.



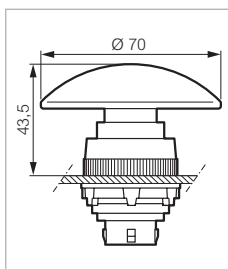
- Red
- Green
- Black
- Yellow

- T16AD01
- T16AD02
- T16AD03
- T16AD04

T16AD01

SPRING RETURN - MUSHROOM HEAD \varnothing 70

Push



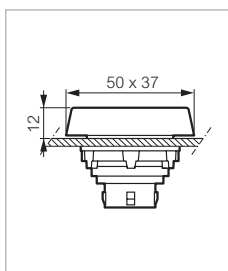
- Red - plastic
- Black - plastic

- T16AE01
- T16AE03

T16AE01

SPRING RETURN - FLUSH-FLUSH

Double touch



Plastic black frame

- Green
- Red
- Black
- Red

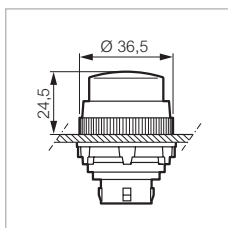
T52QA02

T52QA03

T52QA02

STAY-PUT - PROJECTING

Push-push



- Red
- Green
- Black
- Yellow
- White
- Blue

- T16CB01
- T16CB02
- T16CB03
- T16CB04
- T16CB05
- T16CB06

T16CB02

Separate units \varnothing 30: Heads

IP 65
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Other bezel on request (form p. 123)
 \varnothing 30 blocks use the same blocks and clips (except for the 5 position clip) as \varnothing 22 mm heads (see p. 52-69)
 Conform to IEC 60947-5-1



Characteristics (p. 125)

▶ SELECTOR SWITCHES - NON ILLUMINATED

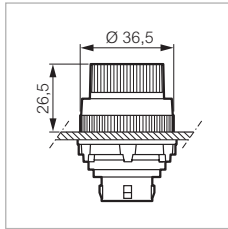
WITH HANDLE

2 positions

Cat. No.



T16KA03



Stay-put positions - 45°

- Red
- Black
- Grey



T16KA01
 T16KA03
 T16KA08

Stay-put positions - 45°

- Red
- Black
- Grey



T16KC01
 T16KC03
 T16KC08

Spring return- 45°

- Red
- Black
- Grey



T16KD01
 T16KD03
 T16KD08

Stay-put positions - 90°

- Red
- Black
- Grey



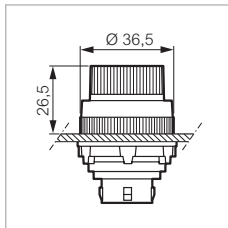
T16KF01
 T16KF03
 T16KF08

WITH HANDLE

3 positions



T16MA01



Stay-put positions - 45°

- Red
- Black
- Grey



T16MA01
 T16MA03
 T16MA08

Spring return from right to 0 - 45°

- Red
- Black
- Grey



T16MC01
 T16MC03
 T16MC08

Spring return to 0 - 45°

- Red
- Black
- Grey



T16MD01
 T16MD03
 T16MD08

Stay-put positions - 90°

- Red
- Black
- Grey



T16MK01
 T16MK03
 T16MK08

Separate units \varnothing 30: Heads

IP 65
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Other bezel on request (form p. 123)
 \varnothing 30 blocks use the same blocks and clips (except for the 5 position clip) as \varnothing 22 mm heads (see p. 52-69)
 Conform to IEC 60947-5-1

 Characteristics (p. 125)

▶ SELECTOR SWITCHES - NON ILLUMINATED (CONTINUED)

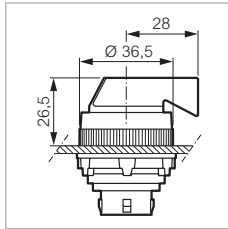
WITH LONG HANDLE

2 positions

Cat. No.



T16KP03



Stay-put positions - 45°

- Red
- Black
- Grey



T16KP01
 T16KP03
 T16KP08

Stay-put positions - 45°

- Red
- Black
- Grey



T16KR01
 T16KR03
 T16KR08

Spring return - 45°

- Red
- Black
- Grey



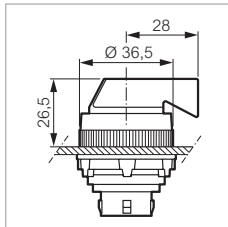
T16KS01
 T16KS03
 T16KS08

WITH LONG HANDLE

3 positions

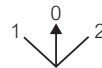


T16MR01



Stay-put positions - 45°

- Red
- Black
- Grey



T16MR01
 T16MR03
 T16MR08

Spring return from right to 0 - 45°

- Red
- Black
- Grey



T16MT01
 T16MT03
 T16MT08

Spring return to 0 - 45°

- Red
- Black
- Grey



T16MU01
 T16MU03
 T16MU08

Separate units \varnothing 30: Heads

IP 65
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Other bezel on request (form p. 123)
 \varnothing 30 blocks use the same blocks and clips (except for the 5 position clip) as \varnothing 22 mm heads (see p. 52-69)
 Conform to IEC 60947-5-1



Characteristics (p. 125)

▶ SELECTOR SWITCHES - NON ILLUMINATED (CONTINUED)

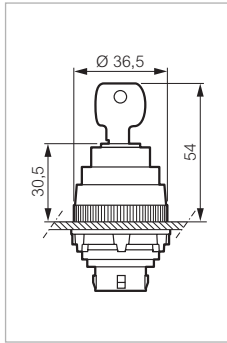
WITH KEY

2 positions

Cat. No.



T16LA00



Supplied with 2 keys profile n° 455

Key free in position:

Stay-put positions - 45°

● Black



0

T16LA00

Stay-put positions - 45°

● Black



0

T16LC00

Spring return- 45°

● Black



0

T16LD00

Stay-put positions - 90°

● Black



0

T16LF00

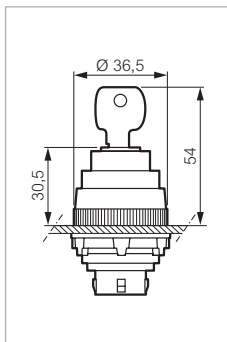
Key profile n° 1424 A and others (form p. 123)

WITH KEY

3 positions



T16NA00



Supplied with 2 keys profile n° 455

Key free in position:

Stay-put positions - 45°

● Black



0

T16NA00

Spring return from right to 0 - 45°

● Black



0

T16NC00

Spring return to 0 - 45°

● Black



0

T16ND00

Stay-put positions - 90°

● Black



1 - 0 - 2

T16NK00

Key profile n° 1424 A and others (form p. 123)

Separate units \varnothing 30: Heads

IP 65
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Other bezel on request (form p. 123)
 \varnothing 30 blocks use the same blocks and clips (except for the 5 position clip) as \varnothing 22 mm heads (see p. 52-69)
 Conform to IEC 60947-5-1



Characteristics (p.125)

▶ SELECTOR SWITCHES - NON ILLUMINATED (CONTINUED)

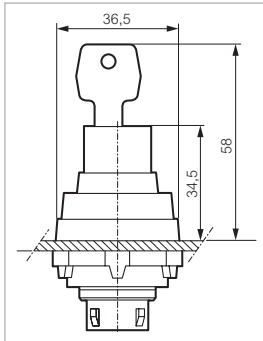
WITH KEY

Push

Cat. No.



T16GM00



Supplied with 2 keys profile n° 455

Lockable position	Key free in:	Cat. No.
Stay-put In bottom position	Top and bottom position	T16GM00
Manual locking In top position In top position	Top and bottom position	T16GF00
	Bottom position	T16GJ00
In bottom position In bottom position	Top and bottom position	T16GG00
	Bottom position	T16GK00
In top and bottom position In top and bottom position	Top and bottom position	T16GH00
	Bottom position	T16GL00

Separate units \varnothing 30: Heads

IP 65
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel - Other bezel on request (form p. 123)
 \varnothing 30 blocks use the same blocks and clips (except for the 5 position clip) as \varnothing 22 mm heads (see p. 52-69)
 Conform to IEC 60947-5-1



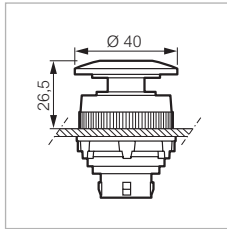
Characteristics (p. 125)

► MUSHROOM HEADS - NON ILLUMINATED

\varnothing 40 - STAY-PUT

Push-pull to reset

Cat. No.



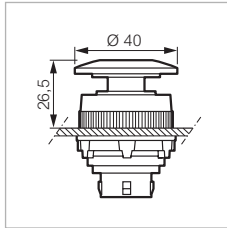
- Red
- Green
- Black
- Yellow

- T16DD01
- T16DD02
- T16DD03
- T16DD04

T16DD01

\varnothing 40 - STAY-PUT

Push-turn to reset



- Stay-put
- Red
 - Green
 - Black
 - Yellow

- T16ED01
- T16ED02
- T16ED03
- T16ED04

T16ED01

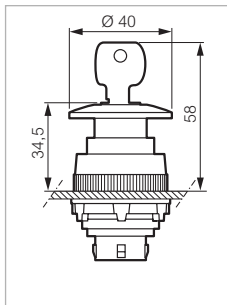
Manual locking

- Red
- Green
- Black
- Yellow

- T16FD01
- T16FD02
- T16FD03
- T16FD04

\varnothing 40 - STAY-PUT

Key to reset



Supplied with 2 keys profile n° 455

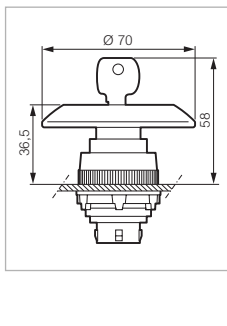
- Red

T16GM01

T16GM01

\varnothing 70 - STAY-PUT

Key to reset



Supplied with 2 keys profile n° 455

- Red

T16GP01

T16GP01

Separate units \varnothing 30: Heads

IP 65
 To be used without electrical block
 Black plastic bezel
 Stroke 12 mm
 Conform to IEC 60947-5-1

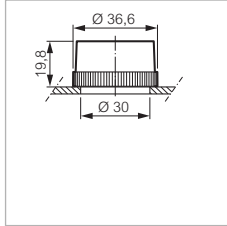


Characteristics (p. 125)

► ADJUSTABLE MECHANICAL PUSH/RESET BUTTON - NON ILLUMINATED

SPRING RETURN - FLUSH

Cat. No.



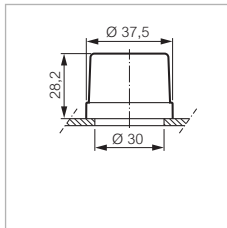
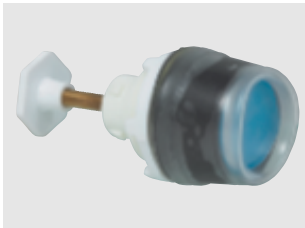
- Red
- Green
- Black
- Yellow
- White
- Blue

- T12HA01
- T12HA02
- T12HA03
- T12HA04
- T12HA05
- T12HA06

T12HA04

SPRING RETURN - FLUSH

Reinforced degree of protection: IP 67



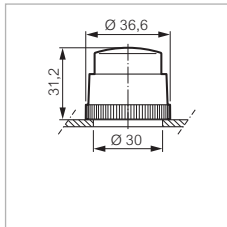
Supplied with transparent shroud

- Red
- Green
- Black
- Yellow
- White
- Blue

- T12HG01
- T12HG02
- T12HG03
- T12HG04
- T12HG05
- T12HG06

T12HG06

SPRING RETURN - PROJECTING



- Red
- Green
- Black
- Yellow
- White
- Blue

- T12HB01
- T12HB02
- T12HB03
- T12HB04
- T12HB05
- T12HB06

T12HB05

Separate units \varnothing 30: Heads

IP 65

To be combined with a clip and electrical blocks (p. 52)

With locking ring

Plastic chrome bezel- Black bezel on request (form p. 123)

\varnothing 30 blocks use the same blocks and clips (except for the 5 position clip) as \varnothing 22 mm heads (see p. 52-69)

Conform to IEC 60947-5-1



Characteristics (p. 125)

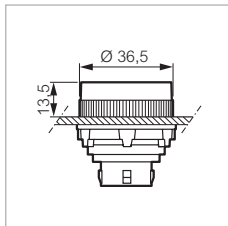
► PUSH-BUTTONS - ILLUMINATED

SPRING RETURN - FLUSH

Cat. No.



T16AH20



- Red
- Green
- Colourless
- Yellow
- Opal

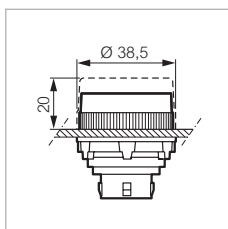
T16AH10
T16AH20
T16AH30
T16AH40
T16AH50

SPRING RETURN - FLUSH

Reinforced degree of protection: IP 67



T12AP40



Supplied with transparent shroud

- Red
- Green
- Colourless
- Yellow
- Opal

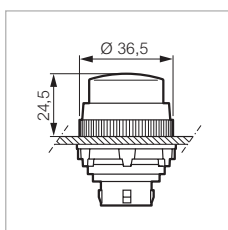
T12AP10
T12AP20
T12AP30
T12AP40
T12AP50

Enables engraving of button plate (form p. 123)

SPRING RETURN - PROJECTING



T16AK10



- Red
- Green
- Colourless
- Yellow
- Opal

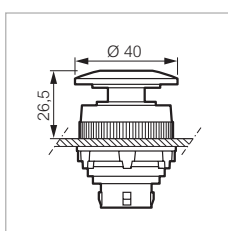
T16AK10
T16AK20
T16AK30
T16AK40
T16AK50

SPRING RETURN - MUSHROOM HEAD \varnothing 40

Push



T16AM10



- Red
- Green
- Yellow
- Opal

T16AM10
T16AM20
T16AM40
T16AM50

Separate units \varnothing 30: Heads

IP 65

To be combined with a clip and electrical blocks (p. 52)

With locking ring

Plastic chrome bezel- Black bezel on request (form p. 123)

\varnothing 30 blocks use the same blocks and clips (except for the 5 position clip) as \varnothing 22 mm heads (see p. 52-69)

Conform to IEC 60947-5-1



Characteristics (p. 125)

► PUSH-BUTTONS - ILLUMINATED (CONTINUED)

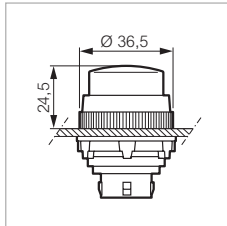
STAY-PUT - PROJECTING

Push-push

Cat. No.



T16CK50



- Red
- Green
- Colourless
- Yellow
- Opal

- T16CK10
- T16CK20
- T16CK30
- T16CK40
- T16CK50

Separate units \varnothing 30: Heads

IP 65
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 Plastic chrome bezel- Other bezel on request (form p. 123)
 \varnothing 30 blocks use the same blocks and clips (except for the 5 position clip) as \varnothing 22 mm heads (see p. 52-69)
 Conform to IEC 60947-5-1



Characteristics (p. 125)

▶ SELECTOR SWITCHES - ILLUMINATED

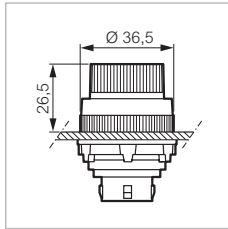
WITH HANDLE

2 positions

Cat. No.



T16KG10



Stay-put positions - 45°

- Red
- Green
- Opal



T16KG10
 T16KG20
 T16KG50

Stay-put positions - 45°

- Red
- Green
- Opal



T16KJ10
 T16KJ20
 T16KJ50

Spring return - 45°

- Red
- Green
- Opal



T16KK10
 T16KK20
 T16KK50

Stay-put positions - 90°

- Red
- Green
- Opal



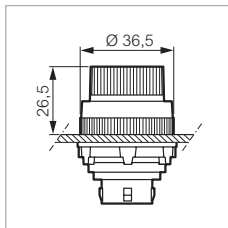
T16KM10
 T16KM20
 T16KM50

WITH HANDLE

3 positions



T16ME20



Stay-put positions - 45°

- Red
- Green
- Opal



T16ME10
 T16ME20
 T16ME50

Spring return from right to 0 - 45°

- Red
- Green
- Opal



T16MG10
 T16MG20
 T16MG50

Spring return to 0 - 45°

- Red
- Green
- Opal



T16MH10
 T16MH20
 T16MH50

Stay-put positions - 90°

- Red
- Green
- Opal



T16MJ10
 T16MJ20
 T16MJ50

Separate units \varnothing 30: Heads

IP 65
 To be combined with a clip and electrical blocks (p. 52)
 With locking ring
 For lens engraving (form p. 123)
 Conform to IEC 60947-5-1



Characteristics (p. 125)

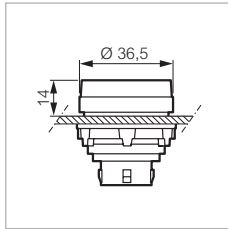
▶ PILOT LIGHT

LENS WITH BEZEL

Cat. No.



T10SB50V



Smooth lens

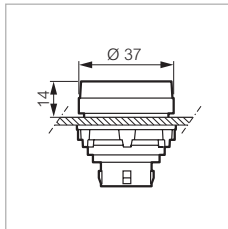
- Red
- Green
- Colourless
- Yellow
- Opal
- Blue

- T10SB10V
- T10SB20V
- T10SB30V
- T10SB40V
- T10SB50V
- T10SB60V

LENS WITH BEZEL AND TRIM



T15SB20V



Smooth lens

- Red
- Green
- Colourless
- Yellow
- Opal
- Blue

- T15SB10V
- T15SB20V
- T15SB30V
- T15SB40V
- T15SB50V
- T15SB60V

Accessories ø 30

 Characteristics (p. 125)

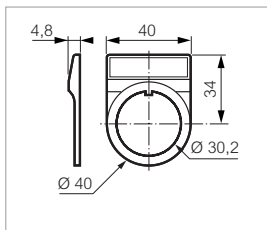
▶ COMPLETE FRAME

Standard model

Cat. No.



UP39



Round shape
Black frame and legend plate unassembled
2 lines maximum, 18 characters per line

Without engraving

- Red
- Black
- Alu
- Transparent

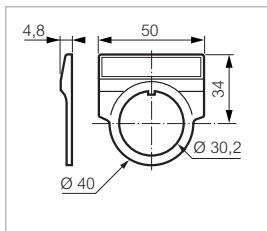
UP31
UP33
UP39
UP37

On demand engraving (p. 123)

Large model



UG39



Round shape
Black frame and legend plate unassembled
2 lines maximum, 24 characters per line

Without engraving

- Red
- Black
- Alu
- Transparent

UG31
UG33
UG39
UG37

On demand engraving (p. 123)

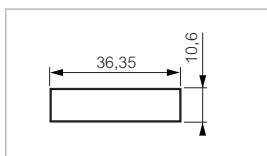
▶ LEGEND PLATE

Standard model

Cat. No.



IB1



2 lines maximum, 18 characters per line
For frame cat. no.. UP3

Without engraving

- Red
- Black
- Alu
- Transparent

IB1
IB3
IB9
IB7

On demand engraving (p. 123)

Cardboard legend for transparent legend plate
Sheet of 20 pieces, to be cut out

I2B

Accessories ø 30

 Characteristics (p. 125)

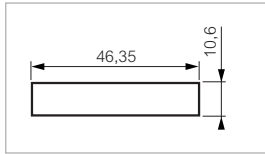
▶ LEGEND PLATE (CONTINUED)

Large model

Cat. No.



IC3



2 lines maximum, 24 characters per line
For frame cat. no.. UG3

Without engraving

- Red
- Black
- Alu
- Transparent

IC1
IC3
IC9
IC7

On demand engraving (p. 123)

Cardboard legend for transparent legend plate
Sheet of 20 pieces, to be cut out

I2C

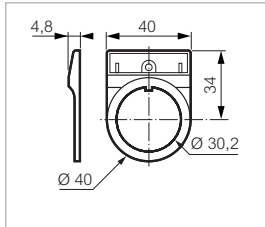
▶ FRAMES

Standard model

Cat. No.



UP3



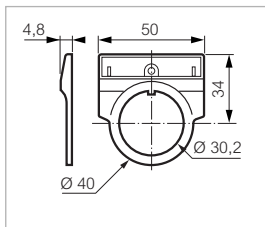
- Black

UP3

Large model



UG3



- Black

UG3

Accessories ø 30

 Characteristics (p. 125)

▶ BUTTON PLATES

FOR ILLUMINATED FLUSH BUTTONS

Cat. No.



UE02

2 lines maximum, 10 characters per line
To be inserted under the button

Without engraving

Transparent UE02

On demand engraving (p. 123)

Symbol code to be added at the end of the catalogue number

Transparent (black engraving) UE02 L L L L

Other colours (form p. 123)

FOR PILOT LIGHTS



UE10

2 lines maximum, 12 characters per line
To be inserted under the lens

Without engraving

Transparent UE10

On demand engraving (p. 123)

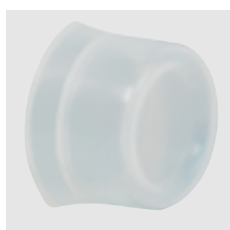
Symbol code to be added at the end of the catalogue number

Transparent (black engraving) UE10 L L L L

▶ SHROUDS IP 67

FOR ADJUSTABLE MECHANICAL BUTTONS

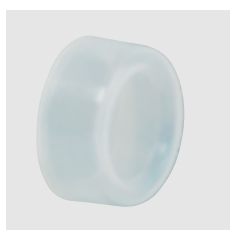
Cat. No.



UA0219

Transparent UA0219

FOR FLUSH BUTTONS



UA0228

Transparent UA0228

Accessories ø 30

 Characteristics (p. 125)

▶ BEZELS

ROUND

Cat. No.



UA0011

Height 13 mm
Possibility of sticking the bezel on the button

Brilliant chrome plastic	UA0011
Black plastic	UA0012
Grey plastic	UA0013
Matt chrome plastic bezel	UA0016
Brilliant chrome brass	UA0014

For adjustable mechanical button



UA0112

Height 20 mm

Brilliant chrome plastic	UA0111
Black plastic	UA0112
Grey plastic	UA0113
Brilliant chrome brass	UA0114

GUARD

For flush push-buttons



UA0202

Height 20 mm

Brilliant chrome brass	UA0202
------------------------	--------

Accessories ø 30

 Characteristics (p. 125)

► MISCELLANEOUS

FIXING TOOL

Cat. No.



Fixing tool ø 30

WA0210

WA0210

BLANKING PLUG



● Grey

UA0215

UA0215

ANTI-ROTATION RING
















Anti-rotation ring

UA0209

UA0209

Request form for specific control and signalling units ø 30

► **HEAD (fill in one form for each type of product)**

- Type:**
-  Spring return flush
 -  Spring return projecting
 -  Mushroom head spring return
 -  Push-push stay-put
 -  Mushroom head push-pull stay-put
 -  Mushroom head push-turn stay-put
 -  Mushroom head With key
 -  Selector switch handle
 -  Selector switch with long handle
 -  Selector switch with key
 - 455 E
 - 1424 A
 - Other
 -  Double touch
 -  Mechanical button
 - Flush
 - Projecting
 -  Pilot light

- Options:**
- Illuminated button
 - IP 67 shroud
 - Guard for buttons
- Size (mm):**
- Mushroom head Ø 40 Ø 70
- Colour :**
- Colourless Green
 - Black Red
 - Opal Blue
 - Yellow
- Bezel:**
- black
 - grey
 - matt chromed
 - brilliant chromed
 - chromed brass

► **ENGRAVINGS**

- Use the grid below**
- on head**
 - standard text or symbol
 - other text (2 x 10 characters)
 - on legend plate :**
 - standard (2 x 18 characters)
 - large model (2 x 24 characters)
- Ground colour:**
- white
 - alu
 - black




► **BLOCKS AND CLIPS**

- Block:**
- ① NO
 - ② NC
 - ③ NO/NC
 - ④ Transformer
 - ⑤ Filter
 - ⑥ Junction
 - ⑦ Empty
 - ⑧ Lamp-test
 - ⑨ LED
- Voltage:** 24 V 130 V 230 V
- Colour:** white yellow red green blue

Connection:

- Screw
- Faston
- Plug-in
- For PCB

Clips :

- 1 position 
- 3 positions 
- 6 positions 

Options:

- Head, block and clip assembled

YOUR DETAILS

Company:

.....

Name and surname:

.....

Address:

.....

E-mail:

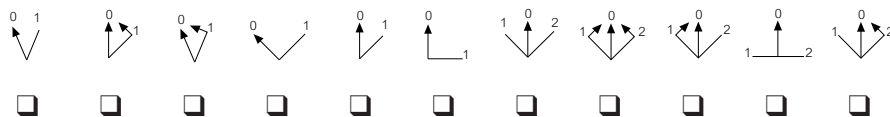
Tel.:

Fax:

COMMENTS

ENGRAVING

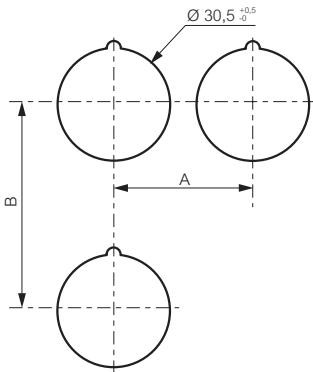
► **SELECTOR SWITCHES SWITCHING ANGLE**



Key free in position: 0 1 2

Panel cut-out $\varnothing 30$

DRILLING

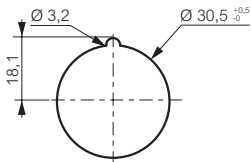


For heads equipped with electrical blocks with screw terminals

Minimum interval (mm)

A	> 40	For mushroom head $\varnothing 40$
	> 50	For selector switch with Long handle
	> 70	For mushroom head $\varnothing 70$
B	> 50	For double touch
	> 50	For legend plates
	> 70	For mushroom head $\varnothing 70$

DRILLING WHEN USING THE ANTI-ROTATION RING (OPTIONAL)



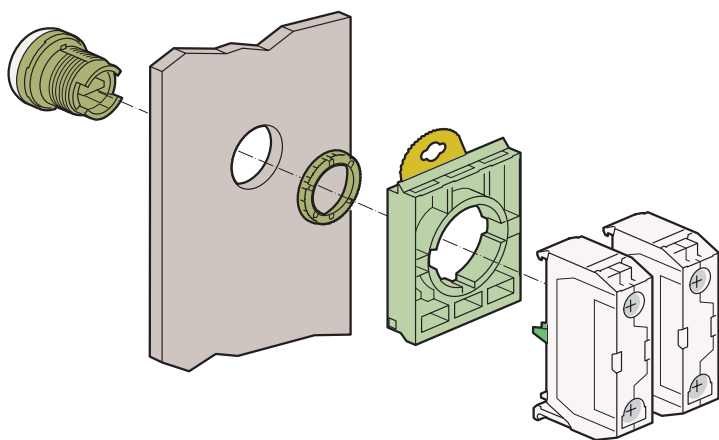
Technical characteristics \varnothing 30

► GENERAL

Characteristics	Data	Standards
► Storage temperature for illuminated or non illuminated button	- 40°C to + 70°C	
► Operating temperature	Non illuminated buttons: - 25°C to + 70°C Illuminated buttons: - 25°C to + 60°C	
► Degree of protection	IP 65 for standard heads IP 67 for shrouded heads	IEC 60529
► Mechanical life	Spring return push button: 3 x 10 ⁶ operating cycles	IEC 60947-5-1

The blocks used for diameter 30 are the same as for diameter 22.
Their characteristics are described on p. 95

► MOUNTING THE BLOCKS



Protection, flexibility and safety

Cam switches from 10 to 200 A

► STANDARD SOLUTIONS P. 134 - 212

The expertise of a specialist like Baco allows us to offer made-to-measure solutions, even the most specific.



Choice of diagram
from 1 to 24 contacts

Metal shaft
can withstand more than
1 million operations

**Customised
engravings**

► ADVANTAGES

- Conform to European and international standards: IEC, UL and CSA
- A metal shaft capable of withstanding more than 1 million operations
- More than 50 000 different diagrams available
- Many specific functions and special markings

► MADE-TO-MEASURE SOLUTIONS

How do I order a switch in 5 steps?

Example: A change-over switch without off

- 1 DETERMINE THE RATING according to the electrical specifications p. 215**
 Voltage, performance, etc (p. 213).
 EG: for switching of resistive loads 63A
 ► RATING: PR 63 ► PRICE LIST CODE: I
- 2 SELECT A DIAGRAM AND ITS SWITCHING ANGLE p. 216**
 EG: for a 2 way switch without off, with 1 pole
 EG: for a switching angle of 90°
 ► CAT. NO. 2251 ► PRICE LIST CODE: A02Z
 ► CAT. NO. A4 ► PRICE LIST CODE: -
- 3 DETERMINE THE MOUNTING METHOD p. 249**
 front or rear mounting, with screws or on DIN rail.
 EG: for rear mounting 68 mm interval
 ► CAT. NO. S ► PRICE LIST CODE: Y508
- 4 DEFINE THE PRESENTATION p. 263**
 Plate, frame and handle, padlockable, with clutch drive, in enclosure, with key locking, coupling in parallel or in series, dual-voltage device, etc
 EG: for a □ 72 frame with a medium handle
 ► CAT. NO. Q72 MN ► PRICE LIST CODE: Q72 MN
- 5 SELECT YOUR OPTIONS p. 278**
 Handles and long handles, legends, legend plate, terminal cover, etc
 EG: for a 72 "pump 1 pump 2" engraving
 ► engraving "pump 1 - pump 2" ► PRICE LIST CODE: Y000

Example of grid to be used for your order

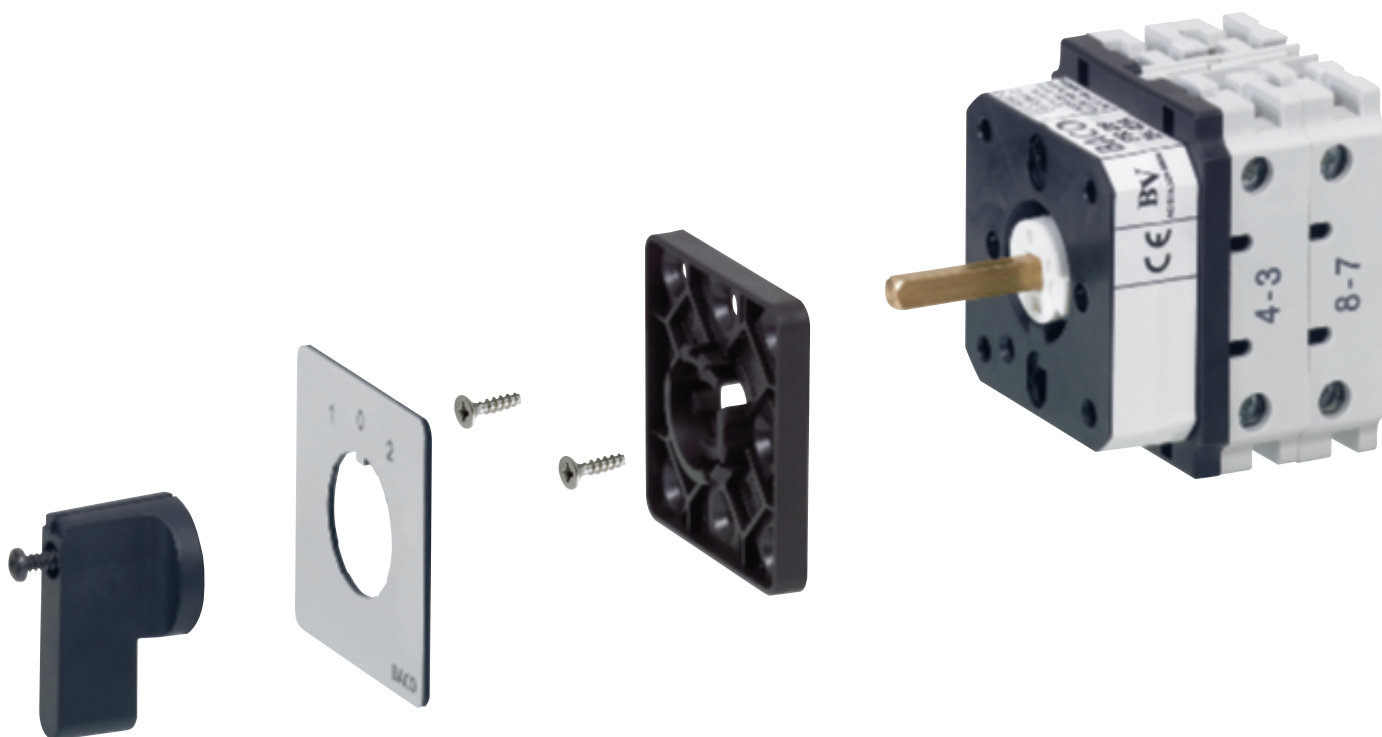
	Rating	Diagram	Mounting	Presentation	Option 1	Option 2...
DESIGNATION	PR 63	2251 A4	S	Q72 MN	"pump 1 - pump 2"	-
PRICE LIST CODE	I	A02Z -	Y508	Q72 MN	Y000	-
Observations	PR 63 AC21 = 63 A	2 way without off, 1 pole 90° switching angle	Rear mounting	□ 72 plate and frame presenta- tion Medium handle	Standard engraving	

PR ONE cam switch Series

A selection of standard switching programmes and mounting forms for practical reliable solutions to be achieved quickly

► DESIGN AND FUNCTIONS

- 45° switching angle
- Forced opened contacts
- Finger protected (degree of protection up to IP 20)
- Short-circuit rated
- Fulfills the load of break requirements up to 690 V
- Terminal screws in open position
- Switching capacity I_e (A): 16 A, 25 A and 32 A in AC21
- Manually operated control switches
- Front presentation: aluminium plate with black handle with index
- Laser marking on escutcheon
- Front degree of protection IP 40
- 2-screw panel mount - interval 30 mm



► APPLICATIONS

- ON-OFF switches
- Changeover switches
- Multi-step switches
- Instrument switches

Standard circuits diagrams from 16 A, 25 A up to 32 A

The expertise of a specialist to offer ready-solutions



▶ ELECTRICAL CHARACTERISTICS

▶ Thermal current, I _{th} (A)		20	32	40
▶ Rated operating current in AC-21A, I _e (A)		16	25	32
▶ Rated operating current in AC-15A, I _e (A)		6	10	12
▶ Motor performance in AC-3 (kW)	3 x 230 V	3	4	5,5
	3 x 400 V	4	7,5	11
▶ Motor performance in AC-23 (kW)	3 x 230 V	4	7,5	11
	3 x 400 V	7,5	11	11
▶ Rated insulation voltage, U _i (V)		690	690	690
▶ Rated short time withstand current, I _{cw} (A) for 1 sec		300	420	800
▶ Maximum wire size (mm ² rigid / flexible)		4 / 2,5	6 / 4	6 / 6
▶ Mechanical durability (nb of operations)		800 000 (max. rate 150 per hour)		
▶ Operating temperature limits		-20°C to 70°C		
▶ Degree of protection	Front	IP 40		
	Rear	IP 2X		

▶ FINGER PROTECTED

Degree of protection up to IP 20

▶ CONFORMING TO STANDARDS

- IEC EN 60947-1
- IEC EN 60947-3
- UL 508
- UL-CSA approved

PR ONE cam switches

 Dimensions (p. 133)

► ON-OFF SWITCHES

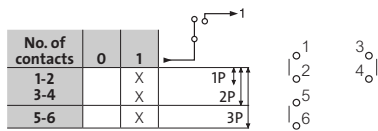
From 1 to 3 poles, each pole being a path for the current, the circuit being open at starting position 0, and closed at position 1

2-screw panel mount - interval: 30 mm

Cat. No.



227603



16 A

1P-1 contact
2P-2 contacts
3P-3 contacts



227600
227601
227602

25 A

1P-1 contact
2P-2 contact
3P-3 contacts



227603
227604
227605

32 A

1P-1 contact
3P-3 contacts



227606
227608

► CHANGE-OVER SWITCHES WITH «OFF» POSITION

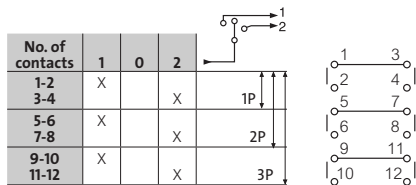
From 1 to 3 poles, each pole having two current paths, open at starting position 0, one path closes on position 1, the other on position 2

2-screw panel mount - interval: 30 mm

Cat. No.



227609



16 A

1P-2 contacts
2P-4 contacts
3P-6 contacts



227609
227610
227611

25 A

1P-2 contacts
2P-4 contacts
3P-6 contacts



227612
227613
227614

32 A

1P-2 contacts
3P-4 contacts
3P-6 contacts



227615
227616
227617

PR ONE cam switches



Dimensions (p. 133)

▶ SELECTOR SWITCHES

2 to 5-way switches, each pole being respectively from 2 to 5 paths for the current, the starting position is at 0

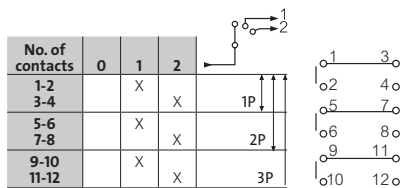
2-WAY SWITCHES WITH OFF

2-screw panel mount - interval: 30 mm

Cat. No.



227630



16 A
1P-2 contacts
2P-4 contacts
3P-6 contacts



227618
227619
227620

25 A
1P-2 contacts
2P-4 contacts
3P-6 contacts



227624
227625
227626

32 A
1P-2 contacts
3P-4 contacts
3P-6 contacts



227630
227631
227632

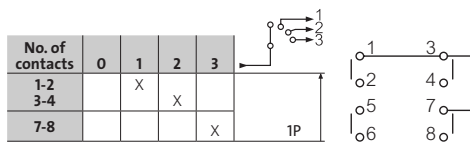
3-WAY SWITCHES WITH OFF

2-screw panel mount - interval: 30 mm

Cat. No.



227621



16 A
1P-3 contacts



227621

25 A
1P-3 contacts

227627

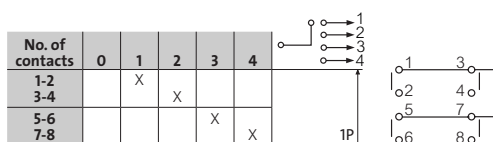
4-WAY SWITCHES WITH OFF

2-screw panel mount - interval: 30 mm

Cat. No.



227622



16 A
1P-4 contacts



227622

PR ONE cam switches



▶ SELECTOR SWITCHES (CONTINUED)

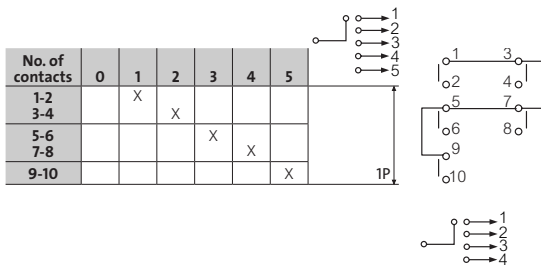
5-WAY SWITCHES WITH OFF

2-screw panel mount - interval: 30 mm

Cat. No.



227623



16 A
1P-5 contacts

227623

25 A
1P-5 contacts

227629



▶ INSTRUMENT SWITCHES

For ammeters wired in 3 CT's connected into the corresponding circuits. The CT's can be mounted in series with common point.
For voltmeters wired into 3-phase networks with neutral.

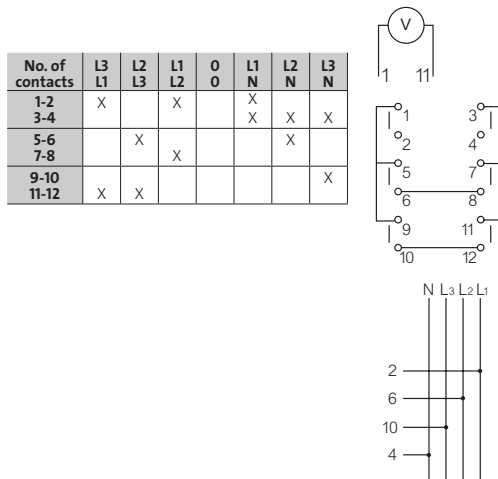
VOLTMETER SWITCH, WITH NEUTRAL

2-screw panel mount - interval: 30 mm

Cat. No.



227636



16 A
6 contacts

227636



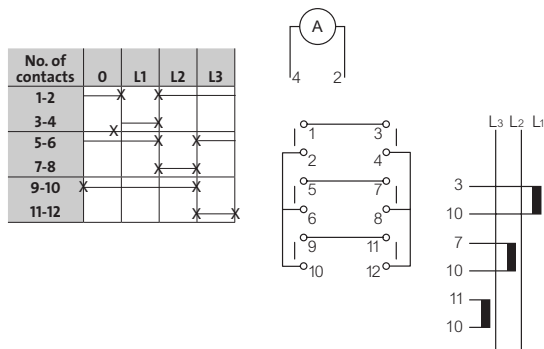
AMMETER SWITCH, 3 CTS WITH COMMON POINT

2-screw panel mount - interval: 30 mm

Cat. No.



227637



16 A
6 contacts

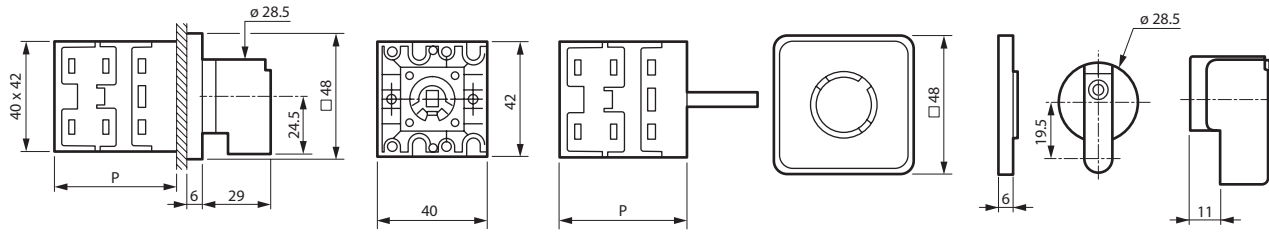
227637



PR ONE cam switches

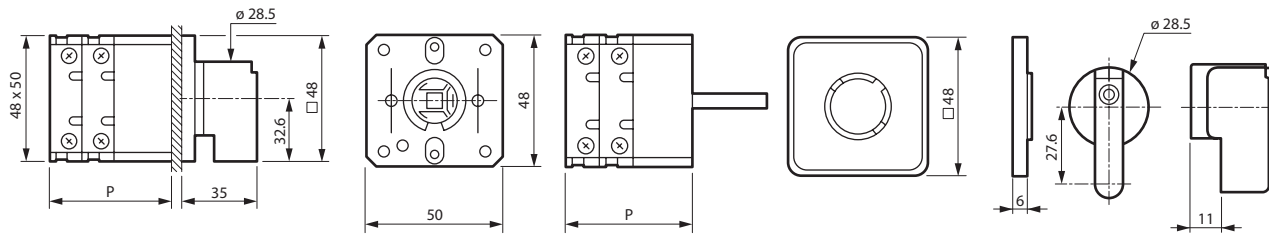
► DIMENSIONS

PR One 16 A (ie)



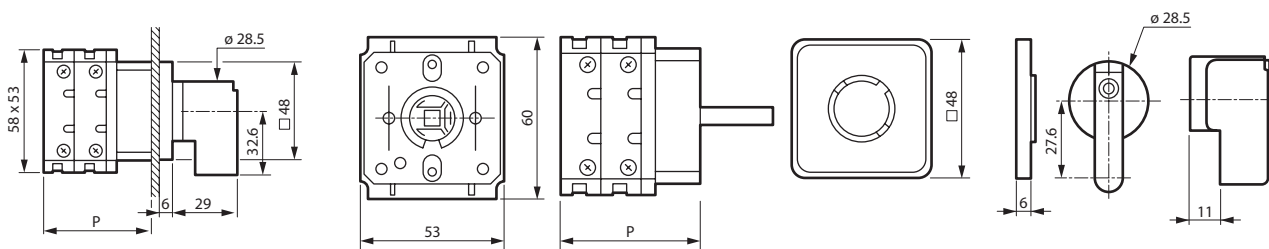
Dimensions in mm
 *P: 36 (1-2 contacts)
 46 (3-4 contacts)
 56 (5-6 contacts)

PR One 25 A (ie)



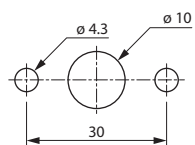
Dimensions in mm
 *P: 33 (1-2 contacts)
 45 (3-4 contacts)
 57 (5-6 contacts)

PR One 32 A (ie)



Dimensions in mm
 *P: 36 (1-2 contacts)
 51 (3-4 contacts)
 66 (5-6 contacts)

► PANEL CUT-OUT



Cam switches



Characteristics (p. 213)

▶ ON-OFF SWITCH

No. of contacts	0	1		
1-2	X		1P	1
3-4	X		2P	2
5-6	X		3P	5
7-8	X		4P	6

MINI CAM SWITCH - 10 A (AC21)

∅ 16 and 22 single hole front mounting

Cat. No.



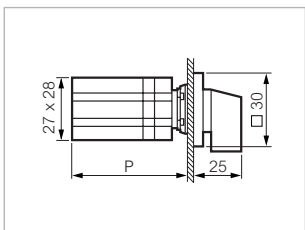
223501

30 aluminium plate and frame

- 1P - 1 contact
- 2P - 2 contacts
- 3P - 3 contacts
- 4P - 4 contacts



- 223501**
- 223502**
- 223503**
- 223504**



Dimensions in mm
*P: 50 (1-2 CONTACTS)
62 (3-4 CONTACTS)

PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NB02AQ1

Designation

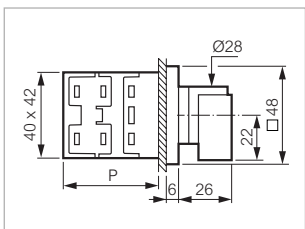
Grey/black small handle
 48 aluminium plate and frame

- 1P - 1 contact
- 2P - 2 contacts
- 3P - 3 contacts
- 4P - 4 contacts



- PR12 1101 A4 E Q48PN
- PR12 1102 A4 E Q48PN
- PR12 1103 A4 E Q48PN
- PR12 1104 A4 E Q48PN

- NB01AQ1**
- NB02AQ1**
- NB03AQ1**
- NB04AQ1**



Dimensions in mm
*P: 36 (1-2 CONTACTS)
46 (3-4 CONTACTS)

- 1P - 1 contact
- 2P - 2 contacts
- 3P - 3 contacts



- PR12 1101 A8 E Q48PN
- PR12 1102 A8 E Q48PN
- PR12 1103 A8 E Q48PN

- NB01EQ1**
- NB02EQ1**
- NB03EQ1**

*P = Depth

Cam switches



Characteristics (p. 213)

► ON-OFF SWITCH (CONTINUED)

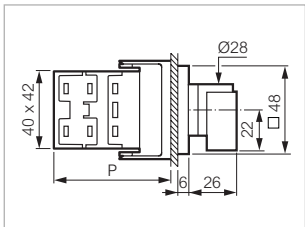
PR 12 - 16 A (AC21)

∅ 22 single hole front mounting

Cat. No.



NB03EX80



Dimensions in mm
*P: 51 (1-2 CONTACTS)
61 (3-4 CONTACTS)

Grey/black small handle
□ 48 aluminium plate and frame

1P - 1 contact
2P - 2 contacts
3P - 3 contacts
4P - 4 contacts



1P - 1 contact
2P - 2 contacts
3P - 3 contacts



Designation

PR12 1101 A4 E N48MD50
PR12 1102 A4 E N48MD50
PR12 1103 A4 E N48MD50
PR12 1104 A4 E N48MD50

NB01AX80
NB02AX80
NB03AX80
NB04AX80

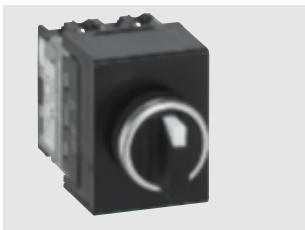
PR12 1101 A8 E N48MD50
PR12 1102 A8 E N48MD50
PR12 1103 A8 E N48MD50

NB01EX80
NB02EX80
NB03EX80

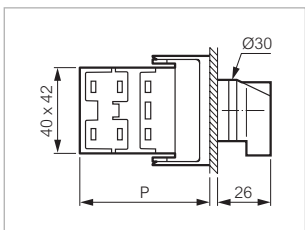
PR 12 - 16 A (AC21)

∅ 22 single hole front mounting

Cat. No.



NB03AC113



Dimensions in mm
*P: 51 (1-2 CONTACTS)
61 (3-4 CONTACTS)

Selector switch style handle
Matt chrome plastic bezel

1P - 1 contact
2P - 2 contacts
3P - 3 contacts
4P - 4 contacts



Designation

PR12 1101 A4 E C21RA03
PR12 1102 A4 E C21RA03
PR12 1103 A4 E C21RA03
PR12 1104 A4 E C21RA03

NB01AC113
NB02AC113
NB03AC113
NB04AC113

*P = Depth

Cam switches



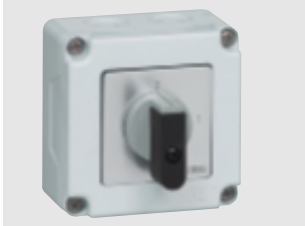
Characteristics (p. 213)

► ON-OFF SWITCH (CONTINUED)

PR 12 - 16 A (AC21)

Enclosure

Cat. No.



NB02AGQ

Grey/black small handle
□ 48 aluminium plate

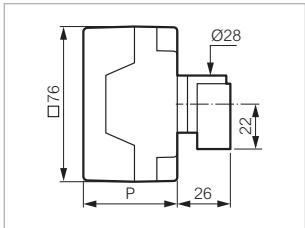
1P - 1 contact
2P - 2 contacts
3P - 3 contacts
4P - 4 contacts



Designation

PR12 1101 A4 BPRQ48PN
PR12 1102 A4 BPRQ48PN
PR12 1103 A4 BPRQ48PN
PR12 1104 A4 BPRQ48PN

NB01AGQ
NB02AGQ
NB03AHQ
NB04AHQ



Dimensions in mm

*P: 46 (1-2 CONTACTS)
58 (3-4 CONTACTS)

PR 17 - 20 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



SB04AQ1

Grey/black small handle
□ 48 aluminium plate and frame

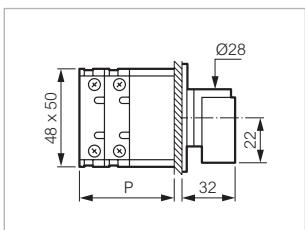
1P - 1 contact
2P - 2 contacts
3P - 3 contacts
4P - 4 contacts



Designation

PR17 1101 A4 E Q48PN
PR17 1102 A4 E Q48PN
PR17 1103 A4 E Q48PN
PR17 1104 A4 E Q48PN

SB01AQ1
SB02AQ1
SB03AQ1
SB04AQ1



Dimensions in mm

*P: 33 (1-2 CONTACTS)
45 (3-4 CONTACTS)

3P - 3 contacts
4P - 4 contacts



PR17 1103 A8 E Q48PN
PR17 1104 A8 E Q48PN


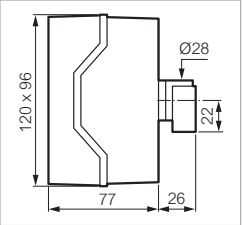

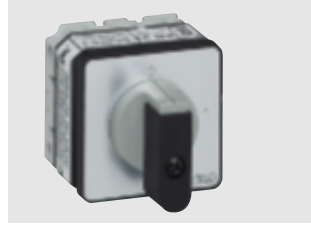
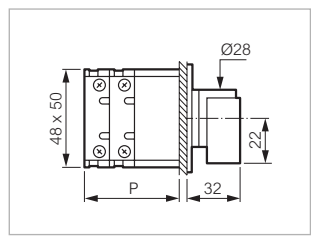



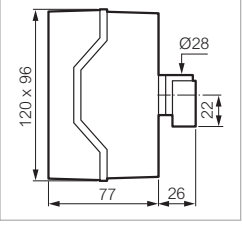

SB03EQ1
SB04EQ1

*P = Depth

Cam switches

 Characteristics (p. 213)

► ON-OFF SWITCH (CONTINUED)

PR 17 -20 A (AC21)	Enclosure	Enclosure	Designation	Cat. No.
 <p>SB02AXQ</p>		<p>Black small handle □ 64 aluminium plate</p> <p>1P - 1 contact 2P - 2 contacts 3P - 3 contacts 4P - 4 contacts</p> 	<p>Designation</p> <p>PR17 1101 A4 BCQ3 PR17 1102 A4 BCQ3 PR17 1103 A4 BCQ3 PR17 1104 A4 BCQ3</p>	<p>SB01AXQ SB02AXQ SB03AXQ SB04AXQ</p>
PR 21 -25 A (AC21)	2-screw panel mount – interval: 30 mm	2-screw panel mount – interval: 30 mm	2-screw panel mount – interval: 30 mm	Cat. No.
 <p>TB01AQ1</p>	 <div> <p>Dimensions in mm *P: 33 (1-2 CONTACTS) 45 (3-4 CONTACTS)</p> </div>	<p>Grey/black small handle □ 48 aluminium plate and frame</p> <p>1P - 1 contact 2P - 2 contacts 3P - 3 contacts 4P - 4 contacts</p>  <p>3P - 3 contacts</p> 	<p>Designation</p> <p>PR21 1101 A4 E Q48PN PR21 1102 A4 E Q48PN PR21 1103 A4 E Q48PN PR21 1104 A4 E Q48PN</p> <p>PR21 1103 A8 E Q48PN</p>	<p>TB01AQ1 TB02AQ1 TB03AQ1 TB04AQ1</p> <p>TB03EQ1</p>
PR 21 -25 A (AC21)	Enclosure	Enclosure	Designation	Cat. No.
 <p>TB01AXQ</p>		<p>Black small handle □ 64 aluminium plate</p> <p>1P - 1 contact 2P - 2 contacts 3P - 3 contacts 4P - 4 contacts</p> 	<p>Designation</p> <p>PR21 1101 A4 BCQ3 PR21 1102 A4 BQ3 PR21 1103 A4 BCQ3 PR21 1104 A4 BCQ3</p>	<p>TB01AXQ TB02AXQ TB03AXQ TB04AXQ</p>

*P = Depth

Cam switches

 Characteristics (p. 213)

► ON-OFF SWITCH (CONTINUED)

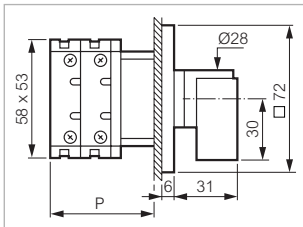
PR 26 -32 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



ZB04AQ7



Dimensions in mm
*P: 36 (1-2 CONTACTS)
51 (3-4 CONTACTS)

Grey/black medium handle
□ 72 aluminium plate and frame

Designation

- 1P - 1 contact
- 2P - 2 contacts
- 3P - 3 contacts
- 4P - 4 contacts



- PR26 1101 A4 E Q72MN
- PR26 1102 A4 E Q72MN
- PR26 1103 A4 E Q72MN
- PR26 1104 A4 E Q72MN

- ZB01AQ7**
- ZB02AQ7**
- ZB03AQ7**
- ZB04AQ7**

- 3P - 3 contacts

- PR26 1103 A8 E Q72MN

- ZB03EQ7**

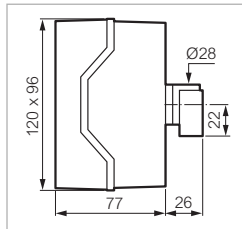
PR 26 -32 A (AC21)

Enclosure

Cat. No.



ZB02AXQ



Black small handle
□ 72 aluminium plate

Designation

- 1P - 1 contact
- 2P - 2 contacts
- 3P - 3 contacts
- 4P - 4 contacts



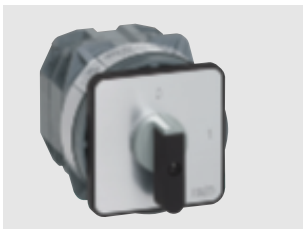
- PR26 1101 A4 BCQ3
- PR26 1102 A4 BCQ3
- PR26 1103 A4 BCQ3
- PR26 1104 A4 BCQ3

- ZB01AXQ**
- ZB02AXQ**
- ZB03AXQ**
- ZB04AXQ**

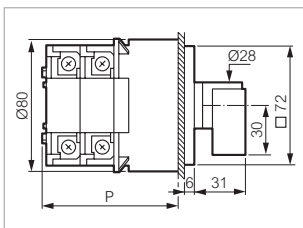
PR 40 -50 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



HB03AQ7



Dimensions in mm
*P: 60 (1-2 CONTACTS)
80 (3-4 CONTACTS)

Grey/black medium handle
□ 72 aluminium plate and frame

Designation

- 1P - 1 contact
- 2P - 2 contacts
- 3P - 3 contacts
- 4P - 4 contacts



- PR40 1101 A4 E Q72MN
- PR40 1102 A4 E Q72MN
- PR40 1103 A4 E Q72MN
- PR40 1104 A4 E Q72MN

- HB01AQ7**
- HB02AQ7**
- HB03AQ7**
- HB04AQ7**

*P = Depth


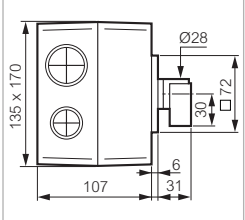

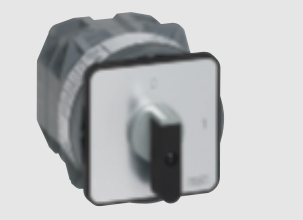

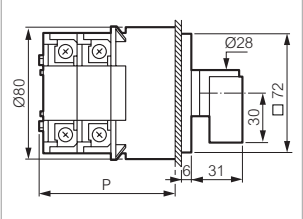

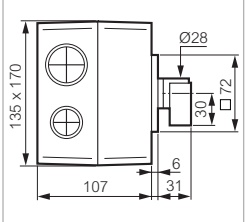

Catalogue No. in bold: normally in stock at distribution outlets

Cam switches



Characteristics (p. 213)

► ON-OFF SWITCH (CONTINUED)

PR 40 -50 A (AC21)	Enclosure	Designation	Cat. No.
 <p>HB02AAQ</p>		<p>Grey/black medium handle □ 72 aluminium plate and frame</p> <p>1P - 1 contact 2P - 2 contacts 3P - 3 contacts 4P - 4 contacts</p>  <p>PR40 1101 A4 BCFQ72MN PR40 1102 A4 BCFQ72MN PR40 1103 A4 BCFQ72MN PR40 1104 A4 BCFQ72MN</p>	<p>HB01AAQ HB02AAQ HB03ABQ HB04ABQ</p>
<p>PR 63 -63 A (AC21)</p>	<p>2-screw panel mount - interval: 50 mm</p>	<p>Cat. No.</p>	<p>Cat. No.</p>
 <p>IB03AQ7</p>	<p>Dimensions in mm</p> <p>*P: 60 (1-2 CONTACTS) 80 (3-4 CONTACTS)</p>	<p>Grey/black medium handle □ 72 aluminium plate and frame</p> <p>1P - 1 contact 2P - 2 contacts 3P - 3 contacts 4P - 4 contacts</p>  <p>PR63 1101 A4 E Q72MN PR63 1102 A4 E Q72MN PR63 1103 A4 E Q72MN PR63 1104 A4 E Q72MN</p>	<p>IB01AQ7 IB02AQ7 IB03AQ7 IB04AQ7</p>
	<p>Enclosure</p>	<p>Designation</p>	<p>Cat. No.</p>
 <p>IB02AAQ</p>		<p>Grey/black medium handle □ 72 aluminium plate and frame</p> <p>1P - 1 contact 2P - 2 contacts 3P - 3 contacts 4P - 4 contacts</p>  <p>PR63 1101 A4 BCF140Q72MN PR63 1102 A4 BCF140Q72MN PR63 1103 A4 BCF240Q72MN PR63 1104 A4 BCF240Q72MN</p>	<p>IB01AAQ IB02AAQ IB03ABQ IB04ABQ</p>

*P = Depth

Cam switches

 Characteristics (p. 213)

► ON-OFF SWITCH (CONTINUED)

PR 125 -160 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



LB02AQ9

Grey/black large handle
□ 96 aluminium plate and frame

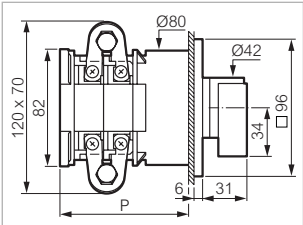
Designation

- 1P - 1 contact
- 2P - 2 contacts
- 3P - 3 contacts
- 4P - 4 contacts



- PR125 1101 A4 E Q96GN
- PR125 1102 A4 E Q96GN
- PR125 1103 A4 E Q96GN
- PR125 1104 A4 E Q96GN

- LB01AQ9
- LB02AQ9
- LB03AQ9
- LB04AQ9



Dimensions in mm
*P: 80 (1-2 CONTACTS)
120 (3-4 CONTACTS)

PR 160 -200 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



MB02AQ9

Grey/black large handle
□ 96 aluminium plate and frame

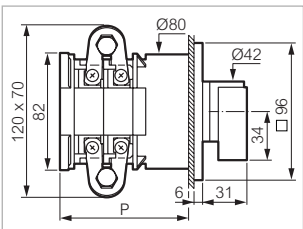
Designation

- 1P - 1 contact
- 2P - 2 contacts
- 3P - 3 contacts
- 4P - 4 contacts



- PR160 1101 A4 E Q96GN
- PR160 1102 A4 E Q96GN
- PR160 1103 A4 E Q96GN
- PR160 1104 A4 E Q96GN


- MB01AQ9
- MB02AQ9
- MB03AQ9
- MB04AQ9



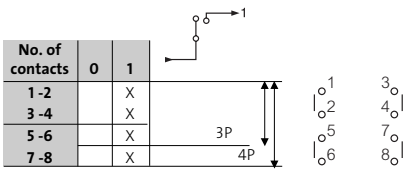
Dimensions in mm
*P: 80 (1-2 CONTACTS)
120 (3-4 CONTACTS)

*P = Depth

Cam switches

 Characteristics (p. 213)

► MAIN SWITCH



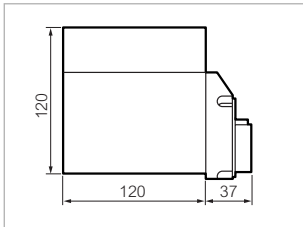
PR 125 - 160 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



LS3EV733



Designation

Red padlockable handle
for up to 4 padlocks
□ 72 yellow frame

**With engraving
MAIN SWITCH**

3P+ \perp - 3 contacts
3P+N - 4 contacts



PR125 1103GN E J723MND61
PR125 1104GN E J723MND61

LS3EV733
LS4EV733

Without engraving

3P+ \perp - 3 contacts
3P+N - 4 contacts



PR125 1103GN E J72MND61
PR125 1104GN E J72MND61

LS3EV72
LS4EV72

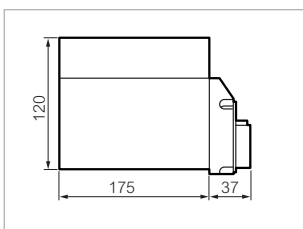
PR 125 - 160 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



LG3EV733



Designation

Grey padlockable handle
for up to 4 padlocks
□ 72 grey frame

**With engraving
MAIN SWITCH**

3P+ \perp - 3 contacts
3P+N - 4 contacts



PR125 1103GN E V723MND
PR125 1104GN E V723MND

LG3EV733
LG4EV733

Without engraving

3P+ \perp - 3 contacts
3P+N - 4 contacts



PR125 1103GN E V72MND
PR125 1104GN E V72MND

LG3EV72
LG4EV72

Cam switches



Characteristics (p. 213)

► MAIN SWITCH (CONTINUED)

PR 125 - 160 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



LS3EV973

Red padlockable handle
for up to 4 padlocks
□ 96 yellow frame

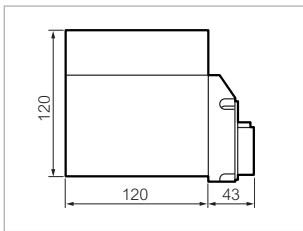
**With engraving
MAIN SWITCH**

3P+ \perp - 3 contacts
3P+N - 4 contacts

Designation

PR125 1103GN E J963GND61
PR125 1104GN E J963GND61

LS3EV973
LS4EV973



PR 125 - 160 A (AC21)

Rear mounting with clutch drive and door interlock

Cat. No.



LS3RV733

Red padlockable handle
for up to 4 padlocks
□ 72 yellow frame
Clutch drive and
door interlock

**With engraving
MAIN SWITCH**

3P+ \perp - 3 contacts
3P+N - 4 contacts

Designation

PR125 1103GN SV6 J723MND61
PR125 1104GN SV6 J723MND61

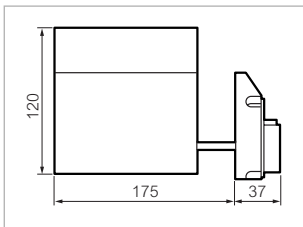
LS3RV733
LS4RV733

Without engraving

3P+ \perp - 3 contacts
3P+N - 4 contacts

PR125 1103GN SV6 J72MND61
PR125 1104GN SV6 J72MND61

LS3RV72
LS4RV72



Cam switches

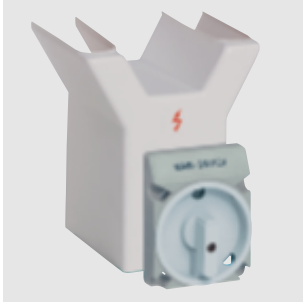
 Characteristics (p. 213)

► MAIN SWITCH (CONTINUED)

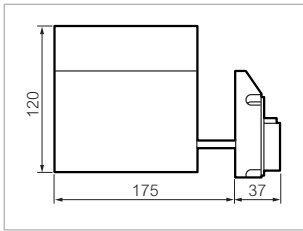
PR 125 - 160 A (AC21)

Rear mounting with clutch drive and door interlock

Cat. No.



LG3RV733



Grey padlockable handle
for up to 4 padlocks
□ 72 grey frame

**With engraving
MAIN SWITCH**

3P+ $\frac{1}{\perp}$ - 3 contacts $\begin{matrix} 0 \\ \swarrow \end{matrix} \begin{matrix} 1 \\ \searrow \end{matrix}$
3P+N - 4 contacts

Designation

PR125 1103GN SV6 V723MND
PR125 1104GN SV6 V723MND

LG3RV733
LG4RV733

Without engraving

3P+ $\frac{1}{\perp}$ - 3 contacts $\begin{matrix} 0 \\ \swarrow \end{matrix} \begin{matrix} 1 \\ \searrow \end{matrix}$
3P+N - 4 contacts

PR125 1103GN SV6 V72MND
PR125 1104GN SV6 V72MND

LG3RV72
LG4RV72

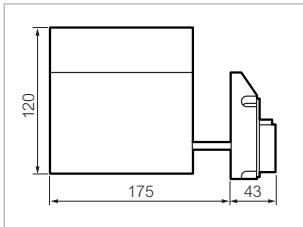
PR 125 - 160 A (AC21)

Rear mounting with clutch drive and door interlock

Cat. No.



LS3RV973



Red padlockable handle
for up to 4 padlocks
□ 96 yellow frame

**With engraving
MAIN SWITCH**

3P+ $\frac{1}{\perp}$ - 3 contacts $\begin{matrix} 0 \\ \swarrow \end{matrix} \begin{matrix} 1 \\ \searrow \end{matrix}$
3P+N - 4 contacts

Designation


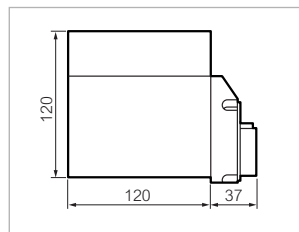
PR125 1103GN SV6 J963GND61
PR125 1104GN SV6 J963GND61


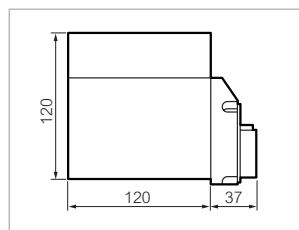
LS3RV973
LS4RV973

Cam switches

 Characteristics (p. 213)

► MAIN SWITCH (CONTINUED)




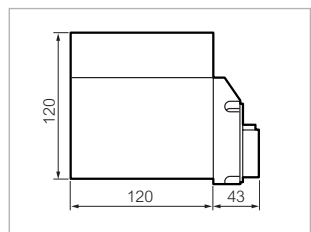
PR 160 -200 A (AC21)	2-screw panel mount - interval: 50 mm	Cat. No.
 <p>MS3EV733</p> 	<p>Designation</p> <p>Red padlockable handle for up to 4 padlocks □ 72 yellow frame</p> <p>With engraving MAIN SWITCH</p> <p>3P+ $\frac{\perp}{\perp}$ - 3 contacts $\begin{matrix} 0 \\ \swarrow \\ 1 \end{matrix}$ 3P+N - 4 contacts</p> <p>Without engraving</p> <p>3P+ $\frac{\perp}{\perp}$ - 3 contacts $\begin{matrix} 0 \\ \swarrow \\ 1 \end{matrix}$ 3P+N - 4 contacts</p>	<p>PR160 1103GN E J723MND61 PR160 1104GN E J723MND61</p> <p>MS3EV733 MS4EV733</p> <p>PR160 1103GN E J72MND61 PR160 1104GN E J72MND61</p> <p>MS3EV72 MS4EV72</p>




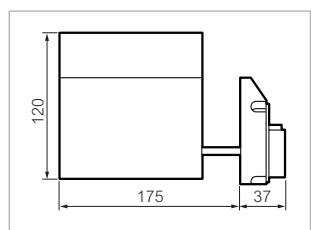


PR 160 -200 A (AC21)	2-screw panel mount - interval: 50 mm	Cat. No.
 <p>MG3EV733</p> 	<p>Designation</p> <p>Grey padlockable handle for up to 4 padlocks □ 72 grey frame</p> <p>With engraving MAIN SWITCH</p> <p>3P+ $\frac{\perp}{\perp}$ - 3 contacts $\begin{matrix} 0 \\ \swarrow \\ 1 \end{matrix}$ 3P+N - 4 contacts</p> <p>Without engraving</p> <p>3P+ $\frac{\perp}{\perp}$ - 3 contacts $\begin{matrix} 0 \\ \swarrow \\ 1 \end{matrix}$ 3P+N - 4 contacts</p>	<p>PR160 1103GN E V723MND PR160 1104GN E V723MND</p> <p>MG3EV733 MG4EV733</p> <p>PR160 1103GN E V72MND PR160 1104GN E V72MND</p> <p>MG3EV72 MG4EV72</p>

Cam switches

 Characteristics (p. 213)

► MAIN SWITCH (CONTINUED)

PR 160 -200 A (AC21)	2-screw panel mount - interval: 50 mm	Cat. No.
	<p>Designation</p> <p>Red padlockable handle for up to 4 padlocks □ 96 yellow frame</p> <p>With engraving MAIN SWITCH</p> <p>3P+ $\frac{\perp}{\text{—}}$ - 3 contacts  3P+N - 4 contacts </p>	<p>PR160 1103GN E J963GND61 MS3EV973 PR160 1104GN E J963GND61 MS4EV973</p>
<p>MS4EV973</p> 		

PR 160 -200 A (AC21)	Rear mounting with clutch drive and door interlock	Cat. No.
	<p>Designation</p> <p>Red padlockable handle for up to 4 padlocks □ 72 yellow frame Clutch drive and door interlock</p> <p>With engraving MAIN SWITCH</p> <p>3P+ $\frac{\perp}{\text{—}}$ - 3 contacts  3P+N - 4 contacts </p>	<p>PR160 1103GN SV6 J723MND61 MS3RV733 PR160 1104GN SV6 J723MND61 MS4RV733</p>
<p>MS3RV733</p> 	<p>Without engraving</p> <p>3P+ $\frac{\perp}{\text{—}}$ - 3 contacts  3P+N - 4 contacts </p>	<p>PR160 1103GN SV6 J72MND61 MS3RV72 PR160 1104GN SV6 J72MND61 MS4RV72</p>

Cam switches

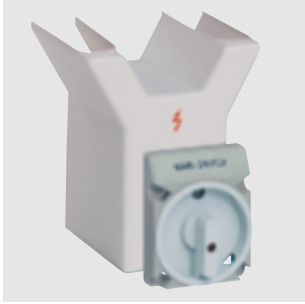
 Characteristics (p. 213)

► MAIN SWITCH (CONTINUED)

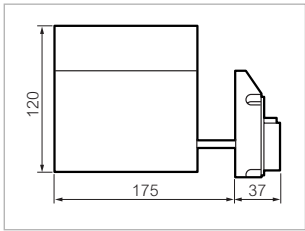
PR 160 -200 A (AC21)

Rear mounting with clutch drive and door interlock

Cat. No.



MG4RV73



Grey padlockable handle
for up to 4 padlocks
□ 72 grey frame

**With engraving
MAIN SWITCH**

3P+ $\frac{\perp}{\text{—}}$ - 3 contacts $\begin{matrix} 0 \\ \swarrow \\ 1 \end{matrix}$
3P+N - 4 contacts

Designation

PR160 1103GN SV6 V723MND	MG3RV733
PR160 1104GN SV6 V723MND	MG4RV733

Without engraving

3P+ $\frac{\perp}{\text{—}}$ - 3 contacts $\begin{matrix} 0 \\ \swarrow \\ 1 \end{matrix}$
3P+N - 4 contacts

PR160 1103GN SV6 V72MND	MG3RV72
PR160 1104GN SV6 V72MND	MG4RV72

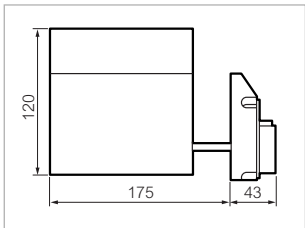
PR 160 -200 A (AC21)

Rear mounting with clutch drive and door interlock

Cat. No.



MS4RV973



Red padlockable handle
for up to 4 padlocks
□ 96 yellow frame

**With engraving
MAIN SWITCH**

3P+ $\frac{\perp}{\text{—}}$ - 3 contacts $\begin{matrix} 0 \\ \swarrow \\ 1 \end{matrix}$
3P+N - 4 contacts

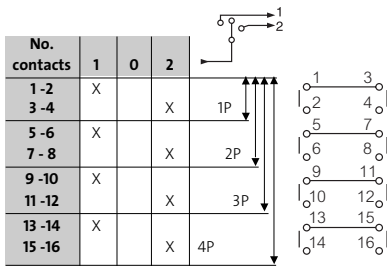
Designation

PR160 1103GN SV6 V963GND61	MS3RV973
PR160 1104GN SV6 V963GND61	MS4RV973

Cam switches

 Characteristics (p. 213)

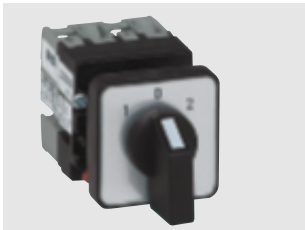
► CHANGE-OVER SWITCH WITH "OFF" POSITION



MINI CAM SWITCH - 10 A (AC21)

∅ 16 and ∅ 22 mm single hole front mounting

Cat. No.



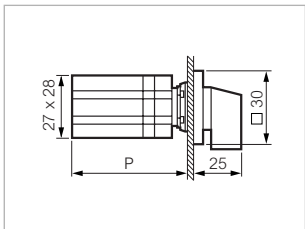
223505

30 aluminium plate and frame

- 1P - 2 contacts
- 2P - 4 contacts
- 3P - 6 contacts
- 4P - 8 contacts



- 223505**
- 223506**
- 223507**
- 223508**



Dimensions in mm

- *P: 50 (1-2 CONTACTS)
- 62 (3-4 CONTACTS)
- 74 (5-6 CONTACTS)
- 96 (7-8 CONTACTS)

PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NC02GQ1

Designation

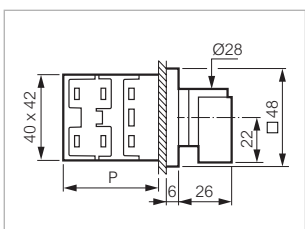
Grey/black small handle
 48 aluminium plate and frame

- 1P - 2 contacts
- 2P - 4 contacts
- 3P - 6 contacts
- 4P - 8 contacts



- PR12 2201 C8 E Q48PN
- PR12 2202 C8 E Q48PN
- PR12 2203 C8 E Q48PN
- PR12 2204 C8 E Q48PN

- NC01GQ1**
- NC02GQ1**
- NC03GQ1**
- NC04GQ1**



Dimensions in mm

- *P: 36 (1-2 CONTACTS)
- 46 (3-4 CONTACTS)
- 56 (5-6 CONTACTS)
- 66 (7-8 CONTACTS)

- 1P - 2 contacts
- 2P - 4 contacts
- 3P - 6 contacts



- PR12 2201 C4 E Q48PN
- PR12 2202 C4 E Q48PN
- PR12 2203 C4 E Q48PN

- NC01CQ1**
- NC02CQ1**
- NC03CQ1**

*P = Depth

Catalogue No. in bold: normally in stock at distribution outlets

Cam switches



Characteristics (p. 213)

► CHANGE-OVER SWITCH WITH “OFF” POSITION (CONTINUED)

PR 12 - 16 A (AC21)

Ø 22 single hole front mounting

Cat. No.



NC02GX80

Grey/black small handle
□ 48 aluminium plate and frame

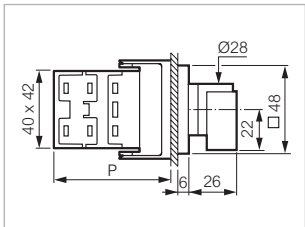
Designation

1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



PR12 2201 C8 E N48MD50
PR12 2202 C8 E N48MD50
PR12 2203 C8 E N48MD50
PR12 2204 C8 E N48MD50

NC01GX80
NC02GX80
NC03GX80
NC04GX80



Dimensions in mm

*P: 51 (1-2 CONTACTS)
61 (3-4 CONTACTS)
71 (5-6 CONTACTS)
81 (7-8 CONTACTS)

PR 12 - 16 A (AC21)

Ø 22 single hole front mounting

Cat. No.



NC02GC113

Black handle
Matt chrome plastic bezel

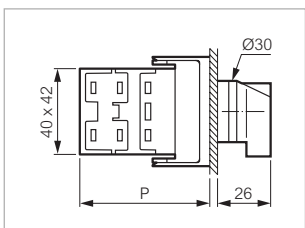
Designation

1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



PR12 2201 C8 E C21RA03
PR12 2202 C8 E C21RA03
PR12 2203 C8 E C21RA03
PR12 2204 C8 E C21RA03

NC01GC113
NC02GC113
NC03GC113
NC04GC113




Dimensions in mm

*P: 51 (1-2 CONTACTS)
61 (3-4 CONTACTS)
71 (5-6 CONTACTS)
81 (7-8 CONTACTS)

*P = Depth

Cam switches

 Characteristics (p. 213)

► CHANGE-OVER SWITCH WITH “OFF” POSITION (CONTINUED)

PR 12 - 16 A (AC21)

Enclosure

Cat. No.



NC01GXQ

Black small handle
□ 64 aluminium plate

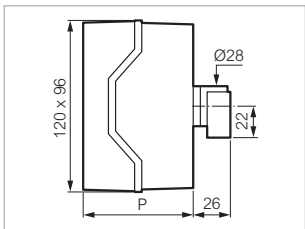
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR12 2201 C8 BCQ3
PR12 2202 C8 BCQ3
PR12 2203 C8 BCQ3
PR12 2204 C8 BCQ3

NC01GXQ
NC02GXQ
NC03GXQ
NC04GXQ



Dimensions in mm
*P: 77 (1 TO 6 CONTACTS)
101 (7-8 CONTACTS)

PR 17 - 20 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



SC04GQ1

Grey/black small handle
□ 48 aluminium plate and frame

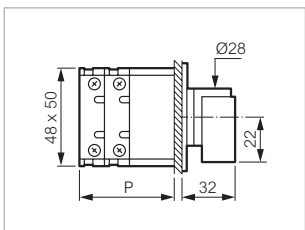
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR17 2201 C8 E Q48PN
PR17 2202 C8 E Q48PN
PR17 2203 C8 E Q48PN
PR17 2204 C8 E Q48PN

SC01GQ1
SC02GQ1
SC03GQ1
SC04GQ1



Dimensions in mm
*P: 33 (1-2 CONTACTS)
45 (3-4 CONTACTS)
57 (5-6 CONTACTS)
69 (7-8 CONTACTS)

*P = Depth

Cam switches



Characteristics (p. 213)

► CHANGE-OVER SWITCH WITH “OFF” POSITION (CONTINUED)

PR 17 - 20 A (AC21)

Enclosure

Cat. No.



SC01GXQ

Black small handle
□ 64 aluminium plate

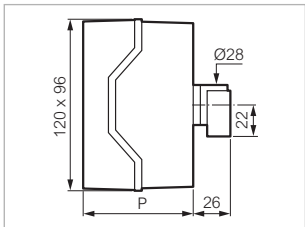
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR17 2201 C8 BCQ3
PR17 2202 C8 BCQ3
PR17 2203 C8 BCQ3
PR17 2201 C8 BCQ3

SC01GXQ
SC02GXQ
SC03GXQ
SC04GXQ

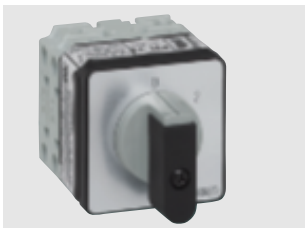


Dimensions in mm
*P: 77 (1 TO 6 CONTACTS)
101 (7-8 CONTACTS)

PR 21 - 25 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



TC02GQ1

Grey/black small handle
□ 48 aluminium plate and frame

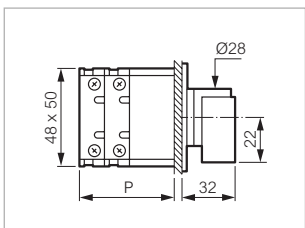
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR21 2201 C8 E Q48PN
PR21 2202 C8 E Q48PN
PR21 2203 C8 E Q48PN
PR21 2204 C8 E Q48PN

TC01GQ1
TC02GQ1
TC03GQ1
TC04GQ1



Dimensions in mm
*P: 33 (1-2 CONTACTS)
45 (3-4 CONTACTS)
57 (5-6 CONTACTS)
69 (7-8 CONTACTS)

*P = Depth

Cam switches

 Characteristics (p. 213)

► CHANGE-OVER SWITCH WITH “OFF” POSITION (CONTINUED)

PR 21 - 25 A (AC21)

Enclosure

Cat. No.



TC03GXQ

Black small handle
□ 64 aluminium plate

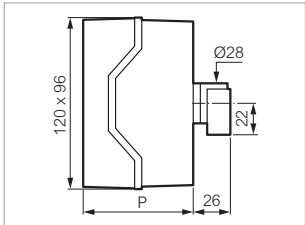
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR21 2201 C8 BCQ3
PR21 2202 C8 BCQ3
PR21 2203 C8 BCQ3
PR21 2204 C8 BCQ3

TC01GXQ
TC02GXQ
TC03GXQ
TC04GXQ



Dimensions in mm
*P: 77 (1 TO 6 CONTACTS)
101 (7-8 CONTACTS)

PR 26 - 32 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



ZC02GQ7

Grey/black medium handle
□ 72 aluminium plate and frame

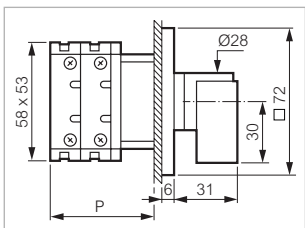
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR26 2201 C8 E Q72MN
PR26 2202 C8 E Q72MN
PR26 2203 C8 E Q72MN
PR26 2204 C8 E Q72MN

ZC01GQ7
ZC02GQ7
ZC03GQ7
ZC04GQ7



Dimensions in mm
*P: 36 (1-2 CONTACTS)
51 (3-4 CONTACTS)
66 (5-6 CONTACTS)
81 (7-8 CONTACTS)

*P = Depth

Cam switches



Characteristics (p. 213)

► CHANGE-OVER SWITCH WITH “OFF” POSITION (CONTINUED)

PR 26 - 32 A (AC21)

Enclosure

Cat. No.



ZC04GXQ

Black small handle
□ 64 aluminium plate

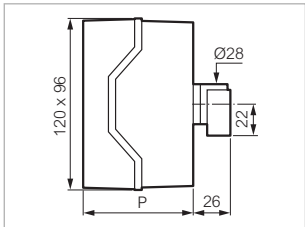
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR26 2201 C8 BCQ3
PR26 2202 C8 BCQ3
PR26 2203 C8 BCQ3
PR26 2204 C8 BCQ3

ZC01GXQ
ZC02GXQ
ZC03GXQ
ZC04GXQ



Dimensions in mm
*P: 77 (1 TO 6 CONTACTS)
101 (7-8 CONTACTS)

PR 40 - 50 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



HC03GQ7

Grey/black medium handle
□ 72 aluminium plate and frame

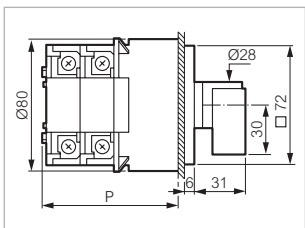
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR40 2201 C8 E Q72MN
PR40 2202 C8 E Q72MN
PR40 2203 C8 E Q72MN
PR40 2204 C8 E Q72MN

HC01GQ7
HC02GQ7
HC03GQ7
HC04GQ7



Dimensions in mm
*P: 60 (1-2 CONTACTS)
80 (3-4 CONTACTS)
100 (5-6 CONTACTS)
120 (7-8 CONTACTS)

*P = Depth

Catalogue No. in bold: normally in stock at distribution outlets

Cam switches

 Characteristics (p. 213)

► CHANGE-OVER SWITCH WITH “OFF” POSITION (CONTINUED)

PR 40 - 50 A (AC21)

Enclosure

Cat. No.



HC01GAQ

Grey/black medium handle
□ 72 aluminium plate and frame

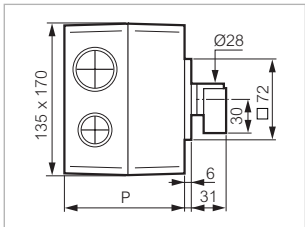
Designation

1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



PR40 2201 C8 BCFQ72MN
PR40 2202 C8 BCFQ72MN
PR40 2203 C8 BCFQ72MN
PR40 2204 C8 BCFQ72MN

HC01GAQ
HC02GBQ
HC03GCQ
HC04GDQ



Dimensions in mm
*P: 107 (1 TO 4 CONTACTS)
145 (5 TO 8 CONTACTS)

PR 63 - 63 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



IC02GQ7

Grey/black medium handle
□ 72 aluminium plate and frame

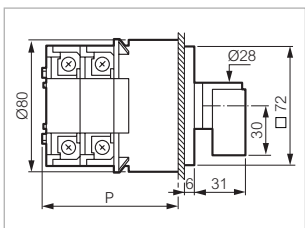
Designation

1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



PR63 2201 C8 E Q72MN
PR63 2202 C8 E Q72MN
PR63 2203 C8 E Q72MN
PR63 2204 C8 E Q72MN

IC01GQ7
IC02GQ7
IC03GQ7
IC04GQ7



Dimensions in mm
*P: 60 (1-2 CONTACTS)
80 (3-4 CONTACTS)
100 (5-6 CONTACTS)
120 (7-8 CONTACTS)

*P = Depth

Cam switches

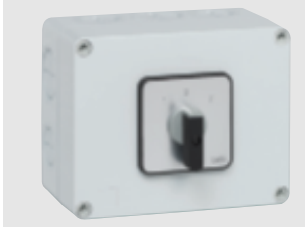
 Characteristics (p. 213)

► CHANGE-OVER SWITCH WITH “OFF” POSITION (CONTINUED)

PR 63 - 63 A (AC21)

Enclosure

Cat. No.



IC02GBQ

Grey/black medium handle
□ 72 aluminium plate and frame

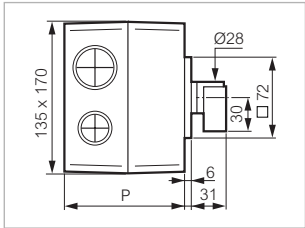
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR63 2201 C8 BCFQ72MN
PR63 2202 C8 BCFQ72MN
PR63 2203 C8 BCFQ72MN
PR63 2204 C8 BCFQ72MN

IC01GAQ
IC02GBQ
IC03GCQ
IC04GDQ

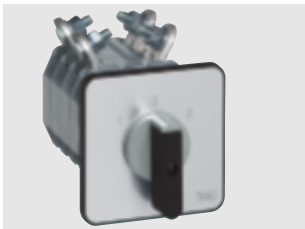


Dimensions in mm
*P: 107 (1 TO 4 CONTACTS)
145 (5 TO 8 CONTACTS)

PR 125 - 160 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



LC02GQ9

Grey/black large handle
□ 96 aluminium plate and frame

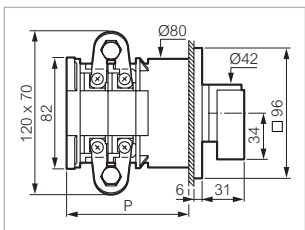
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR125 2201 C8 E Q96GN
PR125 2202 C8 E Q96GN
PR125 2203 C8 E Q96GN
PR125 2204 C8 E Q96GN

LC01GQ9
LC02GQ9
LC03GQ9
LC04GQ9



Dimensions in mm
*P: 80 (1-2 CONTACTS)
120 (3-4 CONTACTS)
160 (5-6 CONTACTS)
200 (7-8 CONTACTS)

*P = Depth

Cam switches

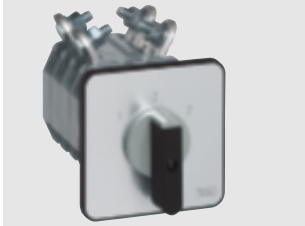
 Characteristics (p. 213)

► CHANGE-OVER SWITCH WITH “OFF” POSITION (CONTINUED)

PR 160 - 200 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



MC02GQ9

Grey/black large handle
 96 aluminium plate and frame

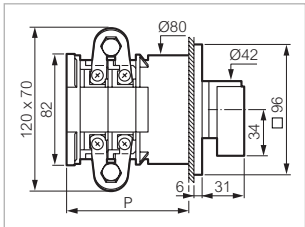
1P - 2 contacts
 2P - 4 contacts
 3P - 6 contacts
 4P - 8 contacts



Designation

PR160 2201 C8 E Q96GN
 PR160 2202 C8 E Q96GN
 PR160 2203 C8 E Q96GN
 PR160 2204 C8 E Q96GN

MC01GQ9
 MC02GQ9
 MC03GQ9
 MC04GQ9



Dimensions in mm

*P: 80 (1-2 CONTACTS)
 120 (3-4 CONTACTS)
 160 (5-6 CONTACTS)
 200 (7-8 CONTACTS)

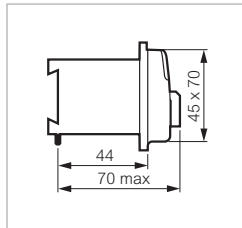
PR 12 - 16 A (AC21)

Modular in panel DIN rail mounting

Cat. No.



NDF15



Small grey handle

2P - 4 contacts



Designation

PR12 2202 C8 DF

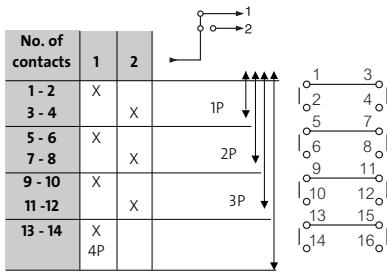
NDF15

*P = Depth

Cam switches

 Characteristics (p. 213)

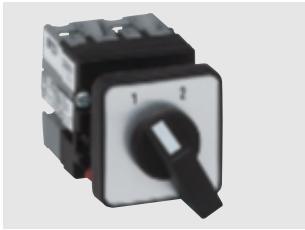
► CHANGE-OVER SWITCH WITHOUT "OFF" POSITION



MINI CAM SWITCH - 10 A (AC21)

∅ 16 and ∅ 22 mm single hole front mounting

Cat. No.



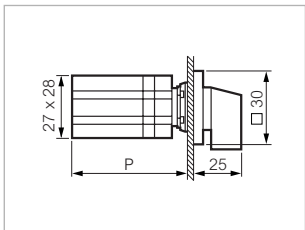
223511

30 aluminium plate and frame

- 1P - 2 contacts
- 2P - 4 contacts
- 3P - 6 contacts
- 4P - 8 contacts



- 223511**
- 223512**
- 223513**
- 223514**



Dimensions in mm

- *P: 50 (1-2 CONTACTS)
- 62 (3-4 CONTACTS)
- 74 (5-6 CONTACTS)
- 86 (7-8 CONTACTS)

PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NC53DQ1

Designation

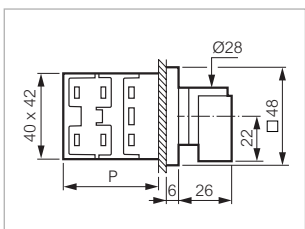
- Grey/black small handle
- 48 aluminium plate and frame

- 1P - 2 contacts
- 2P - 4 contacts
- 3P - 6 contacts
- 4P - 8 contacts



- PR12 2251 D4 E Q48PN
- PR12 2252 D4 E Q48PN
- PR12 2253 D4 E Q48PN
- PR12 2254 D4 E Q48PN

- NC51DQ1**
- NC52DQ1**
- NC53DQ1**
- NC54DQ1**



Dimensions in mm

- *P: 36 (1-2 CONTACTS)
- 46 (3-4 CONTACTS)
- 56 (5-6 CONTACTS)
- 66 (7-8 CONTACTS)

*P = Depth

Catalogue No. in bold: normally in stock at distribution outlets

Cam switches

 Characteristics (p. 213)

► CHANGE-OVER SWITCH WITHOUT “OFF” POSITION (CONTINUED)

PR 12 - 16 A (AC21)

Ø 22 single hole front mounting

Cat. No.



NC53DX80

Grey/black small handle
 □ 48 aluminium plate and frame

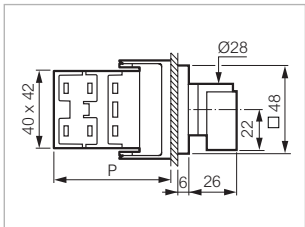
Designation

1P - 2 contacts
 2P - 4 contacts
 3P - 6 contacts
 4P - 8 contacts



PR12 2251 D4 E N48MD50
 PR12 2252 D4 E N48MD50
 PR12 2253 D4 E N48MD50
 PR12 2254 D4 E N48MD50

NC51DX80
 NC52DX80
NC53DX80
NC54DX80



Dimensions in mm

*P: 51 (1-2 CONTACTS)
 61 (3-4 CONTACTS)
 71 (5-6 CONTACTS)
 81 (7-8 CONTACTS)

PR 12 - 16 A (AC21)

Ø 22 single hole front mounting

Cat. No.



NC52DC113

Black handle
 Matt chrome plastic bezel

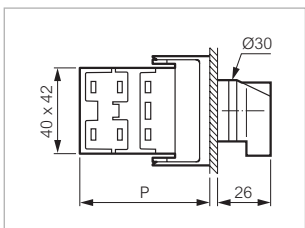
Designation

1P - 2 contacts
 2P - 4 contacts
 3P - 6 contacts
 4P - 8 contacts



PR12 2251 D4 E C21RA03
 PR12 2252 D4 E C21RA03
 PR12 2253 D4 E C21RA03
 PR12 2254 D4 E C21RA03

NC51DC113
 NC52DC113
 NC53DC113
 NC54DC113



Dimensions in mm

*P: 51 (1-2 CONTACTS)
 61 (3-4 CONTACTS)
 71 (5-6 CONTACTS)
 81 (7-8 CONTACTS)

*P = Depth

Cam switches



Characteristics (p. 213)

► CHANGE-OVER SWITCH WITHOUT “OFF” POSITION (CONTINUED)

PR 12 - 16 A (AC21)

Enclosure

Cat. No.



NC51DXQ

Black small handle
 64 aluminium plate

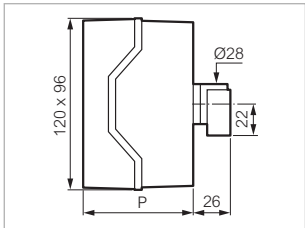
1P - 2 contacts
 2P - 4 contacts
 3P - 6 contacts
 4P - 8 contacts



Designation

PR12 2251 D4 BCQ3
 PR12 2252 D4 BCQ3
 PR12 2253 D4 BCQ3
 PR12 2254 D4 BCQ3

NC51DXQ
 NC52DXQ
 NC53DXQ
 NC54DXQ

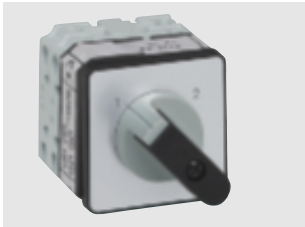


Dimensions in mm
 *P: 77 (1 TO 6 CONTACTS)
 101 (7 TO 8 CONTACTS)

PR 17 - 20 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



SC52DQ1

Grey/black small handle
 48 aluminium plate and frame

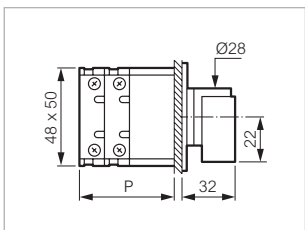
1P - 2 contacts
 2P - 4 contacts
 3P - 6 contacts
 4P - 8 contacts



Designation

PR17 2251 D4 E Q48PN
 PR17 2252 D4 E Q48PN
 PR17 2253 D4 E Q48PN
 PR17 2254 D4 E Q48PN

SC51DQ1
 SC52DQ1
 SC53DQ1
 SC54DQ1



Dimensions in mm
 *P: 33 (1-2 CONTACTS)
 45 (3-4 CONTACTS)
 57 (5-6 CONTACTS)
 69 (7-8 CONTACTS)

*P = Depth

Cam switches



Characteristics (p. 213)

► CHANGE-OVER SWITCH WITHOUT “OFF” POSITION (CONTINUED)

PR 17 - 20 A (AC21)

Enclosure

Cat. No.



SC51DXQ

Black small handle
□ 64 aluminium plate

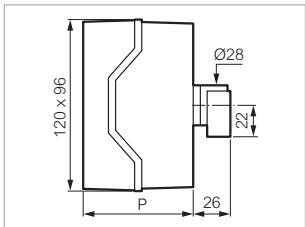
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR17 2251 D4 BCQ3
PR17 2252 D4 BCQ3
PR17 2253 D4 BCQ3
PR17 2254 D4 BCQ3

SC51DXQ
SC52DXQ
SC53DXQ
SC54DXQ

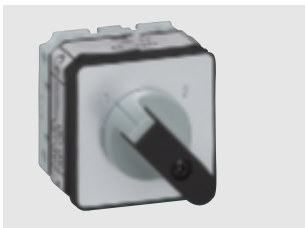


Dimensions in mm
*P: 77 (1 TO 6 CONTACTS)
101 (7 TO 8 CONTACTS)

PR 21 - 25 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



TC51DQ1

Grey/black small handle
□ 48 aluminium plate and frame

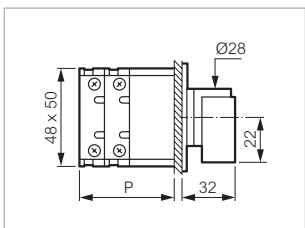
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR21 2251 D4 E Q48PN
PR21 2252 D4 E Q48PN
PR21 2253 D4 E Q48PN
PR21 2254 D4 E Q48PN

TC51DQ1
TC52DQ1
TC53DQ1
TC54DQ1



Dimensions in mm
*P: 33 (1-2 CONTACTS)
45 (3-4 CONTACTS)
57 (5-6 CONTACTS)
69 (7-8 CONTACTS)

*P = Depth

Cam switches



Characteristics (p. 213)

► CHANGE-OVER SWITCH WITHOUT “OFF” POSITION (CONTINUED)

PR 21 - 25 A (AC21)

Enclosure

Cat. No.



TC53DXQ

Black small handle
□ 64 aluminium plate

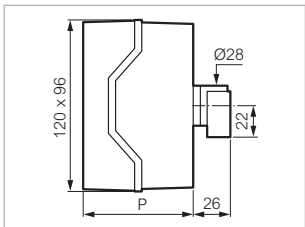
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR21 2251 D4 BCQ3
PR21 2252 D4 BCQ3
PR21 2253 D4 BCQ3
PR21 2254 D4 BCQ3

TC51DXQ
TC52DXQ
TC53DXQ
TC54DXQ



Dimensions in mm
*P: 77 (1 TO 6 CONTACTS)
101 (7 TO 8 CONTACTS)

PR 26 - 32 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



ZC52DQ7

Grey/black medium handle
□ 72 aluminium plate and frame

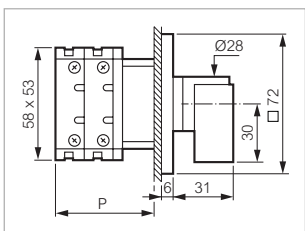
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR26 2251 D4 E Q72MN
PR26 2252 D4 E Q72MN
PR26 2253 D4 E Q72MN
PR26 2254 D4 E Q72MN

ZC51DQ7
ZC52DQ7
ZC53DQ7
ZC54DQ7



Dimensions in mm
*P: 36 (1-2 CONTACTS)
51 (3-4 CONTACTS)
66 (5-6 CONTACTS)
81 (7-8 CONTACTS)

*P = Depth

Cam switches

 Characteristics (p. 213)

► CHANGE-OVER SWITCH WITHOUT “OFF” POSITION (CONTINUED)

PR 26 - 32 A (AC21)

Enclosure

Cat. No.



ZC51DXQ

Black small handle
□ 64 aluminium plate

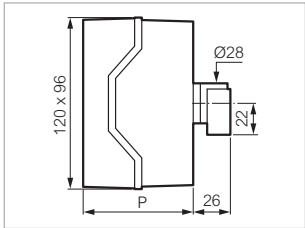
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR26 2251 D4 BCQ3
PR26 2252 D4 BCQ3
PR26 2253 D4 BCQ3
PR26 2254 D4 BCQ3

ZC51DXQ
ZC52DXQ
ZC53DXQ
ZC54DXQ

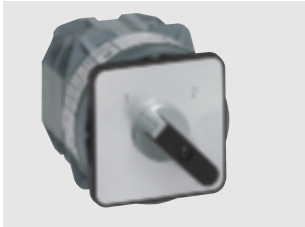


Dimensions in mm
*P: 77 (1 TO 4 CONTACTS)
101 (5 TO 8 CONTACTS)

PR 40 - 50 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



HC52DQ7

Grey/black medium handle
□ 72 aluminium plate and frame

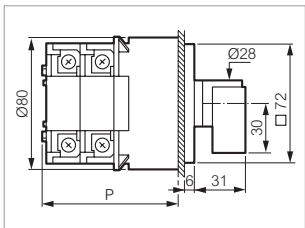
1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



Designation

PR40 2251 D4 E Q72MN
PR40 2252 D4 E Q72MN
PR40 2253 D4 E Q72MN
PR40 2254 D4 E Q72MN

HC51DQ7
HC52DQ7
HC53DQ7
HC54DQ7



Dimensions in mm
*P: 60 (1-2 CONTACTS)
80 (3-4 CONTACTS)
100 (5-6 CONTACTS)
120 (7-8 CONTACTS)

*P = Depth

Cam switches



Characteristics (p. 213)

► CHANGE-OVER SWITCH WITHOUT “OFF” POSITION (CONTINUED)

PR 40 - 50 A (AC21)

Enclosure

Cat. No.



HC52DBQ

Grey/black medium handle
□ 72 aluminium plate and frame

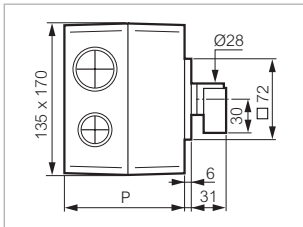
Designation

1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



PR40 2251 D4 BCF Q72MN
PR40 2252 D4 BCF Q72MN
PR40 2253 D4 BCF Q72MN
PR40 2254 D4 BCF Q72MN

HC51DAQ
HC52DBQ
HC53DCQ
HC54DDQ



Dimensions in mm
*P: 107 (1 TO 4 CONTACTS)
145 (5 À 8 CONTACTS)

PR 63 - 63 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



IC51DQ7

Grey/black medium handle
□ 72 aluminium plate and frame

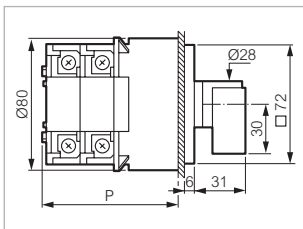
Designation

1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



PR63 2251 D4 E Q72MN
PR63 2252 D4 E Q72MN
PR63 2253 D4 E Q72MN
PR63 2254 D4 E Q72MN

IC51DQ7
IC52DQ7
IC53DQ7
IC54DQ7



Dimensions in mm
*P: 60 (1-2 CONTACTS)
80 (3-4 CONTACTS)
100 (5-6 CONTACTS)
120 (7-8 CONTACTS)

*P = Depth

Cam switches



Characteristics (p. 213)

► CHANGE-OVER SWITCH WITHOUT “OFF” POSITION (CONTINUED)

PR 63 - 63 A (AC21)

Enclosure

Cat. No.



IC52DBQ

Grey/black medium handle
□ 72 aluminium plate and frame

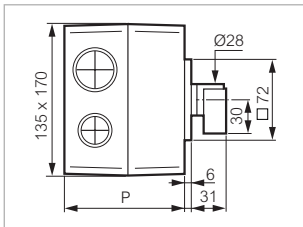
Designation

1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



PR63 2251 D4 BCF Q72MN
PR63 2252 D4 BCF Q72MN
PR63 2253 D4 BCF Q72MN
PR63 2254 D4 BCF Q72MN

IC51DAQ
IC52DBQ
IC53DCQ
IC54DDQ

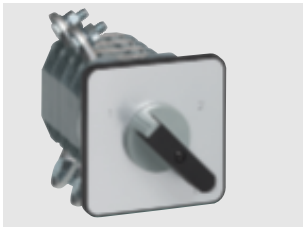


Dimensions in mm
*P: 107 (1 TO 4 CONTACTS)
145 (5 À 8 CONTACTS)

PR 125 - 160 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



LC52DQ9

Grey/black large handle
□ 96 aluminium plate and frame

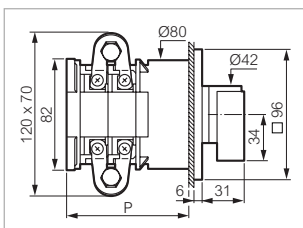
Designation

1P - 2 contacts
2P - 4 contacts
3P - 6 contacts
4P - 8 contacts



PR125 2251 D4 E Q96GN
PR125 2252 D4 E Q96GN
PR125 2253 D4 E Q96GN
PR125 2254 D4 E Q96GN

LC51DQ9
LC52DQ9
LC53DQ9
LC54DQ9



Dimensions in mm
*P: 80 (1-2 CONTACTS)
120 (3-4 CONTACTS)
160 (5-6 CONTACTS)
200 (7-8 CONTACTS)

*P = Depth

Cam switches



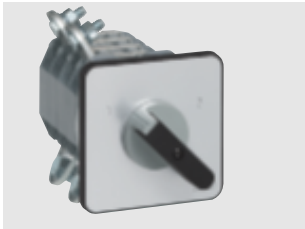
Characteristics (p. 213)

► CHANGE-OVER SWITCH WITHOUT “OFF” POSITION (CONTINUED)

PR 160 - 200 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



MC52DQ9

Grey/black large handle
□ 96 aluminium plate and frame

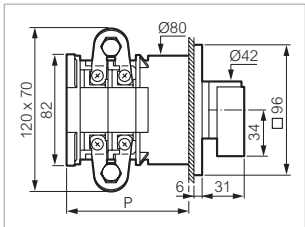
Designation

- 1P - 2 contacts
- 2P - 4 contacts
- 3P - 6 contacts
- 4P - 8 contacts



- PR160 2251 D4 E Q96GN
- PR160 2252 D4 E Q96GN
- PR160 2253 D4 E Q96GN
- PR160 2254 D4 E Q96GN

- MC51DQ9
- MC52DQ9
- MC53DQ9
- MC54DQ9



Dimensions in mm

- *P: 80 (1-2 CONTACTS)
- 120 (3-4 CONTACTS)
- 160 (5-6 CONTACTS)
- 200 (7-8 CONTACTS)

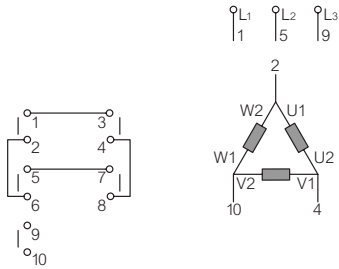
*P = Depth

Cam switches

 Characteristics (p. 213)

▶ 3 PHASE MOTOR SWITCH, FORWARD/REVERSE, 1 SPEED

No. of contacts	REV	0	FWD
1-2	X		
3-4			X
5-6			X
7-8	X		
9-10	X		X



PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NZ11GQ1

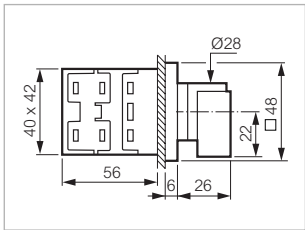
Designation
 Grey/black small handle
 □ 48 aluminium plate and frame
 P= 4 kW in 400 V

5 contacts



PR12 9151 C8 E Q48PN

NZ11GQ1



PR 12 - 16 A (AC21)

Enclosure

Cat. No.



NZ11GXQ

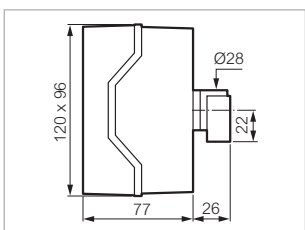
Designation
 Black small handle
 □ 64 aluminium plate
 P= 4 kW in 400 V

5 contacts



PR12 9151 C8 BCQ3

NZ11GXQ

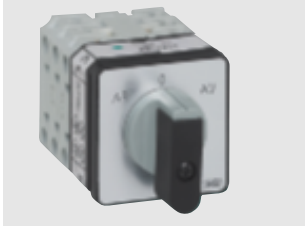


Cam switches

 Characteristics (p. 213)

► 3 PHASE MOTOR SWITCH, FORWARD/REVERSE, 1 SPEED (CONTINUED)

PR 17 - 20 A (AC21) **2-screw panel mount – interval: 30 mm** **Cat. No.**



SZ11GQ1

Designation

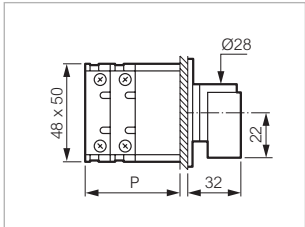
- Grey/black small handle
- 48 aluminium plate and frame
- P= 7,5 kW in 400 V

5 contacts



PR17 9151 C8 E Q48PN

SZ11GQ1



PR 17 - 20 A (AC21) **Enclosure** **Cat. No.**



SZ11GXQ

Designation

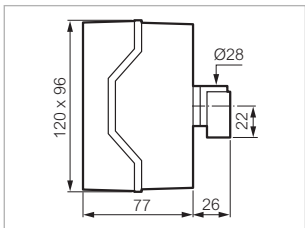
- Black small handle
- 64 aluminium plate
- P= 7,5 kW in 400 V

5 contacts



PR17 9151 C8 BCQ3

SZ11GXQ

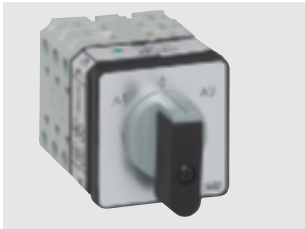


Cam switches

 Characteristics (p. 213)

▶ 3 PHASE MOTOR SWITCH, FORWARD/REVERSE, 1 SPEED (CONTINUED)

PR 21 - 25 A (AC21) **2-screw panel mount – interval: 30 mm** **Cat. No.**



TZ11GQ1

Designation

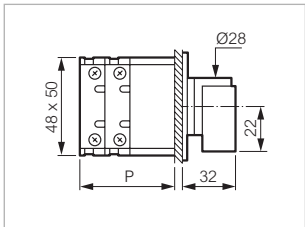
Grey/black small handle
 □ 48 aluminium plate and frame
 P= 7,5 kW in 400 V

5 contacts



PR21 9151 C8 E Q48PN

TZ11GQ1



PR 21 - 25 A (AC21) **Enclosure** **Cat. No.**



TZ11GXQ

Designation

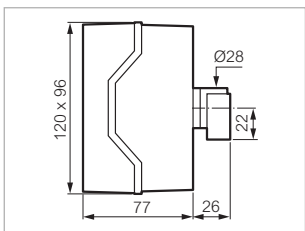
Black small handle
 □ 64 aluminium plate
 P= 7,5 kW in 400 V

5 contacts



PR21 9151 C8 BCQ3

TZ11GXQ



Cam switches

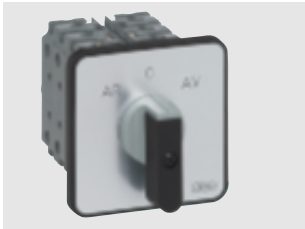
 Characteristics (p. 213)

► 3 PHASE MOTOR SWITCH, FORWARD/REVERSE, 1 SPEED (CONTINUED)

PR 26 - 32 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



ZZ11GQ7

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 11 kW in 400 V

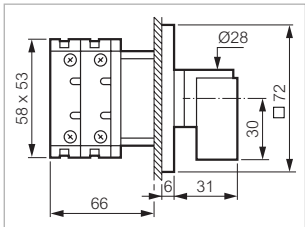
5 contacts



Designation

PR26 9151 C8 E Q72MN

ZZ11GQ7



PR 26 - 32 A (AC21)

Enclosure

Cat. No.



ZZ11GXQ

Black small handle
 □ 64 aluminium plate
 P= 11 kW in 400 V

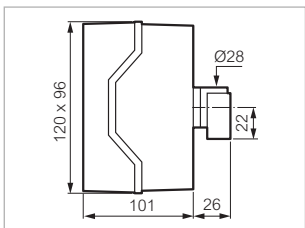
5 contacts



Designation

PR26 9151 C8 BCQ3

ZZ11GXQ



Cam switches

 Characteristics (p. 213)

▶ 3 PHASE MOTOR SWITCH, FORWARD/REVERSE, 1 SPEED (CONTINUED)

PR 40 - 50 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



HZ11GQ7

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 18.5 kW in 400 V

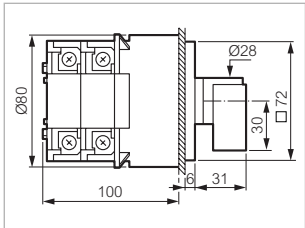
5 contacts



Designation

PR40 9151 C8 E Q72MN

HZ11GQ7



PR 40 - 50 A (AC21)

Enclosure

Cat. No.



HZ11GCQ

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 18.5 kW in 400 V

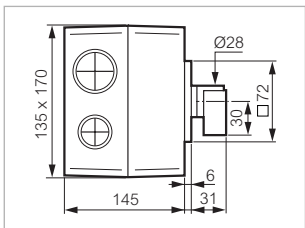
5 contacts



Designation

PR40 9151 C8 BCF Q72MN

HZ11GCQ



Cam switches

 Characteristics (p. 213)

► 3 PHASE MOTOR SWITCH, FORWARD/REVERSE, 1 SPEED (CONTINUED)

PR 63 - 63 A (AC21) **2-screw panel mount - interval: 50 mm** **Cat. No.**



IZ11GQ7

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 22 kW in 400 V

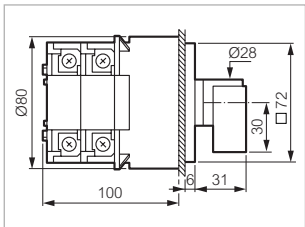
5 contacts



Designation

PR63 9151 C8 E Q72MN

IZ11GQ7



PR 63 - 63 A (AC21) **Enclosure** **Cat. No.**



IZ11GXQ

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 22 kW in 400 V

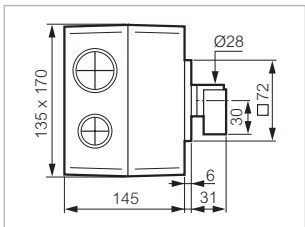
5 contacts



Designation

PR63 9151 C8 BCF Q72MN

IZ11GXQ

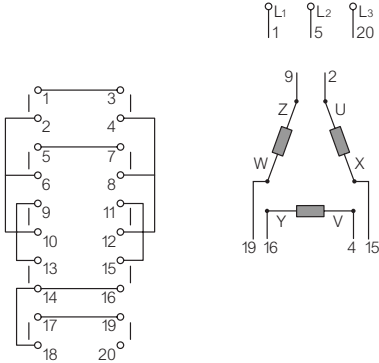


Cam switches

 Characteristics (p. 213)

► 1 SPEED STARTER, FORWARD/REVERSE - 3 PHASE MOTOR

No. of contacts	REV			FWD	
	Δ	Y	0	Δ	Y
1 - 2				X	X
3 - 4	X	X			
5 - 6	X	X			
7 - 8				X	X
9 - 10	X				X
11 - 12	X				X
13 - 14		X	X		
15 - 16		X	X		
17 - 18	X				X
19 - 20	X	X		X	X



PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NZ13GQ1

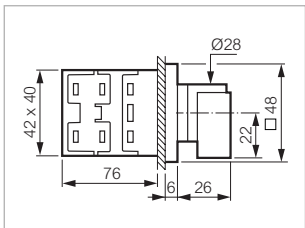
Designation
 Grey/black small handle
 48 aluminium plate and frame
 P= 4 kW in 400 V

10 contacts



PR12 9153 C8 E Q48PN

NZ13GQ1



Cam switches

 Characteristics (p. 213)

▶ 1 SPEED STARTER, FORWARD/REVERSE - 3 PHASE MOTOR (CONTINUED)

PR 12 - 16 A (AC21) **Enclosure** **Cat. No.**



NZ13GXQ

Black small handle
 64 aluminium plate
 P= 4 kW in 400 V

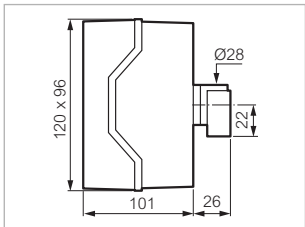
10 contacts



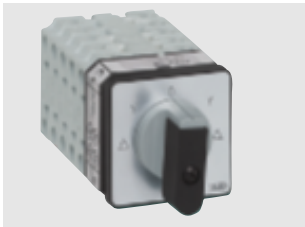
Designation

PR12 9153 C8 BCQ3

NZ13GXQ



PR 17 - 20 A (AC21) **2-crew panel mount – interval: 30 mm** **Cat. No.**



SZ13GQ1

Grey/black small handle
 48 aluminium plate and frame
 P= 7,5 kW in 400 V

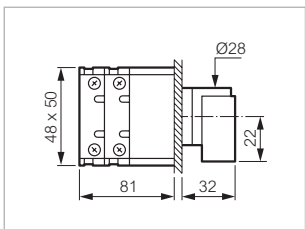
10 contacts



Designation

PR17 9153 C8 E Q48PN

SZ13GQ1



Cam switches

 Characteristics (p. 213)

► 1 SPEED STARTER, FORWARD/REVERSE - 3 PHASE MOTOR (CONTINUED)

PR 17 - 20 A (AC21) **Enclosure** **Cat. No.**



SZ13GXQ

Black small handle
 □ 64 aluminium plate
 P= 7,5 kW in 400 V

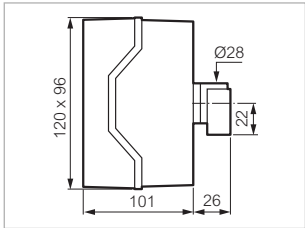
10 contacts



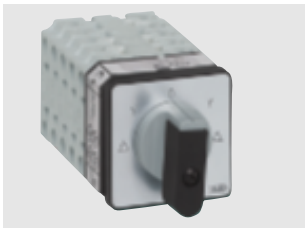
Designation

PR17 9153 C8 BCQ3

SZ13GXQ



PR 21 - 25 A (AC21) **2-screw panel mount – interval: 30 mm** **Cat. No.**



TZ13GQ1

Grey/black small handle
 □ 48 aluminium plate and frame
 P= 7,5 kW in 400 V

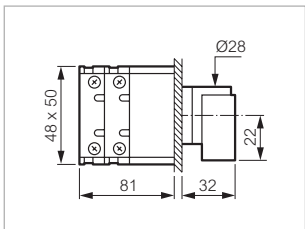
10 contacts



Designation

PR21 9153 C8 E Q48PN

TZ13GQ1



Cam switches

 Characteristics (p. 213)

► 1 SPEED STARTER, FORWARD/REVERSE - 3 PHASE MOTOR (CONTINUED)

PR 21 - 25 A (AC21) **Enclosure** **Cat. No.**



TZ13GXQ

Black small handle
 □ 64 aluminium plate
 P= 7.5 kW in 400 V

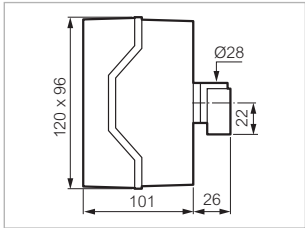
10 contacts



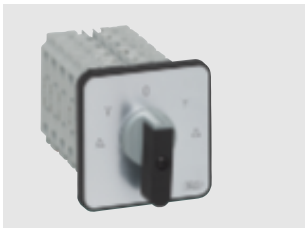
Designation

PR21 9153 C8 BCQ3

TZ13GXQ



PR 26 - 32 A (AC21) **2-screw panel mount – interval: 30 mm** **Cat. No.**



ZZ13GQ7

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 11 kW in 400 V

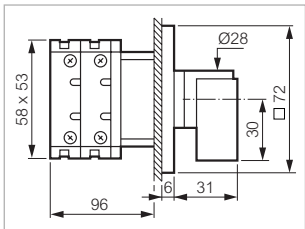
10 contacts



Designation

PR26 9153 C8 E Q72MN

ZZ13GQ7



Cam switches

 Characteristics (p. 213)

► 1 SPEED STARTER, FORWARD/REVERSE - 3 PHASE MOTOR (CONTINUED)

PR 40 - 50 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



HZ13GQ7

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 18,5 kW in 400 V

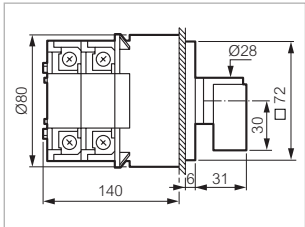
10 contacts



Designation

PR40 9153 C8 E Q72MN

HZ13GQ7



PR 63 - 63 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



IZ13GQ7

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 22 kW in 400 V

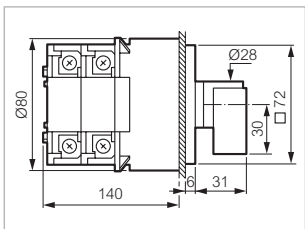
10 contacts



Designation

PR63 9153 C8 E Q72MN

IZ13GQ7

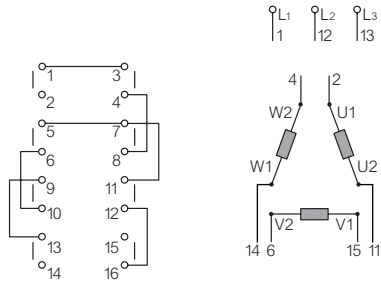


Cam switches

 Characteristics (p. 213)

► 1 SPEED STARTER, 1 WAY - 3 PHASE MOTOR

No. of contacts	0	Y	Δ
1 - 2		X	X
3 - 4		X	
5 - 6	X	X	
7 - 8	X	X	
9 - 10			X
11 - 12			X
13 - 14	X	X	
15 - 16	X	X	



PR 12 - 16 A (AC21)

2- screw panel mount – interval: 30 mm

Cat. No.



NZ51BQ1

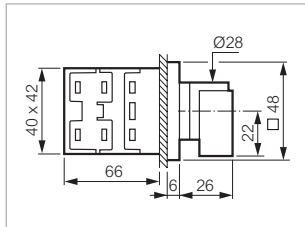
Designation
 Grey/black small handle
 □ 48 aluminium plate and frame
 P= 4 kW in 400 V

8 contacts



PR12 9551 B4 E Q48PN

NZ51BQ1



PR 12 - 16 A (AC21)

Enclosure

Cat. No.



NZ51BXQ

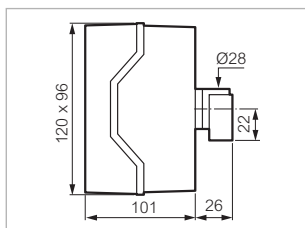
Designation
 Black small handle
 □ 64 aluminium plate
 P= 4 kW in 400 V

8 contacts



PR12 9551 B4 BCQ3

NZ51BXQ



Cam switches



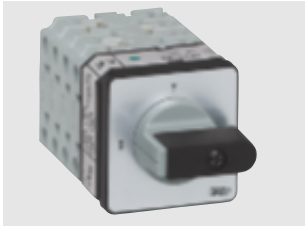
Characteristics (p. 213)

► 1 SPEED STARTER, 1 WAY - 3 PHASE MOTOR (CONTINUED)

PR 17 - 20 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



Designation

Grey/black small handle
 □ 48 aluminium plate and frame
 P= 7.5 kW in 400 V

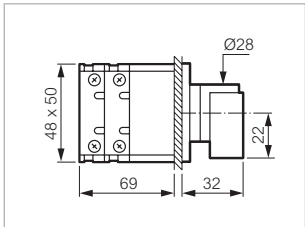
8 contacts



PR17 9551 B4 E Q48PN

SZ51BQ1

SZ51BQ1



PR 17 - 20 A (AC21)

Enclosure

Cat. No.



Designation

Black small handle
 □ 64 aluminium plate
 P= 7.5 kW in 400 V

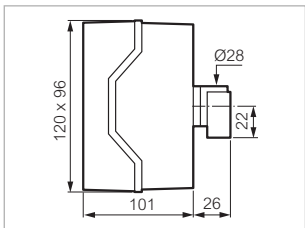
8 contacts



PR17 9551 B4 BCQ3

SZ51BXQ

SZ51BXQ

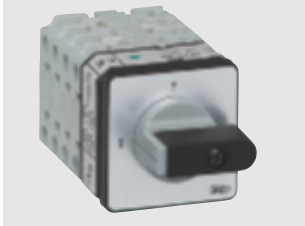


Cam switches

 Characteristics (p. 213)

► 1 SPEED STARTER, 1 WAY - 3 PHASE MOTOR (CONTINUED)

PR 21 - 25 A (AC21) **2-screw panel mount – interval: 30 mm** **Cat. No.**



TZ51BQ1

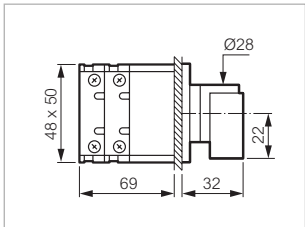
Designation
 Grey/black small handle
 □ 48 aluminium plate and frame
 P= 7.5 kW in 400 V

8 contacts



PR21 9551 B4 E Q48PN

TZ51BQ1



PR 21 - 25 A (AC21) **Enclosure** **Cat. No.**



TZ51BXQ

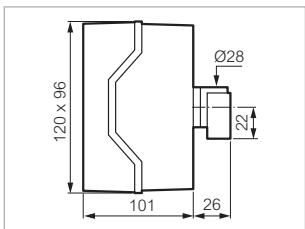
Designation
 Black small handle
 □ 64 aluminium plate
 P= 7.5 kW in 400 V

8 contacts



PR21 9551 B4 BCQ3

TZ51BXQ



Cam switches

 Characteristics (p. 213)

► 1 SPEED STARTER, 1 WAY - 3 PHASE MOTOR (CONTINUED)

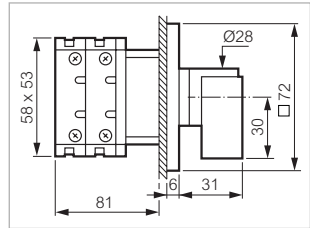
PR 26 - 32 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



ZZ51BQ7



Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 11 kW in 400 V

8 contacts



Designation

PR26 9551 B4 E Q72MN

ZZ51BQ7

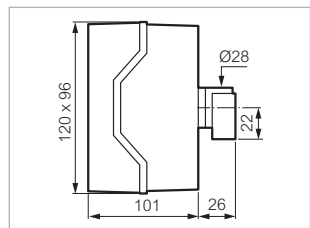
PR 26 - 32 A (AC21)

Enclosure

Cat. No.



ZZ51BXQ



Black small handle
 □ 64 aluminium plate
 P= 11 kW in 400 V

8 contacts



Designation

PR26 9551 B4 BCQ3

ZZ51BXQ

Cam switches

 Characteristics (p. 213)

► 1 SPEED STARTER, 1 WAY - 3 PHASE MOTOR (CONTINUED)

PR 40 - 50 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



HZ51BQ7

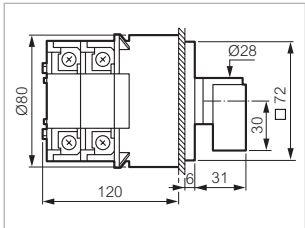
Designation
 Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 18.5 kW in 400 V

8 contacts



PR40 9551 B4 E Q72MN

HZ51BQ7



PR 40 - 50 A (AC21)

Enclosure

Cat. No.



HZ51BDQ

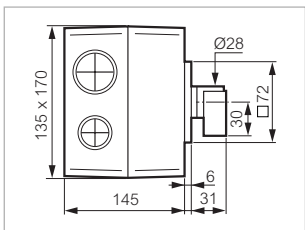
Designation
 Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 18.5 kW in 400 V

8 contacts



PR40 9551 B4 BCF Q72MN

HZ51BDQ



Cam switches



Characteristics (p. 213)

► 1 SPEED STARTER, 1 WAY - 3 PHASE MOTOR (CONTINUED)

PR 63 - 63 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



Designation

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 22 kW in 400 V

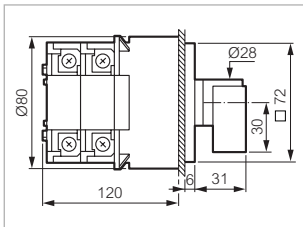
8 contacts



PR63 9551 B4 E Q72MN

IZ51BQ7

IZ51BQ7



PR 63 - 63 A (AC21)

Enclosure

Cat. No.



Designation

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 22 kW in 400 V

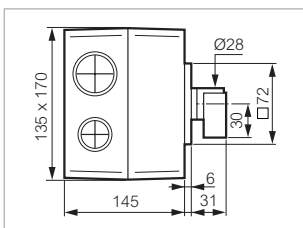
8 contacts



PR63 9551 B4 BCF Q72MN

IZ51BDQ

HZ51BDQ

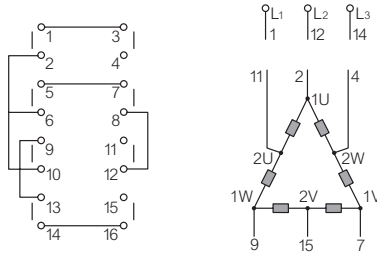


Cam switches

 Characteristics (p. 213)

► 2 SPEEDS, 1 WAY – 3 PHASE DALHANDER MOTOR

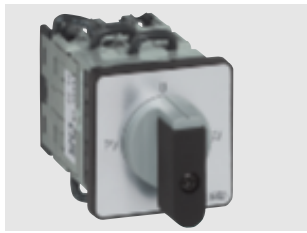
No. of contacts	LS	0	HS	No. of contacts	0	LS	HS
1 - 2	X			1 - 2		X	
3 - 4			X	3 - 4			X
5 - 6			X	5 - 6			X
7 - 8	X			7 - 8		X	
9 - 10			X	9 - 10			X
11 - 12			X	11 - 12			X
13 - 14	X			13 - 14		X	
15 - 16			X	15 - 16			X



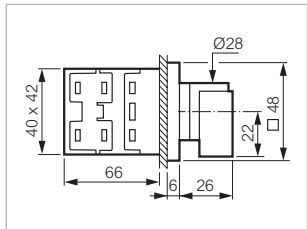
PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NZ52CQ1



Designation

Grey/black small handle
 48 aluminium plate and frame
 P= 4 kW in 400 V

8 contacts



PR12 9552 B4 E Q48PN

NZ52BQ1

8 contacts



PR12 9552 C4 E Q48PN

NZ52CQ1

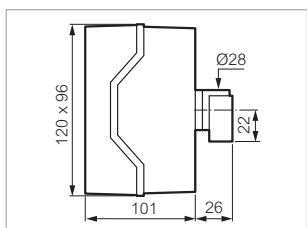
PR 12 - 16 A (AC21)

Enclosure

Cat. No.



NZ52CXQ



Designation

Black small handle
 64 aluminium plate
 P= 4 kW in 400 V

8 contacts



PR12 9552 B4 BCQ3

NZ52BXQ

8 contacts



PR12 9552 C4 BCQ3

NZ52CXQ

Cam switches



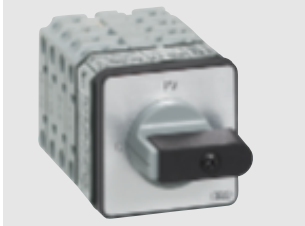
Characteristics (p. 213)

► 2 SPEEDS, 1 WAY – 3 PHASE DALHANDER MOTOR (CONTINUED)

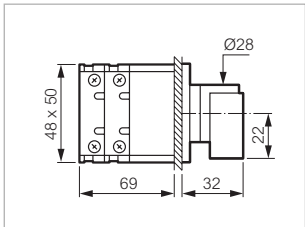
PR 17 - 20 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



SZ52BQ1



Designation

Grey/black small handle
 □ 48 aluminium plate and frame
 P= 7.5 kW in 400 V

8 contacts



PR17 9552 B4 E Q48PN

SZ52BQ1

8 contacts



PR17 9552 C4 E Q48PN

SZ52CQ1

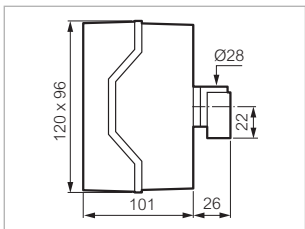
PR 17 - 20 A (AC21)

Enclosure

Cat. No.



SZ52BXQ



Designation

Black small handle
 □ 64 aluminium plate
 P= 7.5 kW in 400 V

8 contacts



PR17 9552 B4 BCQ3

SZ52BXQ

8 contacts



PR17 9552 C4 BCQ3

SZ52CXQ

Cam switches

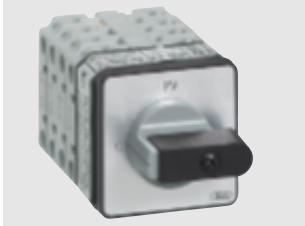
 Characteristics (p. 213)

► 2 SPEEDS, 1 WAY – 3 PHASE DALHANDER MOTOR (CONTINUED)

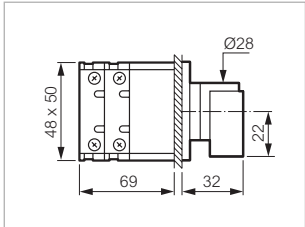
PR 21 - 25 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



TZ52BQ1



Designation

Grey/black small handle
 □ 48 aluminium plate and frame
 P= 7.5 kW in 400 V

8 contacts



PR21 9552 B4 E Q48PN

TZ52BQ1

8 contacts



PR21 9552 C4 E Q48PN

TZ52CQ1

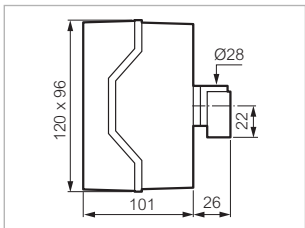
PR 21 - 25 A (AC21)

Enclosure

Cat. No.



TZ52BXQ



Designation

Black small handle
 □ 64 aluminium plate
 P= 7.5 kW in 400 V

8 contacts



PR21 9552 B4 BCQ3

TZ52BXQ

8 contacts



PR21 9552 C4 BCQ3

TZ52CXQ

Cam switches

 Characteristics (p. 213)

► 2 SPEEDS, 1 WAY – 3 PHASE DALHANDER MOTOR (CONTINUED)

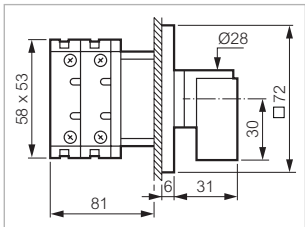
PR 26 - 32 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



ZZ52BQ7



Designation

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 11 kW in 400 V

8 contacts



PR26 9552 B4 E Q72MN

ZZ52BQ7

8 contacts



PR26 9552 C4 E Q72MN

ZZ52CQ7

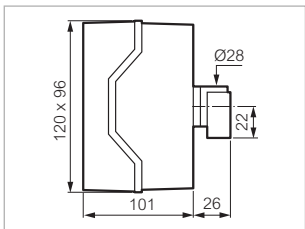
PR 26 - 32 A (AC21)

Enclosure

Cat. No.



ZZ52BXQ



Designation

Black small handle
 □ 64 aluminium plate
 P= 11 kW in 400 V

8 contacts



PR26 9552 B4 BCQ3

ZZ52BXQ


8 contacts



PR26 9552 C4 BCQ3

ZZ52CXQ

Cam switches

 Characteristics (p. 213)

► 2 SPEEDS, 1 WAY – 3 PHASE DALHANDER MOTOR (CONTINUED)

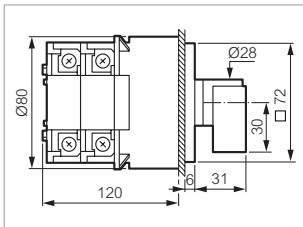
PR 40 - 50 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



HZ52BQ7



Designation

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 18.5 kW in 400 V

8 contacts



PR40 9552 B4 E Q72MN

HZ52BQ7

8 contacts



PR40 9552 C4 E Q72MN

HZ52CQ7

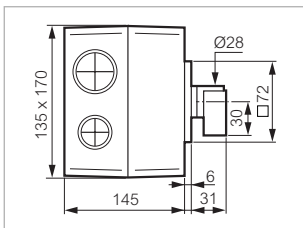
PR 40 - 50 A (AC21)

Enclosure

Cat. No.



HZ52BDQ



Designation

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 18.5 kW in 400 V

8 contacts



PR40 9552 B4 BCF Q72MN

HZ52BDQ

8 contacts



PR40 9552 C4 BCF Q72MN

HZ52CDQ

Cam switches

 Characteristics (p. 213)

► 2 SPEEDS, 1 WAY – 3 PHASE DALHANDER MOTOR (CONTINUED)

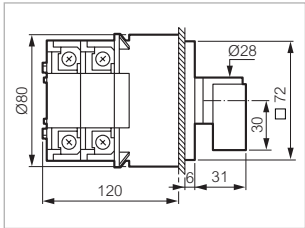
PR 63 - 63 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



IZ52BQ7



Designation

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 22 kW in 400 V

8 contacts



PR63 9552 B4 E Q72MN

IZ52BQ7

8 contacts



PR63 9552 C4 E Q72MN

IZ52CQ7

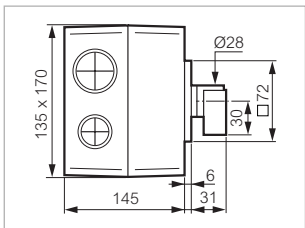
PR 63 - 63 A (AC21)

Enclosure

Cat. No.



IZ52BDQ



Designation

Grey/black medium handle
 □ 72 aluminium plate and frame
 P= 22 kW in 400 V

8 contacts



PR63 9552 B4 BCF Q72MN

IZ52BDQ

8 contacts



PR63 9552 C4 BCF Q72MN

IZ52CDQ

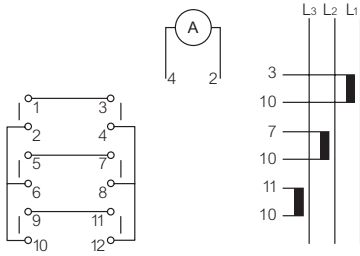
Cam switches



Characteristics (p. 213)

▶ **AMMETER SWITCH, 3 CTS WITH COMMON POINT**

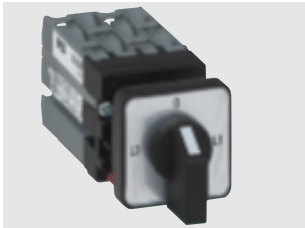
No. OF CONTACTS	0	L1	L2	L3
1 - 2	X	X		
3 - 4	X	X		
5 - 6		X	X	
7 - 8		X	X	
9 - 10	X			X
11 - 12			X	X



MINI CAM SWITCH - 10 A (AC21)

Ø 16 or 22 single hole front mounting

Cat. No.



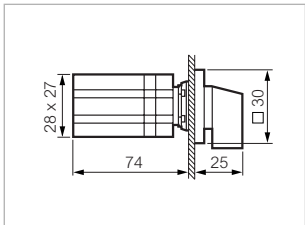
- 30 aluminium plate and frame
- 1 network, 3 wires, 1 ammeter

6 contacts



223529

223529



Cam switches



Characteristics (p. 213)

▶ AMMETER SWITCH, 3 CTS WITH COMMON POINT (CONTINUED)

PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NY11AQ1

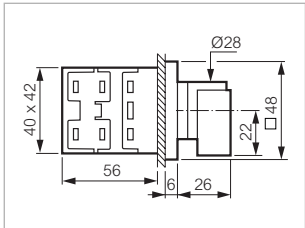
Grey/black small handle
 □ 48 aluminium plate and frame
 1 network, 3 wires, 1 ammeter
 6 contacts



Designation

PR12 8151 A4 E Q48PN

NY11AQ1



PR 12 - 16 A (AC21)

∅ 22 single hole front mounting

Cat. No.



NY11AX80

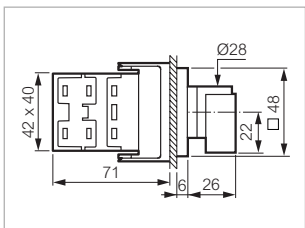
Grey/black small handle
 □ 48 aluminium plate and frame
 1 network, 3 wires, 1 ammeter
 6 contacts



Designation

PR12 8151 A4 E N48MD50

NY11AX80



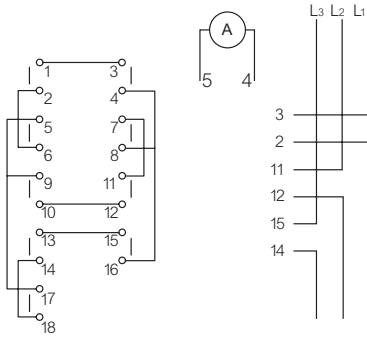
Cam switches



Characteristics (p. 213)

► AMMETER SWITCH, WITHOUT CT

No. of contacts	0	L1	L2	L3
1 - 2	X	X		
3 - 4	X	X		
5 - 6	X	X		
7 - 8		X	X	
9 - 10		X	X	
11 - 12		X	X	
13 - 14	X			
15 - 16			X	X
17 - 18			X	X



PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NY14AQ1

Designation

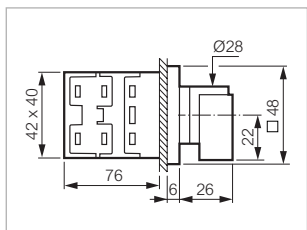
Grey/black small handle
 □ 48 aluminium plate and frame
 1 network, 3 wires, 1 ammeter

9 contacts



PR12 8164 A4 E Q48PN

NY14AQ1



PR 12 - 16 A (AC21)

Ø 22 single hole front mounting

Cat. No.



NY14AX80

Designation

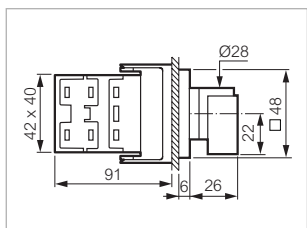
Grey/black small handle
 □ 48 aluminium plate and frame
 1 network, 3 wires, 1 ammeter

9 contacts



PR12 8164 A4 E N48MD50

NY14AX80



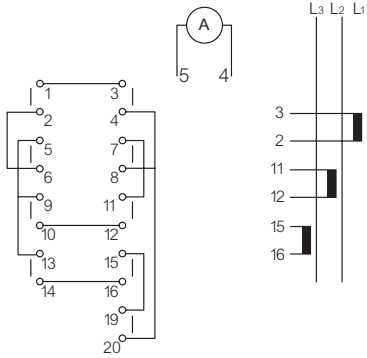
Cam switches



Characteristics (p. 213)

▶ AMMETER SWITCH WITHOUT COMMON POINT

No. of contacts	0	L1	L2	L3
1 - 2	X	X		
3 - 4	X	X		
5 - 6	X	X		
7 - 8		X	X	
9 - 10		X	X	
11 - 12		X	X	
13 - 14			X	X
15 - 16	X		X	X
17 - 18			X	X



PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NY17AQ1

Designation

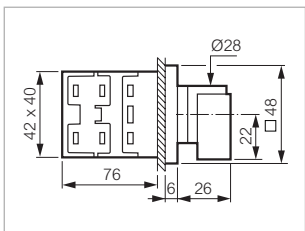
Grey/black small handle
 □ 48 aluminium plate and frame
 1 network, 3 wires, 1 ammeter

9 contacts



PR12 8157 A4 E Q48PN

NY17AQ1



PR 12 - 16 A (AC21)

∅ 22 single hole front mounting

Cat. No.



NY17AX80

Designation

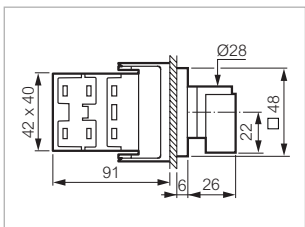
Grey/black small handle
 □ 48 aluminium plate and frame
 1 network, 3 wires, 1 ammeter

9 contacts



PR12 8157 A4 E N48MD50

NY17AX80

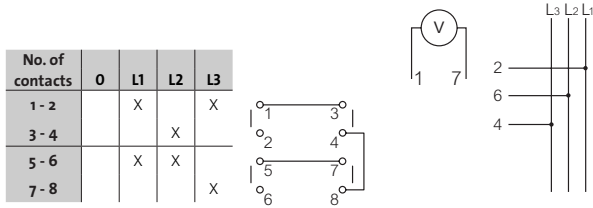


Catalogue No. in bold: normally in stock at distribution outlets

Cam switches

 Characteristics (p. 213)

► VOLTMETER SWITCH, WITHOUT NEUTRAL



MINI CAM SWITCH - 10 A (AC21)

∅ 16 or 22 single hole front mounting

Cat. No.



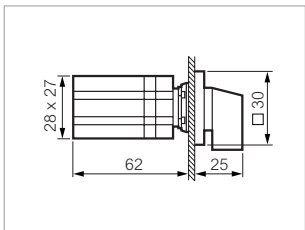
- 30 aluminium plate and frame
- 1 network, 3-phase without neutral
- 1 voltmeter

4 contacts



223527

223527



Cam switches



Characteristics (p. 213)

▶ VOLTMETER SWITCH, WITHOUT NEUTRAL (CONTINUED)

PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NY31AQ1

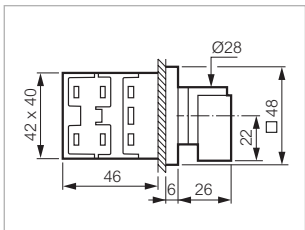
Designation
 Grey/black small handle
 □ 48 aluminium plate and frame
 1 network, 3-phase without neutral
 1 voltmeter

4 contacts



PR12 8351 A4 E Q48PN

NY31AQ1



PR 12 - 16 A (AC21)

∅ 22 single hole front mounting

Cat. No.



NY31AX80

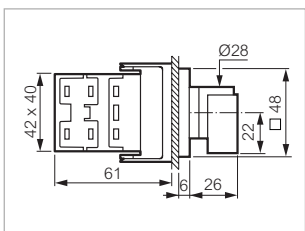
Designation
 Grey/black small handle
 □ 48 aluminium plate and frame
 1 network, 3-phase without neutral
 1 voltmeter

4 contacts




PR12 8351 A4 E N48MD50

NY31AX80

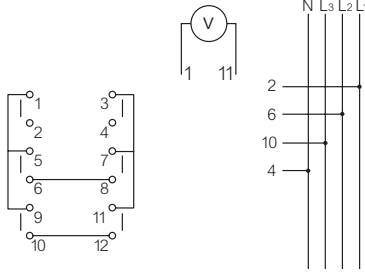


Cam switches

 Characteristics (p. 213)

► VOLTMETER SWITCH, WITH NEUTRAL

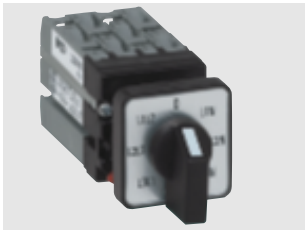
No. of contacts	L3 L1	L2 L2	L1 L3	0 0	L1 N	L2 N	L3 N
1 - 2	X		X		X		
3 - 4					X	X	X
5 - 6		X				X	
7 - 8			X				
9 - 10							X
11 - 12	X	X					



MINI CAM SWITCH - 10 A (AC21)

Ø 16 or 22 single hole front mounting

Cat. No.



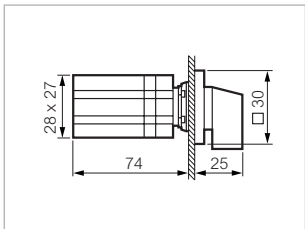
223528

30 aluminium plate and frame
1 network, 3-phase with neutral,
1 voltmeter

6 contacts



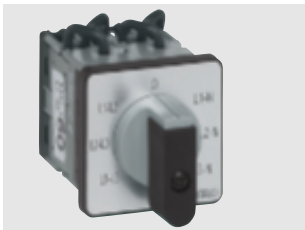
223528



PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NY37GQ1

Designation

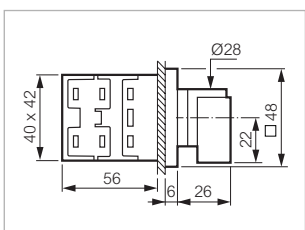
Grey/black small handle
 48 aluminium plate and frame
1 network, 3-phase with neutral,
1 voltmeter

6 contacts



PR12 8357 C8 E Q48PN

NY37GQ1



Cam switches



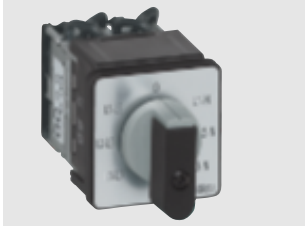
Characteristics (p. 213)

► VOLTMETER SWITCH, WITH NEUTRAL (CONTINUED)

PR 12 - 16 A (AC21)

Ø22 single hole front mounting

Cat. No.



NY37GX80

Grey/black small handle
 □ 48 aluminium plate and frame
 1 network, 3-phase with neutral,
 1 voltmeter

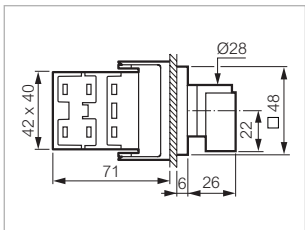
6 contacts



Designation

PR12 8357 C8 E N48MD50

NY37GX80



PR 12 - 16 A (AC21)

Modular in panel DIN rail mounting

Cat. No.



NDF03

Small grey handle
 1 network, 3-phase with neutral,
 1 voltmeter

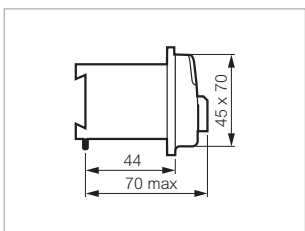
6 contacts



Designation

PR12 8357 C8 DF

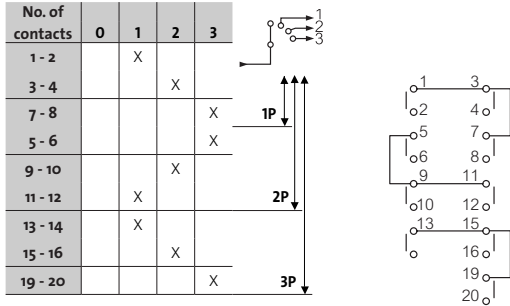
NDF03



Cam switches

 Characteristics (p. 213)

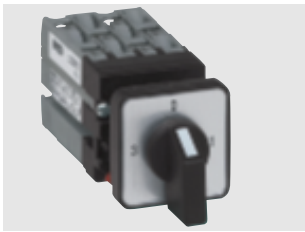
► 3-WAY SWITCHES WITH “OFF” POSITION



MINI CAM SWITCH - 10 A (AC21)

ø 16 or 22 single hole front mounting

Cat. No.



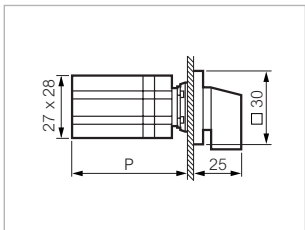
223522

30 aluminium plate and frame

1P -3 contacts
2P -6 contacts
3P -9 contacts



223521
223522
223523



Dimensions in mm

*P: 62 (3 CONTACTS)
74 (6 CONTACTS)
95 (9 CONTACTS)

*P = Depth

Cam switches



Characteristics (p. 213)

► 3-WAY CAM SWITCHES WITH “OFF” POSITION (CONTINUED)

PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



Designation

Grey/black small handle
 □ 48 aluminium plate and frame

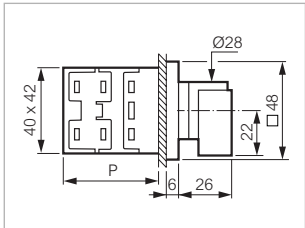
1P - 3 contacts
 2P - 6 contacts
 3P - 9 contacts



PR12 2301 A4 E Q48PN
 PR12 2302 A4 E Q48PN
 PR12 2303 A4 E Q48PN

ND01AQ1
ND02AQ1
ND03AQ1

ND03AQ1



Dimensions in mm

*P: 46 (3 CONTACTS)
 56 (6 CONTACTS)
 76 (9 CONTACTS)

PR 12 - 16 A (AC21)

∅ 22 single hole front mounting

Cat. No.



Designation

Grey/black small handle
 □ 48 aluminium plate and frame

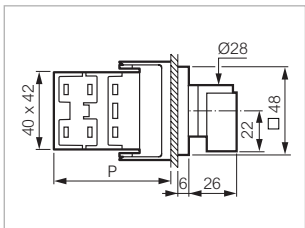
1P - 3 contacts
 2P - 6 contacts
 3P - 9 contacts



PR12 2301 A4 E N48MD50
 PR12 2302 A4 E N48MD50
 PR12 2303 A4 E N48MD50

ND01AX80
ND02AX80
ND03AX80

ND02AX80



Dimensions in mm

*P: 61 (3 CONTACTS)
 71 (6 CONTACTS)
 91 (9 CONTACTS)

*P = Depth

Cam switches



Characteristics (p. 213)

▶ 3-WAY CAM SWITCHES WITH “OFF” POSITION (CONTINUED)

PR 12 - 16 A (AC21)

∅ 22 single hole front mounting

Cat. No.



ND01AC113

With selector switch style handle
Matt chrome plastic bezel

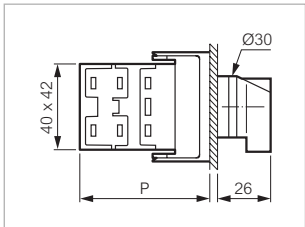
Designation

1P - 3 contacts
2P - 6 contacts
3P - 9 contacts



PR12 2301 A4 E C21RA03
PR12 2302 A4 E C21RA03
PR12 2303 A4 E C21RA03

ND01AC113
ND02AC113
ND03AC113



Dimensions in mm

*P: 61 (3 CONTACTS)
71 (6 CONTACTS)
91 (9 CONTACTS)

PR 12 - 16 A (AC21)

Enclosure

Cat. No.



ND02AXQ

Black small handle
□ 64 aluminium plate

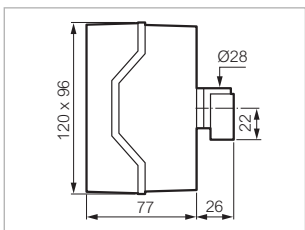
Designation

1P - 3 contacts
2P - 6 contacts
3P - 9 contacts



PR12 2301 A4 BCQ3
PR12 2302 A4 BCQ3
PR12 2303 A4 BCQ3

ND01AXQ
ND02AXQ
ND03AXQ



Dimensions in mm

*P: 77 (3 TO 6 CONTACTS)
101 (9 CONTACTS)

*P = Depth

Cam switches

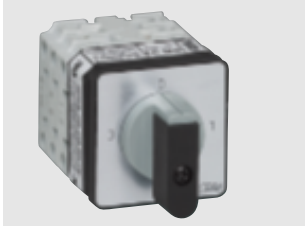
 Characteristics (p. 213)

► 3-WAY CAM SWITCHES WITH “OFF” POSITION (CONTINUED)

PR 17 - 20 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



SD03AQ1

Designation

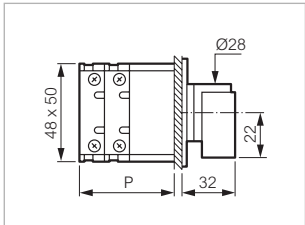
- Grey/black small handle
- 48 aluminium plate and frame

- 1P - 3 contacts
- 2P - 6 contacts
- 3P - 9 contacts



- PR17 2301 A4 E Q48PN
- PR17 2302 A4 E Q48PN
- PR17 2303 A4 E Q48PN

- SD01AQ1
- SD02AQ1
- SD03AQ1



Dimensions in mm

- *P: 45 (3 CONTACTS)
- 57 (6 CONTACTS)
- 81 (9 CONTACTS)

PR 17 - 20 A (AC21)

Enclosure

Cat. No.



SD02AXQ

Designation

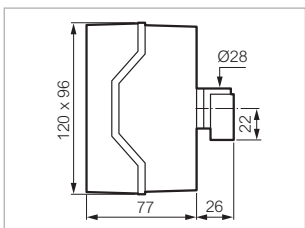
- Black small handle
- 64 aluminium plate

- 1P - 3 contacts
- 2P - 6 contacts
- 3P - 9 contacts



- PR17 2301 A4 BCQ3
- PR17 2302 A4 BCQ3
- PR17 2303 A4 BCQ3

- SD01AXQ
- SD02AXQ
- SD03AXQ



Dimensions in mm

- *P: 77 (3 TO 6 CONTACTS)
- 101 (9 CONTACTS)

*P = Depth

Cam switches



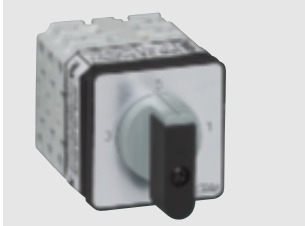
Characteristics (p. 213)

► 3-WAY CAM SWITCHES WITH “OFF” POSITION (CONTINUED)

PR 21 - 25 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



Designation

Grey/black small handle
□ 48 aluminium plate and frame

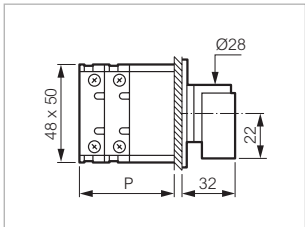
1P - 3 contacts
2P - 6 contacts
3P - 9 contacts



PR21 2301 A4 E Q48PN
PR21 2302 A4 E Q48PN
PR21 2303 A4 E Q48PN

TD01AQ1
TD02AQ1
TD03AQ1

TD02AQ1



Dimensions in mm

*P: 45 (3 CONTACTS)
57 (6 CONTACTS)
81 (9 CONTACTS)

PR 21 - 25 A (AC21)

Enclosure

Cat. No.



Designation

Black small handle
□ 64 aluminium plate

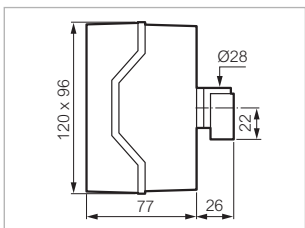
1P - 3 contacts
2P - 6 contacts
3P - 9 contacts



PR21 2301 A4 BCQ3
PR21 2302 A4 BCQ3
PR21 2303 A4 BCQ3

TD01AXQ
TD02AXQ
TD03AXQ

TD01AXQ



Dimensions in mm

*P: 77 (3 TO 6 CONTACTS)
101 (9 CONTACTS)

*P = Depth

Cam switches



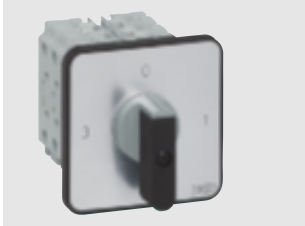
Characteristics (p. 213)

► 3-WAY CAM SWITCHES WITH “OFF” POSITION (CONTINUED)

PR 26 - 32 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



Designation

Grey/black medium handle
 72 aluminium plate and frame

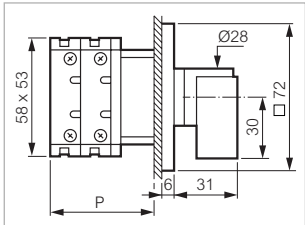
1P -3 contacts
 2P - 6 contacts
 3P - 9 contacts



PR26 2301 A4 E Q72MN
 PR26 2302 A4 E Q72MN
 PR26 2303 A4 E Q72MN

ZD01AQ7
 ZD02AQ7
 ZD03AQ7

ZD02AQ7



Dimensions in mm

*P: 51 (3 CONTACTS)
 66 (6 CONTACTS)
 96 (9 CONTACTS)

PR 26 - 32 A (AC21)

Enclosure

Cat. No.



Designation

Black small handle
 64 aluminium plate

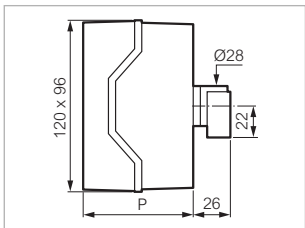
1P -3 contacts
 2P - 6 contacts



PR26 2301 A4 BCQ3
 PR26 2302 A4 BCQ3

ZD01AXQ
 ZD02AXQ

ZD01AXQ



Dimensions in mm

*P: 77 (3 CONTACTS)
 101 (6 CONTACTS)

*P = Depth

Cam switches

 Characteristics (p. 213)

► 3-WAY CAM SWITCHES WITH “OFF” POSITION (CONTINUED)

PR 40 - 50 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



Designation

Grey/black medium handle
□ 72 aluminium plate and frame

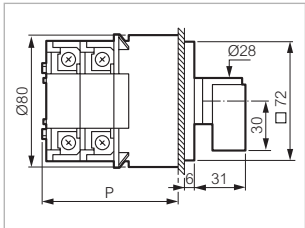
1P - 3 contacts
2P - 6 contacts
3P - 9 contacts



PR40 2301 A4 E Q72MN
PR40 2302 A4 E Q72MN
PR40 2303 A4 E Q72MN

HD01AQ7
HD02AQ7
HD03AQ7

HD02AQ7



Dimensions in mm
*P: 80 (3 CONTACTS)
100 (6 CONTACTS)
140 (9 CONTACTS)

PR 40 - 50 A (AC21)

Enclosure

Cat. No.



Designation

Grey/black medium handle
□ 72 aluminium plate and frame

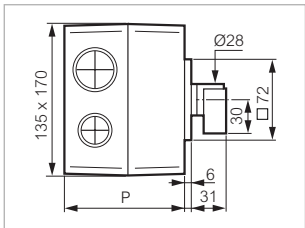
1P - 3 contacts
2P - 6 contacts



PR40 2301 A4 BCF Q72MN
PR40 2302 A4 BCF Q72MN

HD01ABQ
HD02ACQ

HD01ABQ



Dimensions in mm
*P: 107 (3 CONTACTS)
145 (6 CONTACTS)

*P = Depth

Cam switches

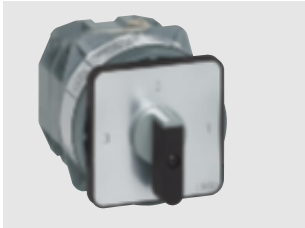
 Characteristics (p. 213)

► 3-WAY CAM SWITCHES WITH “OFF” POSITION (CONTINUED)

PR 63 - 63 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



ID01AQ7

Grey/black medium handle
 72 aluminium plate and frame

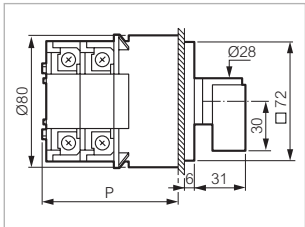
1P - 3 contacts
 2P - 6 contacts
 3P - 9 contacts



Designation

PR63 2301 A4 E Q72MN
 PR63 2302 A4 E Q72MN
 PR63 2303 A4 E Q72MN

ID01AQ7
 ID02AQ7
 ID03AQ7



Dimensions in mm
 *P: 80 (3 CONTACTS)
 100 (6 CONTACTS)
 140 (9 CONTACTS)

PR 63 - 63 A (AC21)

Enclosure

Cat. No.



ID01ABQ

Grey/black medium handle
 72 aluminium plate and frame

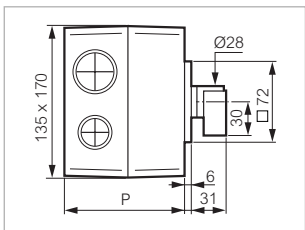
1P - 3 contacts
 2P - 6 contacts



Designation

PR63 2301 A4 BCF Q72MN
 PR63 2302 A4 BCF Q72MN

ID01ABQ
 ID02ACQ



Dimensions in mm
 *P: 107 (3 CONTACTS)
 145 (6 CONTACTS)

*P = Depth

Cam switches

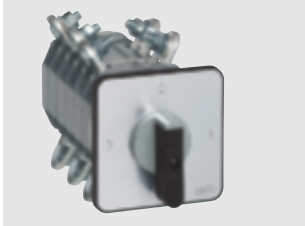
 Characteristics (p. 213)

► 3-WAY CAM SWITCHES WITH “OFF” POSITION (CONTINUED)

PR 125 - 160 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



Designation

Grey/black large handle
□ 96 aluminium plate and frame

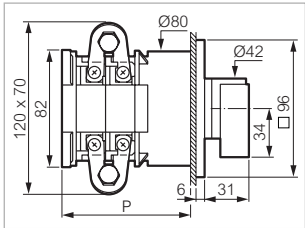
1P - 3 contacts
2P - 6 contacts
3P - 9 contacts



PR125 2301 A4 E Q96GN
PR125 2302 A4 E Q96GN
PR125 2303 A4 E Q96GN

LD01AQ9
LD02AQ9
LD03AQ9

LD02AQ9



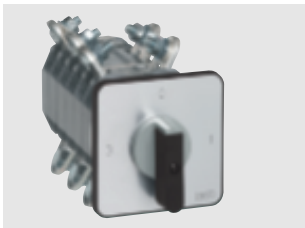
Dimensions in mm

*P: 120 (3 CONTACTS)
160 (6 CONTACTS)
240 (9 CONTACTS)

PR 160 - 200 A (AC21)

2-screw panel mount - interval: 50 mm

Cat. No.



Designation

Grey/black large handle
□ 96 aluminium plate and frame

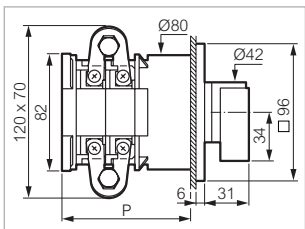
1P - 3 contacts
2P - 6 contacts
3P - 9 contacts



PR160 2301 A4 E Q96GN
PR160 2302 A4 E Q96GN
PR160 2303 A4 E Q96GN

MD01AQ9
MD02AQ9
MD03AQ9

MD01AQ9



Dimensions in mm

*P: 120 (3 CONTACTS)
160 (6 CONTACTS)
240 (9 CONTACTS)

*P = Depth

Cam switches

 Characteristics (p. 213)

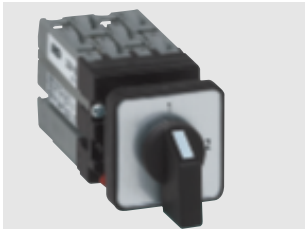
► 3-WAY CAM SWITCHES WITHOUT “OFF” POSITION

No. of contacts	1	2	3
1 - 2	X		
3 - 4		X	
7 - 8			X
5 - 6			X
9 - 10		X	
11 - 12	X		
13 - 14	X		
15 - 16		X	
19 - 20			X

MINI CAM SWITCH - 10 A (AC21)

∅ 16 or 22 single hole front mounting

Cat. No.



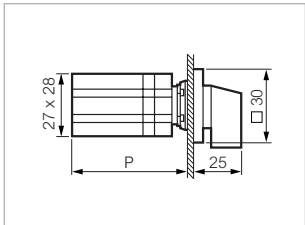
223516

30 aluminium plate and frame

1P -3 contacts
2P -6 contacts
3P -9 contacts



223515
223516
223517



Dimensions in mm

*P: 50 (3 CONTACTS)
74 (6 CONTACTS)
95 (9 CONTACTS)

PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



ND51EQ1

Designation

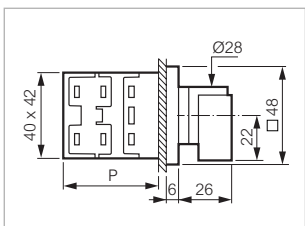
Grey/black small handle
 48 aluminium plate and frame

1P -3 contacts
2P -6 contacts
3P -9 contacts



PR12 2351 A8 E Q48PN
PR12 2352 A8 E Q48PN
PR12 2353 A8 E Q48PN

ND51EQ1
ND52EQ1
ND53EQ1



Dimensions in mm

*P: 46 (3 CONTACTS)
56 (6 CONTACTS)
76 (9 CONTACTS)

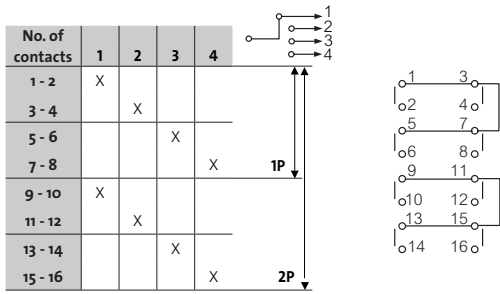
*P = Depth

Catalogue No. in bold: normally in stock at distribution outlets

Cam switches

 Characteristics (p. 213)

► 4-WAY CAM SWITCHES WITHOUT “OFF” POSITION



MINI CAM SWITCH - 10 A (AC21)

Ø 16 or 22 single hole front mounting

Cat. No.



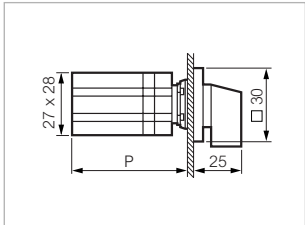
223525

□ 30 aluminium plate and frame

1P -4 contacts
2P -8 contacts



223525
223526



Dimensions in mm
*P: 62 (4 CONTACTS)
86 (8 CONTACTS)

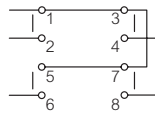
*P = Depth

Cam switches

 Characteristics (p. 213)

► CODING SWITCH WITH “OFF”

No. of contacts	Positions											
	0	1	2	3	4	5	6	7	8	9	10	11
1 - 2		X		X		X		X		X		X
3 - 4			X	X			X	X			X	X
5 - 6					X			X				
7 - 8									X			X



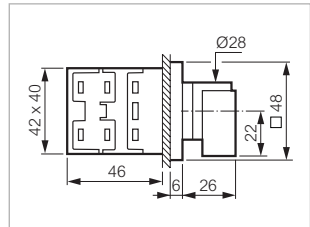
PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NR51UQ1



Designation

Grey/black small handle
□ 48 aluminium plate and frame

4 contacts



PR12 6501 A1 E Q48PN

NR51UQ1

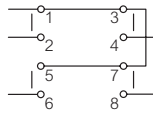
Cam switches



Characteristics (p. 213)

► CODING SWITCH WITHOUT “OFF”

No. of contacts	Positions											
	1	2	3	4	5	6	7	8	9	10	11	12
1 - 2	X		X		X		X		X		X	
3 - 4		X	X			X	X			X	X	
5 - 6				X			X					X
7 - 8								X				X



PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NR52UQ1

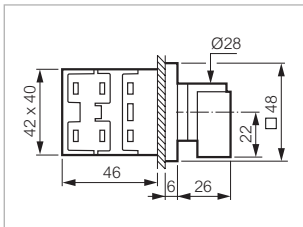
Designation
 Grey/black small handle
 □ 48 aluminium plate and frame

4 contacts



PR12 6502 A1 E Q48PN

NR52UQ1

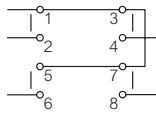


Cam switches

 Characteristics (p. 213)

► CODING SWITCH (COMPLEMENTARY BCD CODE, 0 TO 9)

No. of contacts	Positions									
	0	1	2	3	4	5	6	7	8	9
1 - 2		X		X		X		X		X
3 - 4			X	X			X	X		
5 - 6					X			X		
7 - 8									X	X



PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NR53UQ1

Designation

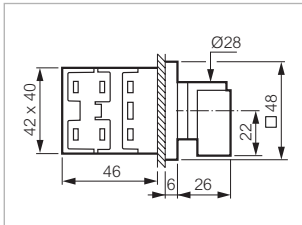
- Grey/black small handle
- 48 aluminium plate and frame
- With complete rotation possible

4 contacts



PR12 6503 A1 E Q48PN

NR53UQ1



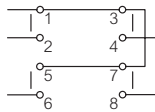
Cam switches



Characteristics (p. 213)

► COMPLEMENTARY BCD CODE, 0 TO 9

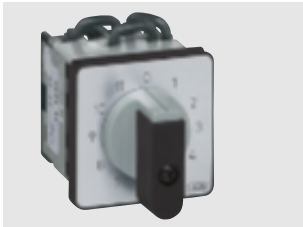
No. of contacts	Positions									
	0	1	2	3	4	5	6	7	8	9
1 - 2	X		X		X		X		X	
3 - 4	X	X			X	X			X	X
5 - 6	X			X					X	X
7 - 8	X						X			



PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NR54UQ1

Designation

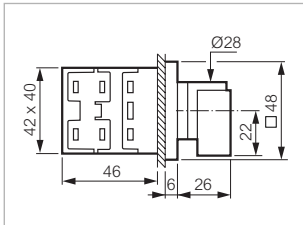
- Grey/black small handle
- 48 aluminium plate and frame
- With complete rotation possible

4 contacts



PR12 6504 A1 E Q48PN

NR54UQ1

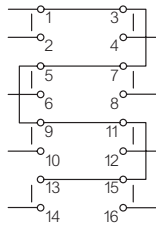


Cam switches

 Characteristics (p. 213)

► BCD CODE, 0 TO 9, + COMPLEMENTARY BCD CODE

No. of contacts	Positions									
	0	1	2	3	4	5	6	7	8	9
1 - 2		X		X		X		X		X
3 - 4			X	X			X	X		
5 - 6					X			X		
7 - 8									X	X
9 - 10	X		X		X		X		X	
11 - 12	X	X			X	X			X	X
13 - 14	X			X					X	X
15 - 16	X						X			



PR 12 - 16 A (AC21)

2-screw panel mount – interval: 30 mm

Cat. No.



NR55UQ1

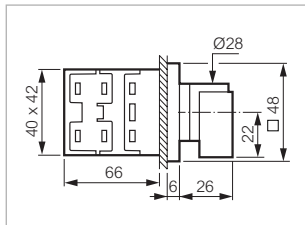
Designation
 Grey/black small handle
 □ 48 aluminium plate and frame
 With complete rotation possible

8 contacts



PR12 6505 A1 E Q48PN

NR55UQ1



Cam switches

[Characteristics \(p. 213\)](#)

► ACCESSORIES

FIXING TOOL

Cat. No.



For mini cam switches

223520

223520

FIXING TOOL

Cat. No.

Fixing tool for PR 12 cam switches
ø 22 single hole front mounting**LWA0234**

LWA0234

Technical characteristics

▶ MINI CAM SWITCHES

Characteristics	Data
▶ Thermal current I _{th}	10 A
▶ Rated operating current I _e	
- in AC 21	10 A
- in AC 15	2.5 A
▶ Motor performance in AC-3	
- 3 x 230 V	1.8 kW
- 3 x 400 V	2.2 kW
▶ Motor performance in AC-23	
- 1 x 230 V	0.75 kW
- 1 x 400 V	1.1 kW
- 3 x 230 V	1.8 kW
- 3 x 400 V	3 kW
▶ Rated insulation voltage U _i (V)	500 V
▶ Rated operating current in DC-1 L/R < 1ms	
- 24 V DC	10 A
- 40 V DC	6 A
- 60 V DC	2.5 A
- 110 V DC	0.7 A
- 220 V DC	0.3 A
▶ Rated conditional short-circuit current	3 kA
▶ Max. fuse rating	10 A
▶ Degree of protection	IP 65 IP 2x at the rear of the panel
▶ Wire size (flexible and rigid)	2 x 1.5 mm ² max. 1 x 0.5 mm ² min.
▶ Operating temperature	- 20°C to + 50°C
▶ Standards	IEC 60947-1 IEC 60947-3 CSA 22.2 UL 508

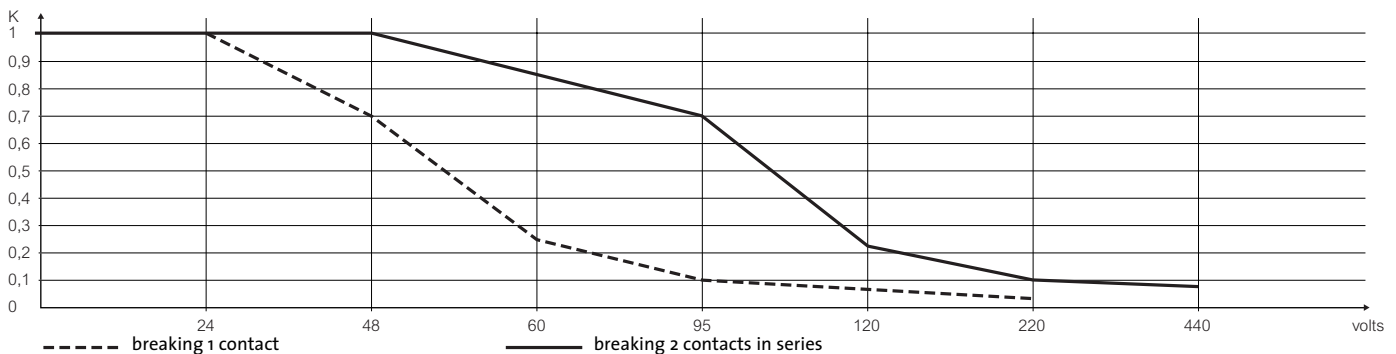
▶ CAM SWITCHES

Characteristics	PR 12	PR 17	PR 21	PR 26	PR 40	PR 63	PR 125	PR 160
▶ For thermal current I _{th} I _c (A)	20	25	32	40	63	63	200	250
▶ Rated operating current for AC-21 A I _e (A) (IEC 60 947-3)								
Switching of resistive loads including moderate overloads	16	20	25	32	50	63	160	200
▶ Rated operating current for AC-15 A I _e (A) at 230V AC (IEC 60 947-3)								
Control of electromagnetic loads	6	8	10	12	-	-	-	-

Technical characteristics

► SELECTOR SWITCHES

Characteristics	PR 12	PR 17	PR 21	PR 26	PR 40	PR 63	PR 125	PR 160
► Performance in AC 23 (kW) (IEC 60 947-3) Switching of motors or other highly inductive loads								
- 3 x 230 V	4	5.5	7.5	11	15	18.5	-	-
- 3 x 400 V	7.5	11	11	11	22	25	-	-
- 3 x 500 V	5.5	11	11	11	25	25	-	-
- 3 x 690 V	4	10	10	11	18.5	22	-	-
► Performance in AC 3 (IEC 60 947-3) Control of squirrel-cage motors starting and switching off motors while running								
- In kW								
- 3 x 230 V	3	4	4	5.5	11	15	-	-
- 3 x 400 V	4	7.5	7.5	11	18.5	22	-	-
- 3 x 500 V	5.5	7.5	7.5	11	18.5	22	-	-
- 3 x 690 V	3	7.5	7.5	11	18.5	22	-	-
- In HP (for reference)								
- 3 x 230 V	4	5.5	5.5	7.5	15	20	-	-
- 3 x 400 V	5.5	10	10	15	25	30	-	-
- 3 x 500 V	7.5	10	10	15	25	30	-	-
- 3 x 690 V	4	10	10	15	25	30	-	-
► Rated insulation voltage Ui (V)	690	690	690	690	690	690	690	690
- Max. rated voltage Ue(v) IEC	690	690	690	690	690	690	690	690
- CSA (Canada)	600	600	600	600	600	600	600	600
- UL (USA)	600	600	600	600	600	600	600	600
► Rated short time withstand current Icw (A) for 1 sec	300	400	420	800	1200	1500	2400	3000
► Maximum wire size (mm²)								
- rigid	4	6/4 ⁽¹⁾	6/4 ⁽¹⁾	6	16	16	ø 8 screw for eyelet	
- flexible	2.5	4	4	6	16	16	ø 8 screw for eyelet	
(1): These values correspond to terminals with jumpers								
► Mechanical durability	1,250,000 operations, maximum rate 150 operations per hour							
► Operating temperature limits	- 20°C to + 70°C (beyond these limits consult us)							
► Rated operating current in DC-1 low inductive loads (< 1 ms)								
Rated operating current Ie (A) 24 V DC	16	20	25	32	50	63	-	-
Ie (A): rated current for breaking 1 contact. For higher voltages you must use a reduction coefficient K in the following graph								



reduction coefficient K for rated operating current in DC-1 continuous current

Separate cam switches

To order your cam switch, it is essential to follow the 5-step procedure (see presentation on p. 127)
Mini cam switches are only available in standard versions.

► I - CHOICE OF SWITCH SIZE

TECHNICAL CHARACTERISTICS

The choice of switch size depends on the type of load to be switched
Cam switches are devices designed mainly for use with AC current
When using with DC current, you must use a reduction coefficient (see previous page)

PRICE LIST CODE

The price list code allows you (if necessary) to determine the price of the chosen switch by referring to the current price list

RATING	PR 12	PR 17	PR 21	PR 26	PR 40	PR 63	PR 125	PR 160
PRICE LIST CODE	N	S	T	Z	H	I	L	M

EXAMPLE

1 You are looking for a switch to control motors (3x230 V) with a power rating of 18.5 kW, what you need is a **PR 63**.

Characteristics	PR 12	PR 17	PR 21	PR 26	PR 40	PR 63	PR 125	PR 160
► Performance in AC 23 (kW) (IEC 60 947-3) Switching of motors or other highly inductive loads								
- 3 x 230 V	4	5.5	7.5	11	15	18.5	-	-
- 3 x 400 V	7.5	11	11	11	22	25	-	-
- 3 x 500 V	5.5	11	11	11	25	25	-	-
- 3 x 690 V	4	10	10	11	18.5	22	-	-

2 For a PR 63 the price list code is: I

RATING	PR 12	PR 17	PR 21	PR 26	PR 40	PR 63	PR 125	PR 160
PRICE LIST CODE	N	S	T	Z	H	I	L	M

Separate cam switches

To order your cam switch, it is essential to follow the 5-step procedure (see presentation on p. 127)
Mini cam switches are only available in standard versions.

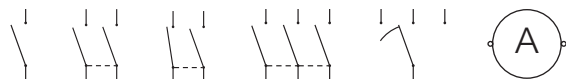
► II - CHOICE OF FUNCTION (DIAGRAM AND SWITCHING ANGLE)

FUNCTIONS

The electrical circuit diagram for separate switches can be:

► A standard diagram (see p. 207 to 238).

Examples:



► A special diagram to your own requirement (complete the form on p. 277)



EXAMPLE

1 The reference of the diagram for a 1-2 contact switch (p. 208) is: **1101**, and its price list code is: **A01Z**

DIAGRAM (REFERENCE AND PRICE LIST CODE)

Contact Nos.	Positions						No. of poles	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	0	1	-	-	-	-					
1 - 2	X						1	1	$\begin{matrix} 1 \\ 0 \end{matrix} \quad \begin{matrix} 3 \\ 0 \end{matrix}$	1101	A01Z
3 - 4	X						2	2	$\begin{matrix} 2 \\ 0 \end{matrix} \quad \begin{matrix} 4 \\ 0 \end{matrix}$	1102	A02Z
5 - 6	X						3	3	$\begin{matrix} 5 \\ 0 \end{matrix} \quad \begin{matrix} 7 \\ 0 \end{matrix}$	1103	A03Z
7 - 8	X						4	4	$\begin{matrix} 6 \\ 0 \end{matrix} \quad \begin{matrix} 8 \\ 0 \end{matrix}$	1104	A04Z
9 - 10	X						5	5	$\begin{matrix} 9 \\ 0 \end{matrix} \quad \begin{matrix} 11 \\ 0 \end{matrix}$	1105	A05Z
11 - 12	X						6	6	$\begin{matrix} 10 \\ 0 \end{matrix} \quad \begin{matrix} 12 \\ 0 \end{matrix}$	1106	A06Z

2 For a switch, the reference of the 90° switching angle with spring return is: **AR10**, and the price list code is: **Y640**

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°	60°	90°	90°	Spring return	Spring return
Cat. No.	A1	A8	A6	A4	M4	AR10*	VR11*









Spring return extra charge	Number of spring return contacts
* Y652 (PR12)	≤ 4 (PR12 25)
Y639 (PR17 26)	≤ 2 (PR40 63)
Y640 (PR40 63)	

3 The full catalogue number for the function is **1101 - AR10**, and its price list code is **(I)A01Z - Y640**

Separate cam switches

To order your cam switch, it is essential to follow the 5-step procedure (see presentation on p. 127)
Mini cam switches are only available in standard versions.

► II - CHOICE OF FUNCTION (DIAGRAM AND SWITCHING ANGLE)

FUNCTIONS	Diagram	Page
<p>► Switches From 1 to 24 poles, each pole being a path for the current, the circuit being open at starting position 0, and closed at position 1</p>		218
<p>► 2 way change-over switches without off position From 1 to 12 poles, each pole having 2 current paths, one path is closed at position 1, the other at position 2 The two paths can be joined by a common point (link)</p>		219
<p>► 2 way change-over switches with off position From 1 to 12 poles, each pole having 2 current paths, one path is closed at position 1, the other at position 2. Both paths can be open at position 0 and joined by a common point (link)</p>		220
<p>► 3 to 8-way cam switches Each pole having respectively 3 to 8 paths for the current, the number of poles multiplied by the number of ways must be 24 or less The starting position is either 0 (diagram with OFF) or 1 (diagram without OFF) The current paths of the same pole are connected together by links</p>		221
<p>► Grouping switches From 2 to 4 ways with or without starting position at 0, each pole having respectively 2 to 4 current paths which close consecutively and remain closed on the following positions, thus grouping 2 to 4 elements The current paths of the same pole are connected together by links</p>		233
<p>► Instrument switches For ammeters wired without a CT or with several CTs connected on the corresponding circuits The CTs can be mounted in series, with a common point or independently, they are always short-circuited when not feeding the ammeters</p>		236
<p>For voltmeters wired into 3-phase networks with or without neutral</p>		238
<p>► Motor control switches For 3-phase asynchronous motors with Y - ▲ starting, with several speeds, with or without reversing</p>		239
<p>► Switches for coupling 2 or 3 resistors</p>		245
<p>► Coding switches Code BCD and additional BCD</p>		247

Separate cam switches

► SWITCHES

DIAGRAM (REFERENCE AND PRICE LIST CODE)

Contact Nos.	Positions								No. of poles	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	0	1	-	-	-	-	-	-					
1 - 2	X								1	1	1 ₁	1101	A01Z
3 - 4	X								2	2	2 ₂	1102	A02Z
5 - 6	X								3	3	3 ₃	1103	A03Z
7 - 8	X								4	4	4 ₄	1104	A04Z
9 - 10	X								5	5	5 ₅	1105	A05Z
11 - 12	X								6	6	6 ₆	1106	A06Z
13 - 14	X								7	7	7 ₇	1107	A07Z
15 - 16	X								8	8	8 ₈	1108	A08Z
17 - 18	X								9	9	9 ₉	1109	A09Z
19 - 20	X								10	10	10 ₁₀	1110	A10Z
21 - 22	X								11	11	11 ₁₁	1111	A11Z
23 - 24	X								12	12	12 ₁₂	1112	A12Z
25 - 26	X								13	13	13 ₁₃	1113	A13Z
27 - 28	X								14	14	14 ₁₄	1114	A14Z
29 - 30	X								15	15	15 ₁₅	1115	A15Z
31 - 32	X								16	16	16 ₁₆	1116	A16Z
33 - 34	X								17	17	17 ₁₇	1117	A17Z
35 - 36	X								18	18	18 ₁₈	1118	A18Z
37 - 38	X								19	19	19 ₁₉	1119	A19Z
39 - 40	X								20	20	20 ₂₀	1120	A20Z
41 - 42	X								21	21	21 ₂₁	1121	A21Z
43 - 44	X								22	22	22 ₂₂	1122	A22Z
45 - 46	X								23	23	23 ₂₃	1123	A23Z
47 - 48	X								24	24	24 ₂₄	1124	A24Z

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°	60°	90°	90°	Spring return	Spring return
Cat. No.	A1	A8	A6	A4	M4	AR10*	VR11*
Cat. No.	B1	B8	B6	B4			
Cat. No.		V8		D4			

Spring return extra charge	Number of spring return contacts
* V652 (PR12)	≤ 4 (PR12 26)
Y639 (PR17 26)	≤ 2 (PR40 63)
Y640 (PR40 63)	

Separate cam switches

► 2-WAY CHANGE-OVER SWITCHES WITHOUT OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions 1 2	No. of poles	No. of contacts	Connection terminals* + links	Diagram* reference	Diagram price list code
1 - 2 3 - 4	X X	1	2		2251	A02Z
5 - 6 7 - 8	X X	2	4		2252	A04Z
9 - 10 11 - 12	X X	3	6		2253	A06Z
13 - 14 15 - 16	X X	4	8		2254	A08Z
17 - 18 19 - 20	X X	5	10		2255	A10Z
21 - 22 23 - 24	X X	6	12		2256	A12Z
25 - 26 27 - 28	X X	7	14		2257	A14Z
29 - 30 31 - 32	X X	8	16		2258	A16Z
33 - 34 35 - 36	X X	9	18		2259	A18Z
37 - 38 39 - 40	X X	10	20		2260	A20Z
41 - 42 43 - 44	X X	11	22		2261	A22Z
45 - 46 47 - 48	X X	12	24		2262	A24Z

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°	60°	90°	90°	Spring return	Spring return
Cat. No.	A1	A8	A6	A4	D4	AR10*	VR11*
Cat. No.	B1	B8	B6	B4			
Cat. No.	V8			M4			

Spring return extra charge	Number of spring return contacts
* Y652 (PR12)	≤ 4 (PR12 → 26)
Y639 (PR17 → 26)	≤ 2 (PR40 → 63)
Y640 (PR40 → 63)	

Separate cam switches

► 2-WAY CHANGE-OVER SWITCHES WITH OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions												No. of poles	No. of contacts	Connection terminals* + links	Diagram* reference	Diagram price list code	
	0	1	2	-	-	-	-	-	-	-	-	-						
1 - 2 3 - 4	X													1	2		2201	A02Z
5 - 6 7 - 8	X													2	4		2202	A04Z
9 - 10 11 - 12	X													3	6		2203	A06Z
13 - 14 15 - 16	X													4	8		2204	A08Z
17 - 18 19 - 20	X													5	10		2205	A10Z
21 - 22 23 - 24	X													6	12		2206	A12Z
25 - 26 27 - 28	X													7	14		2207	A14Z
29 - 30 31 - 32	X													8	16		2208	A16Z
33 - 34 35 - 36	X													9	18		2209	A18Z
37 - 38 39 - 40	X													10	20		2210	A20Z
41 - 42 43 - 44	X													11	22		2211	A22Z
45 - 46 47 - 48	X													12	24		2212	A24Z

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°	60°	90°	Misc	Spring return	Spring return	Spring return	Spring return	Spring return
Cat. No.	A1	A8	A6	A4	J4	AR23*	AR25*	AR32*	BR19*	CR12*
Cat. No.	B1	B8	B6	B4	M6	CR13*	CR14*	CR19*		
Cat. No.	C1	C8	C6	C4	V8	CR20*	VR12*	VR13*		

Spring return extra charge	Number of spring return contacts
* Y652 (PR12)	≤ 4 (PR12 → 26)
Y639 (PR17 → 26)	≤ 2 (PR40 → 63)
Y640 (PR40 → 63)	

Separate cam switches

▶ 3-WAY SWITCHES WITHOUT OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions			No. of poles	No. of contacts	Connection terminals* + links	Diagram* reference	Diagram price list code
	1	2	3					
1-2 3-4 7-8	X	X		1	3		2351	A03Z
5-6 9-10 11-12		X	X	2	6		2352	A06Z
13-14 15-16 19-20	X	X		3	9		2353	A09Z
17-18 21-22 23-24		X	X	4	12		2354	A12Z
25-26 27-28 31-32	X	X		5	15		2355	A15Z
29-30 33-34 35-36		X	X	6	18		2356	A18Z
37-38 39-40 43-44	X	X		7	21		2357	A21Z
41-42 45-46 47-48		X	X	8	24		2358	A24Z

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°	60°	90°	60°	Spring return	Spring return	Spring return
Cat. No.	A1	A8	A6	A4	M6	AR23*	AR25*	
Cat. No.	B1	B8	B6	B4		BR19*		
Cat. No.	C1	C8	C6			CR12*	CR13*	CR14*

Spring return extra charge	Number of spring return contacts
* Y652 (PR12)	≤ 4 (PR12 → 26)
Y639 (PR17 → 26)	≤ 2 (PR40 → 63)
Y640 (PR40 → 63)	

Separate cam switches

▶ 3-WAY SWITCHES WITH OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions										No. of poles	No. of contacts	Connection terminals* + links	Diagram* reference	Diagram price list code
	0	1	2	3	-	-	-	-	-	-					
1-2 3-4 7-8	X										1	3		2301	A03Z
5-6 9-10 11-12		X									2	6		2302	A06Z
13-14 15-16 19-20	X										3	9		2303	A09Z
17-18 21-22 23-24		X									4	12		2304	A12Z
25-26 27-28 31-32	X										5	15		2305	A15Z
29-30 33-34 35-36		X									6	18		2306	A18Z
37-38 39-40 43-44	X										7	21		2307	A21Z
41-42 45-46 47-48		X									8	24		2308	A24Z

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°	60°	90°	45°	Spring return	Spring return
Cat. No.	A1	A8	A6	A4	V8	BR15*	VR16*
Cat. No.	B1	B8	B6	B4			
Cat. No.	M8	J6					

Spring return extra charge	Number of spring return contacts
* Y652 (PR12)	≤ 4 (PR12 → 26)
Y639 (PR17 → 26)	≤ 2 (PR40 → 63)
Y640 (PR40 → 63)	

Separate cam switches

▶ 4-WAY SWITCHES WITHOUT OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions				No. of poles	No. of contacts	Connection terminals* + links	Diagram* reference	Diagram price list code
	1	2	3	4					
1-2 3-4 5-6 7-8	X				1	4		2451	Ao4Z
9-10 11-12 13-14 15-16	X				2	8		2452	Ao8Z
17-18 19-20 21-22 23-24	X				3	12		2453	A12Z
25-26 27-28 29-30 31-32	X				4	16		2454	A16Z
33-34 35-36 37-38 39-40	X				5	20		2455	A20Z
41-42 43-44 45-46 47-48	X				6	24		2456	A24Z

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°	60°	90°	45°	Spring return	Spring return
Cat. No.	A1	A8	A6	A4	V8	AR30*	
Cat. No.	B1	B8	B6	B4	BR15*	BR41*	
Cat. No.	V1	M8			VR16*	VR28*	

Spring return extra charge	Number of spring return contacts
* Y652 (PR12)	≤ 4 (PR12 → 26)
Y639 (PR17 → 26)	≤ 2 (PR40 → 63)
Y640 (PR40 → 63)	

Separate cam switches

► 4-WAY SWITCHES WITH OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions	No. of poles	No. of contacts	Connection terminals* + links	Diagram* reference	Diagram price list code
	0 1 2 3 4 - - - - -					
1-2 3-4 5-6 7-8	X X X X	1	4		2401	Ao4Z
9-10 11-12 13-14 15-16	X X X X	2	8		2402	Ao8Z
17-18 19-20 21-22 23-24	X X X X	3	12		2403	A12Z
25-26 27-28 29-30 31-32	X X X X	4	16		2404	A16Z
33-34 35-36 37-38 39-40	X X X X	5	20		2405	A20Z
41-42 43-44 45-46 47-48	X X X X	6	24		2406	A24Z

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°	60°	45°	Spring return	Spring return	Spring return
Cat. No.	A1	A8	A6	J8	AR38*		
Cat. No.	B1	B8	B6				
Cat. No.	C1	C8	C6	CR27*	CR34*	CR40*	

Spring return extra charge	Number of spring return contacts
* Y652 (PR12)	≤ 4 (PR12 → 26)
Y639 (PR17 → 26)	≤ 2 (PR40 → 63)
Y640 (PR40 → 63)	

Separate cam switches

► 5-WAY SWITCHES WITHOUT OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions					No. of poles	No. of contacts	Connection terminals* + links	Diagram* reference	Diagram price list code
	1	2	3	4	5					
1-2 3-4 5-6 7-8 9-10	X	X				1	5		2551	A05Z
11-12 13-14 15-16 17-18 19-20	X	X	X			2	10		2552	A10Z
21-22 23-24 25-26 27-28 29-30	X	X	X	X		3	15		2553	A15Z
31-32 33-34 35-36 37-38 39-40	X	X	X	X	X	4	20		2554	A20Z

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°	60°	Spring return
Cat. No.	A1	A8	A6	
Cat. No.	B1	B8	B6	BR27*
Cat. No.	V8			

Spring return extra charge	Number of spring return contacts
* Y652 (PR12)	≤ 4 (PR12 → 26)
Y639 (PR17 → 26)	≤ 2 (PR40 → 63)
Y640 (PR40 → 63)	

Separate cam switches

► 5-WAY SWITCHES WITH OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions 0 1 2 3 4 5 - - - - -	No. of poles	No. of contacts	Connection terminals* + links	Diagram* reference	Diagram price list code
1-2 3-4 5-6 7-8 9-10	X X X X X	1	5		2501	A05Z
11-12 13-14 15-16 17-18 19-20	X X X X X	2	10		2502	A10Z
21-22 23-24 25-26 27-28 29-30	X X X X X	3	15		2503	A15Z
31-32 33-34 35-36 37-38 39-40	X X X X X	4	20		2504	A20Z

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°	60°
Cat. No.	A1	A8	A6
Cat. No.	B1	B8	B6
Cat. No.	M1	V6	

Separate cam switches

► 6-WAY SWITCHES WITHOUT OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions 1 2 3 4 5 6 - - - - -	No. of poles	No. of contacts	Connection terminals* + links	Diagram* reference	Diagram price list code
1-2 3-4 5-6 7-8 9-10 11-12	X X X X X	1	6		2651	Ao6Z
13-14 15-16 17-18 19-20 21-22 23-24	X X X X X	2	12		2652	A12Z
25-26 27-28 29-30 31-32 33-34 35-36	X X X X X	3	18		2653	A18Z
37-38 39-40 41-42 43-44 45-46 47-48	X X X X X	4	24		2654	A24Z

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°	60°
Cat. No.	A1	A8	A6
Cat. No.	B1	B8	B6
Cat. No.	M1		

Separate cam switches

► 6-WAY SWITCHES WITH OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions o 1 2 3 4 5 6 - - - - -	No. of poles	No. of contacts	Connection terminals* + links	Diagram* reference	Diagram price list code
1 -2 3 -4 5 -6 7 -8 9 -10 11 -12	X: X: X: X: X: X:	1	6		2601	Ao6Z
13 -14 15 -16 17 -18 19 -20 21 -22 23 -24	X: X: X: X: X: X:	2	12		2602	A12Z
25 -26 27 -28 29 -30 31 -32 33 -34 35 -36	X: X: X: X: X: X:	3	18		2603	A18Z
37 -38 39 -40 41 -42 43 -44 45 -46 47 -48	X: X: X: X: X: X:	4	24		2604	A24Z

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°
Cat. No.	A1	A8
Cat. No.	B1	B8
Cat. No.	J1	C8

Separate cam switches

► 7-WAY SWITCHES WITHOUT OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions							No. of poles	No. of contacts	Connection terminals* + links	Diagram* reference	Diagram price list code
	1	2	3	4	5	6	7					
1-2 3-4 5-6 7-8 9-10 11-12 15-16	X							1	7		2751	A07Z
13-14 17-18 19-20 21-22 23-24 25-26 27-28						X		2	14		2752	A14Z
29-30 31-32 33-34 35-36 37-38 39-40 43-44	X							3	21		2753	A21Z
41-42 45-46 47-48												

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

30°

45°



Cat. No. A1

A8



Cat. No. B1

B8



Cat. No.

C8

Separate cam switches

► 7-WAY SWITCHES WITH OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions							No. of poles	No. of contacts	Connection terminals +* links	Diagram* reference	Diagram price list code	
	0	1	2	3	4	5	6						7
1-2 3-4 5-6 7-8 9-10 11-12 15-16	X								1	7		2701	A07Z
13-14 17-18 19-20 21-22 23-24 25-26 27-28							X		2	14		2702	A14Z
29-30 31-32 33-34 35-36 37-38 39-40 43-44	X								3	21		2703	A21Z
41-42 45-46 47-48													

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°
Cat. No.	A1	A8
Cat. No.	B1	B8

Separate cam switches

► 8-WAY SWITCHES WITHOUT OFF

DIAGRAM (REFERENCE AND PRICE LIST CODE) (with link for common point)

Contact Nos.	Positions								No. of poles	No. of contacts	Connection terminals* + links	Diagram* reference	Diagram price list code	
	1	2	3	4	5	6	7	8						
1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16	X									1	8		2851	A08Z
17-18 19-20 21-22 23-24 25-26 27-28 29-30 31-32	X	X								2	16		2852	A16Z
33-34 35-36 37-38 39-40 41-42 43-44 45-46 47-48	X	X	X							3	24		2853	A24Z

*For diagrams without a link, replace number 2 by number 1 at the beginning of the diagram reference.

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

	30°	45°
Cat. No.	A1	A8
Cat. No.	B1	B8

For more than 8 ways, please contact us.

Separate cam switches

► GROUPING SWITCHES FOR 2 ELEMENTS

DIAGRAM (REFERENCE AND PRICE LIST CODE)

Contact Nos.	Positions										No. of poles	No. of contacts	Connection terminals + links	Diagram reference		Diagram price list code	
	0	1	2	-	-	-	-	-	-	-				with off	without off		
1-2 3-4	X	X										1	2		5201	5251	A02Z
5-6 7-8	X	X										2	4		5202	5252	A04Z
9-10 11-12	X	X										3	6		5203	5253	A06Z
13-14 15-16	X	X										4	8		5204	5254	A08Z
17-18 19-20	X	X										5	10		5205	5255	A10Z
21-22 23-24	X	X										6	12		5206	5256	A12Z
25-26 27-28	X	X										7	14		5207	5257	A14Z
29-30 31-32	X	X										8	16		5208	5258	A16Z
33-34 35-36	X	X										9	18		5209	5259	A18Z
37-38 39-40	X	X										10	20		5210	5260	A20Z
41-42 43-44	X	X										11	22		5211	5261	A22Z
45-46 47-48	X	X										12	24		5212	5262	A24Z

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

Diagram with off position

Diagram without off position

Diagram with off position				Diagram without off position			
30°	45°	60°	90°	30°	45°	60°	90°
Cat. No. A1	A8	A6	A4	A1	A8	A6	A4
Cat. No. B1	B8	B6	B4	B1	B8	B6	B4
Cat. No. V8	M6						

Separate cam switches

► GROUPING SWITCHES FOR 3 ELEMENTS

DIAGRAM (REFERENCE AND PRICE LIST CODE)

Contact Nos.	Positions										No. of poles	No. of contacts	Connection terminals + links	Diagram reference		Diagram price list code	
	0	1	2	3	-	-	-	-	-	-				with off	without off		
1-2 3-4 7-8	X	X										1	3		5301	5351	A03Z
5-6 9-10 11-12		X										2	6		5302	5352	A06Z
13-14 15-16 17-18	X	X										3	9		5303	5353	A09Z
19-20 21-22 23-24		X										4	12		5304	5354	A12Z
25-26 27-28 29-30	X	X										5	15		5305	5355	A15Z
31-32 33-34 35-36		X										6	18		5306	5356	A18Z
37-38 39-40 41-42	X	X										7	21		5307	5357	A21Z
43-44 45-46 47-48		X										8	24		5308	5358	A24Z

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

Diagram with off position

Diagram without off position

Diagram with off position				Diagram without off position			
30°	45°	60°	90°	30°	45°	60°	90°
Cat. No. A1	A8	A6	A4	A1	A8	A6	A4
Cat. No. B1	B8	B6	B4	B1	B8	B6	B4
Cat. No. V8 (45°)	M8			V8	M6		

Separate cam switches

► GROUPING SWITCHES FOR 4 ELEMENTS

DIAGRAM (REFERENCE AND PRICE LIST CODE)

Contact Nos.	Positions								No. of poles	No. of contacts	Connection terminals + links	Diagram reference		Diagram price list code
	0	1	2	3	4	-	-	-				with off	without off	
1-2 3-4 5-6 7-8	X			X					1	4		5401	5451	Ao4Z
9-10 11-12 13-14 15-16	X			X					2	8		5402	5452	Ao8Z
17-18 19-20 21-22 23-24	X			X					3	12		5403	5453	A12Z
25-26 27-28 29-30 31-32	X			X					4	16		5404	5454	A16Z
33-34 35-36 37-38 39-40	X			X					5	20		5405	5455	A20Z
41-42 43-44 45-46 47-48	X			X					6	24		5406	5456	A24Z

SWITCHING ANGLE (REFERENCE AND PRICE LIST CODE)

Diagram with off position

Diagram without off position

30°			45°			60°			30°				45°				60°				90°			
Cat. No. A1	A8	A6	A1	A8	A6	A1	A8	A6	A1	A8	A6	A1	A8	A6	A4									
Cat. No. B1	B8	B6	B1	B8	B6	B1	B8	B6	B1	B8	B6	B1	B8	B6	B4									

For more than 4 elements, please contact us.

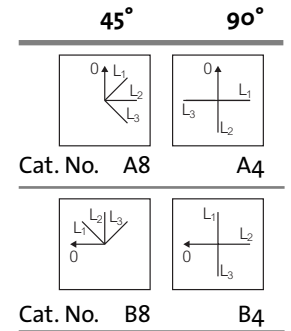
Separate cam switches

► INSTRUMENT SWITCHES: AMMETER

MEASUREMENT ON 3 CIRCUITS L₁-L₂-L₃ WITH 1 AMMETER AND 3 CTS WITH COMMON POINT

SWITCHING ANGLE

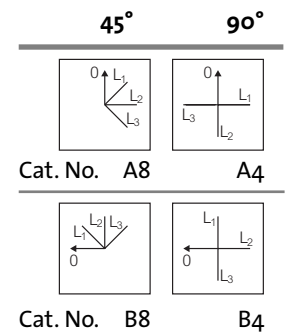
Contact Nos.	Positions o: L ₁ : L ₂ : L ₃ : - - - - -	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
1-2 3-4 5-6 7-8 9-10 11-12	X X X X X X X X X X X X	6		8151	Ao6Z



MEASUREMENT ON 3 CIRCUITS L₁-L₂-L₃ WITH 1 AMMETER AND 3 CTS WITHOUT COMMON POINT

SWITCHING ANGLE

Contact Nos.	Positions o: L ₁ : L ₂ : L ₃ : - - - - -	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 19-20	X X X X X X X X X X X X X X X X X X	9		8157	Ao9Z



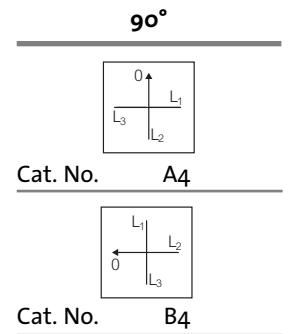
Separate cam switches

► INSTRUMENT SWITCHES: AMMETER (CONTINUED)

MEASUREMENT ON 3 CIRCUITS L₁-L₂-L₃ WITH 1 AMMETER, DIRECT READING WITHOUT CT

SWITCHING ANGLE

Contact Nos.	Positions o : L ₁ : L ₂ : L ₃ : - : - : - : -	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
1-2	X X	9		8164	A09Z
3-4	X X				
5-6	X X				
7-8	X X				
9-10	X X				
11-12	X X				
13-14	X X				
15-16	X X				
17-18	X X				



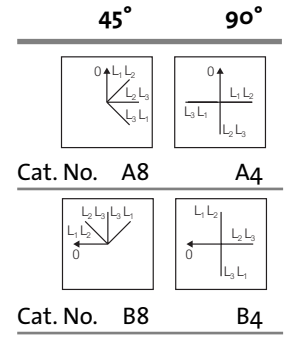
Separate cam switches

► INSTRUMENT SWITCHES: VOLTMETER

MEASUREMENT ON 3-PHASE CIRCUIT WITH 1 VOLTMETER, READING BETWEEN PHASES

SWITCHING ANGLE

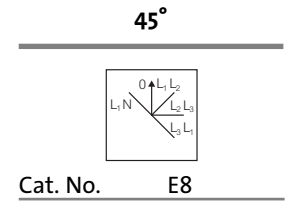
Contact Nos.	Positions						No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	0	L ₁	L ₂	L ₃	-	-				
1-2	X							8351	Ao4Z	
3-4		X								
5-6	X	X								
7-8			X							



MEASUREMENT ON 3-PHASE CIRCUIT WITH 1 VOLTMETER, READING BETWEEN PHASES + BETWEEN 1 PHASE AND NEUTRAL

SWITCHING ANGLE

Contact Nos.	Positions							No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	0	L ₁	L ₂	L ₃	-	-	L ₁ N				
1-2	X		X				X		8356	Ao5Z	
3-4		X									
5-6	X	X									
7-8			X								
9-10	X					X					

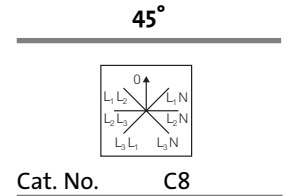


Separate cam switches

▶ INSTRUMENT SWITCHES: VOLTMETER (CONTINUED)

MEASUREMENT ON 3-PHASE CIRCUIT WITH 1 VOLTMETER, READING BETWEEN PHASES AND BETWEEN PHASES AND NEUTRAL SWITCHING ANGLE

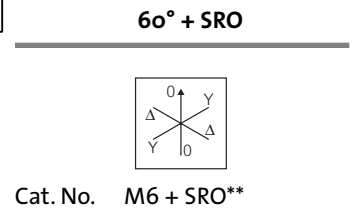
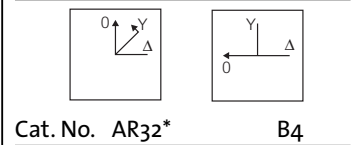
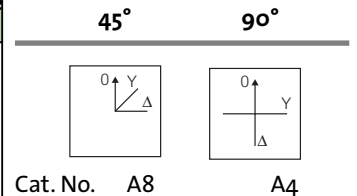
Contact Nos.	Positions						No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	0	L ₁	L ₂	L ₃	L ₁	L ₂				
1-2	X				X		6		8357	Ao6Z
3-4	X	X	X							
5-6	X					X				
7-8						X				
9-10		X								
11-12				X	X					



▶ 1 SPEED STARTER, 1 WAY - 3 PHASE MOTOR

Y Δ STARTER, ONE WAY, FOR SINGLE SPEED MOTOR SWITCHING ANGLE

Contact Nos.	Positions						No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	0	Y	Δ	-	-	-				
1-2	X	X					8		9551	Ao8Z
3-4	X									
5-6	X	X								
7-8	X	X								
9-10		X								
11-12		X								
13-14	X	X								
15-16	X	X								



* Y652, PR12
Y639, PR17 → 26
Y640, PR40 → 160

** Y649, PR12
Y642, PR17 → 26
Y643, PR40 → 160

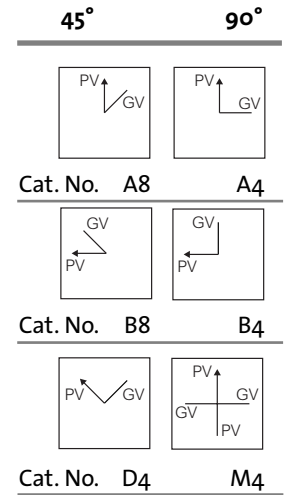
Separate cam switches

▶ 3-PHASE, 2-SPEED MOTOR CONTROL SWITCHES

2 SPEEDS, 1 WAY WITHOUT OFF - 3 PHASE DALHANDER MOTOR (not suitable as starter)

* SWITCHING ANGLE

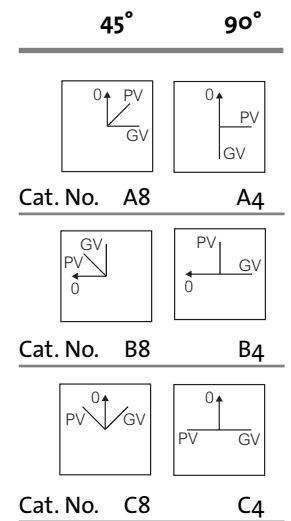
Contact Nos.	Positions						No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	Δ	YY	-	-	-	-				
1-2	X						8		9354	Ao8Z
3-4		X								
5-6			X							
7-8	X									
9-10		X								
11-12			X							
13-14	X									
15-16				X						



2 SPEEDS, 1 WAY WITH OFF - 3 PHASE DALHANDER MOTOR

* SWITCHING ANGLE

Contact Nos.	Positions						No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	o	Δ	YY	-	-	-				
1-2	X						8		9552	Ao8Z
3-4		X								
5-6			X							
7-8	X									
9-10		X								
11-12			X							
13-14	X									
15-16				X						



* Δ = PV
YY = GV

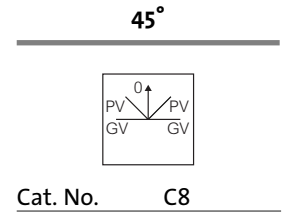
Separate cam switches

▶ 3-PHASE, 2-SPEED MOTOR CONTROL SWITCHES (CONTINUED)

2 SPEEDS, FORWARD/REVERSE - 3 PHASE DALHANDER MOTOR

* SWITCHING ANGLE

Contact Nos.	FWD Positions	REV	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
1-2	X	X	12		9154	A12Z
3-4		X				
5-6		X				
7-8	X					
9-10	X					
11-12	X					
13-14	X	X				
15-16	X	X				
17-18	X	X				
19-20	X	X				
21-22	X	X				
23-24	X	X				

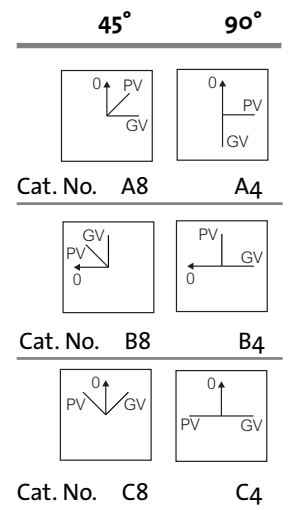


* Δ = PV
YY = GV

STARTER, 2 SPEEDS, 1 WAY - 2 COILS ΔA, ΔB OPEN

* SWITCHING ANGLE

Contact Nos.	Positions	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
1-2	X	8		9553	Ao8Z
3-4	X				
5-6	X				
7-8	X				
9-10	X				
11-12	X				
13-14	X				
15-16	X				



* PV = LS
GV = HS

Separate cam switches

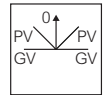
▶ 3-PHASE, 2-SPEED MOTOR CONTROL SWITCHES (CONTINUED)

STARTER, FORWARD/REVERSE, FOR 2 SPEED MOTOR, 2 COILS ΔA, ΔB OPEN

* SWITCHING ANGLE

Contact Nos.	FWD Positions O : LS : HS : - : - : -	REV HS : LS	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
1 - 2	X - X		12		9156	A12Z
3 - 4		X - X				
5 - 6		X - X				
7 - 8	X - X					
9 - 10	X	X				
11 - 12	X	X				
13 - 14	X	X				
15 - 16	X	X				
17 - 18	X	X				
19 - 20	X	X				
21 - 22	X	X				
23 - 24	X	X				

45°



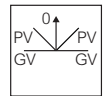
Cat. No. C8

STARTER, FORWARD/REVERSE, FOR 2 SPEED MOTOR, 2 COILS YA, YB OPEN

* SWITCHING ANGLE

Contact Nos.	FWD Positions O : LS : HS : - : - : -	REV HS : LS	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
1 - 2	X - X		10		9163	A10Z
3 - 4		X - X				
5 - 6		X - X				
7 - 8	X - X					
9 - 10	X	X				
11 - 12	X	X				
13 - 14	X	X				
15 - 16	X	X				
17 - 18	X	X				
19 - 20	X	X				

45°



Cat. No. C8

For function
1 way,
see page 210,
ref. diagram 2203,
diagram price list code
Ao6Z

* AR = REV
AV = FWD

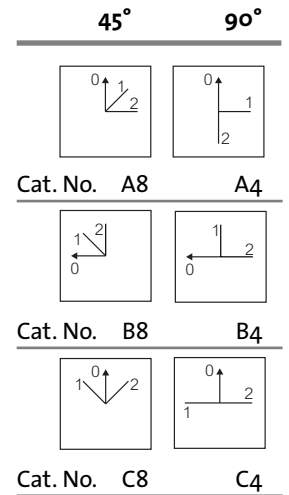
Separate cam switches

► MOTOR CONTROL SWITCHES - D.C. CURRENT OR SINGLE PHASE

POLARITY OR PHASE CHANGE-OVER WITH OFF POSITION (D.C. current)

SWITCHING ANGLE

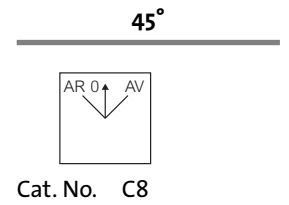
Contact Nos.	Positions	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
1-2 3-4 5-6 7-8	o 1 2 - - - - -	4		9051	Ao4Z



FORWARD/REVERSE SWITCH WITH OFF POSITION FOR 1-SPEED SINGLE PHASE MOTOR WITH PERMANENT CONDENSER (4 WIRES)

SWITCHING ANGLE

Contact Nos.	Positions	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
1-2 3-4 5-6 7-8 9-10 11-12	o FWD - - - - - REV	6		9057C8	Ao6Z



* AR = REV
AV = FWD

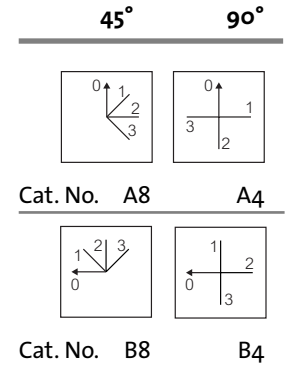
Separate cam switches

SWITCHES FOR COUPLING 2 RESISTORS

COUPLING OF 2 RESISTORS WITH COMMON POINT, 2-POLE SWITCHING

SWITCHING ANGLE

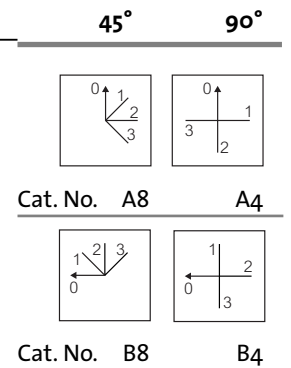
Contact Nos.	o	1	2	3	-	-	-	-	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
1-2		X	X						4		7202	Ao4Z
3-4				X								
5-6			X	X								
7-8		X										
Pos. a 0 off 1 R ₁ 2 R ₂ 3 R ₁ +R ₂ series										Pos. b 0 off 1 R ₁ +R ₂ series 2 R ₂ 3 R ₁		



COUPLING OF 2 RESISTORS WITH COMMON POINT, 2-POLE SWITCHING

SWITCHING ANGLE

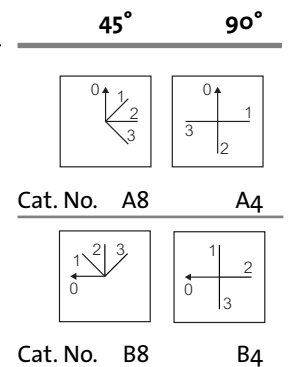
Contact Nos.	o	1	2	3	-	-	-	-	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
1-2		X	X	X					4		7204	Ao4Z
3-4				X								
5-6			X	X								
7-8		X										
Pos. a 0 off 1 R ₁ +R ₂ series 2 R ₁ 3 R ₁ +R ₂ //										Pos. b 0 off 1 R ₁ 2 R ₁ +R ₂ series 3 R ₂		



FUNCTION: COUPLING OF 2 RESISTORS WITHOUT COMMON POINT, 2-POLE SWITCHING

SWITCHING ANGLE

Contact Nos.	o	1	2	3	-	-	-	-	No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
1-2		X		X					4		7207	Ao4Z
3-4			X	X								
5-6		X		X								
7-8			X	X								
Pos. Function 0 off 1 R ₁ 2 R ₂ 3 R ₁ +R ₂ //												



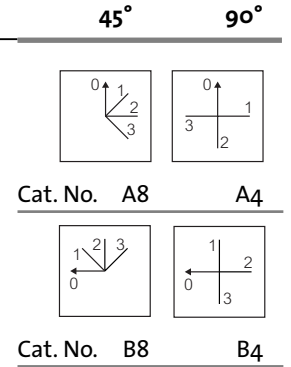
Separate cam switches

SWITCHES FOR COUPLING 3 RESISTORS

COUPLING OF 3 RESISTORS WITHOUT COMMON POINT, 2-POLE SWITCHING

SWITCHING ANGLE

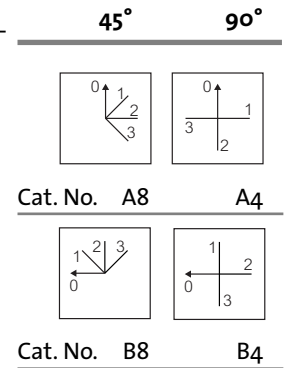
Contact Nos.	Positions						No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	0	1	2	3	-	-				
1-2	X	X	X				<p>Pos. Function</p> <ul style="list-style-type: none"> 0 off 1 R₁ 2 R₁+R₂// 3 R₁+R₂+R₃// 	7211	Ao6Z	
3-4		X	X							
5-6			X							
7-8	X	X	X							
9-10		X	X							
11-12			X							



COUPLING OF 3 RESISTORS, 3-PHASE NETWORK, TOTAL CUT-OFF AT OFF

SWITCHING ANGLE

Contact Nos.	Positions						No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	0	1	2	3	-	-				
1-2	X	X	X				<p>Pos. Function</p> <ul style="list-style-type: none"> 0 off 1 R₁ (L₁/L₂) 2 R₁ (L₁/L₂), R₂ (L₂/L₃) 3 R₁, R₂, R₃ in ? 	7607	Ao4Z	
3-4		X	X							
5-6	X	X	X							
7-8		X	X							

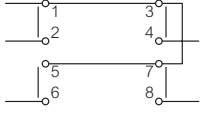


Separate cam switches

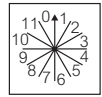
► CODING SWITCHES

CODING SWITCH WITH OFF

SWITCHING ANGLE

Contact Nos.	Positions											No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code	
	0	1	2	3	4	5	6	7	8	9	10					11
1-2	X	X	X	X	X	X	X	X	X	X	X	X	4		6501	Ao4Z
3-4			X-X			X-X			X-X							
5-6				X	X	X	X									
7-8							X	X		X						

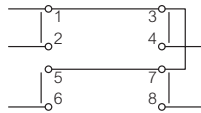
30°



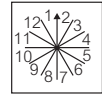
Cat. No. A1

CODING SWITCH WITHOUT OFF

SWITCHING ANGLE

Contact Nos.	Positions												No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	1	2	3	4	5	6	7	8	9	10	11	12				
1-2	X	X	X	X	X	X	X	X	X	X	X	X	4		6502	Ao4Z
3-4		X-X			X-X			X-X								
5-6			X	X	X	X				X						
7-8							X	X		X						

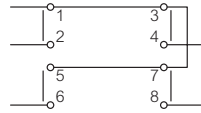
30°



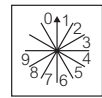
Cat. No. A1

CODING SWITCH, BCD CODE, 0 TO 9 (with complete rotation possible)

SWITCHING ANGLE

Contact Nos.	Positions											No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	0	1	2	3	4	5	6	7	8	9	-				
1-2	X	X	X	X	X	X	X	X	X	X	X	4		6503	Ao4Z
3-4		X-X			X-X			X-X							
5-6			X	X	X	X				X					
7-8							X-X		X-X						

30°



Cat. No. A1

Separate cam switches

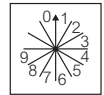
► CODING SWITCHES (CONTINUED)

COMPLEMENTARY BCD CODE, 0 to 9 (with complete rotation possible)

SWITCHING ANGLE

Contact Nos.	Positions										No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	0	1	2	3	4	5	6	7	8	9				
1 - 2	X	X	X	X	X								6504	Ao4Z
3 - 4	X-X			X-X					X-X					
5 - 6	X		X						X-X					
7 - 8	X						X							

30°



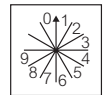
Cat. No. A1

BCD CODE, 0 to 9 + COMPLEMENTARY BCD CODE (with complete rotation possible)

SWITCHING ANGLE

Contact Nos.	Positions										No. of contacts	Connection terminals + links	Diagram reference	Diagram price list code
	0	1	2	3	4	5	6	7	8	9				
1 - 2	X	X	X	X	X								6505	Ao8Z
3 - 4			X-X			X-X								
5 - 6					X		X							
7 - 8									X-X					
9 - 10	X	X	X	X	X									
11 - 12	X-X			X-X					X-X					
13 - 14	X		X						X-X					
15 - 16	X						X							

30°







Cat. No. A1

Separate cam switches

To order your cam switch, it is essential to follow the 5-step procedure (see presentation on p. 126)
Mini cam switches are only available in standard formats.

► III - CHOICE OF MOUNTING

	Image	Page
► 2-screw panel mount Intervals 30 or 50 Intervals 35 or 36, 48, 54, 68		250 250 250
► Single hole mounting Ø 22 With plate frame and handle With key with selector switch		251 251 251 252
► Single hole mounting Ø 30 One-piece with handle One-piece with key		253 253 253
► Rear mounting Intervals 48 or 68 On DIN rail		254 254 254
► Dimensions		255
Front and rear mounting (E and S)		255
Front mounting (EZ)		257
Single hole mounting Ø 22 (E N48MD50)		259
Single hole mounting Ø 22 (E C21XXXX)		259
Single hole mounting Ø 30 (E 30PN)		260
Single hole mounting Ø 30 (E 30C)		261
Rear mounting on DIN rail (SX)		262

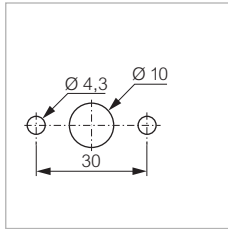
Separate cam switches

Dimensions (p. 255)

▶ FRONT MOUNTING

2 SCREWS - 30 OR 50 MM INTERVAL

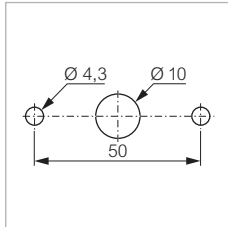
Cat. No.



For PR 12 to PR 160

Price list code

PR 12	-	E
PR 17	-	E
PR 21	-	E
PR 26	-	E

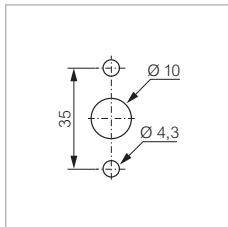


PR 40	-	E
PR 63	-	E
PR 125	-	E
PR 160	-	E

For foolproof shaft profile, add D to the type of mounting code (ED)

2 SCREWS - 35 MM INTERVAL OR □ 36, 48, 54 OR 68

Cat. No.



For PR 12 to PR 160

Price list code

35 mm interval

PR 12	Y533	EZ35
PR 17	Y523	EZ35
PR 21	Y524	EZ35
PR 26	Y525	EZ35

□ 36, 48, or 54 interval (see end of code)

PR 12	Y654	EZ36
PR 17	Y523	EZ36 or EZ48
PR 21	Y524	EZ36 or EZ48
PR 26	Y525	EZ36 or EZ54

□ 68 mm interval

PR 40	Y527	EZ68
PR 63	Y528	EZ68
PR 125	Y531	EZ68
PR 160	Y532	EZ68

For foolproof shaft profile, add D to the type of mounting code (eg: EZD35)

Separate cam switches

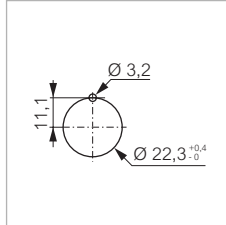
Dimensions (p. 259)

▶ ONE-HOLE MOUNTING Ø 22

WITH PLATE, FRAME AND HANDLE

For PR 12

Cat. No.



Max. number of contacts accepted: 12

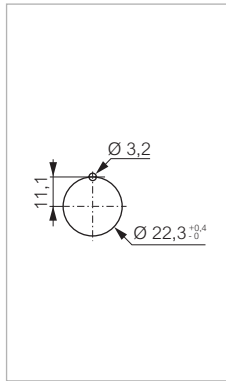
Price list code

<input type="checkbox"/> 48 legend plate with handle	N48MD50	N48MD50
<input type="checkbox"/> 48 legend plate with standard handle and aluminium legend plate	N480MD50	N480MD50

SELECTOR SWITCH WITH KEY

For PR 12

Cat. No.



Supplied with 2 keys n° 455
Max. number of contacts accepted: 8
Legend plate can be used (p. 281)

Price list code

Key lock 90/45° for □ 5 mm shaft

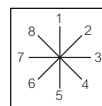
Key free in:

1-3-5-7	C21RC00	C21RC00
3-7	C21RD00	C21RD00
1-5	C21RE00	C21RE00
2-4-6-8	C21RF00	C21RF00
2-6	C21RG00	C21RG00
4-8	C21RH00	C21RH00



48 plate, key free in:

1-3-5-7	C21RC48	C21RC48
3-7	C21RD48	C21RD48
1-5	C21RE48	C21RE48
2-4-6-8	C21RF48	C21RF48
2-6	C21RG48	C21RG48
4-8	C21RH48	C21RH48



Key lock 60/30° for □ 5 mm shaft

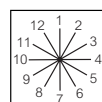
Key free in:

1-3-5-7-9-11	C21RJ00	C21RJ00
1-7	C21RK00	C21RK00
3-9	C21RQ00	C21RQ00
5-11	C21RR00	C21RR00
2-4-6-8-10-12	C21RL00	C21RL00
4-10	C21RM00	C21RM00
2-8	C21RS00	C21RS00
6-12	C21RT00	C21RT00



48 plate, key free in:

1-3-5-7-9-11	C21RJ48	C21RJ48
1-7	C21RK48	C21RK48
3-7	C21RQ48	C21RQ48
5-11	C21RR48	C21RR48
2-4-6-8-10-12	C21RL48	C21RL48
4-10	C21RM48	C21RM48
2-8	C21RS48	C21RS48
6-12	C21RT48	C21RT48



- For other bezels, replace 21 in the reference and the price list code with:

- 22 - black plastic
- 23 - grey plastic
- 24 - brilliant chromed brass
- 25 - brilliant chromed plastic

Separate cam switches

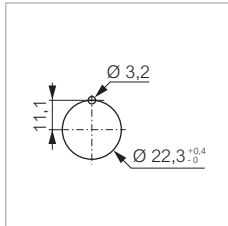
Dimensions (p. 259)

▶ ONE-HOLE MOUNTING Ø 22 (CONTINUED)

WITH SELECTOR SWITCH

For PR 12

Cat. No.



Max. number of contacts accepted: 12

Price list code

Handle

- Red
- Green
- Black
- Grey

C21RA01
C21RA02
C21RA03
C21RA08

C21RA01
C21RA02
C21RA03
C21RA08

Long handle

- Red
- Green
- Black
- Grey

C21RB01
C21RB02
C21RB03
C21RB08

C21RB01
C21RB02
C21RB03
C21RB08

- For other bezels, replace 21 in the reference and the price list code with:

- 22 - black plastic
- 23 - grey plastic
- 24 - brilliant chromed brass
- 25 - brilliant chromed plastic
- 26 - matt anodised aluminium

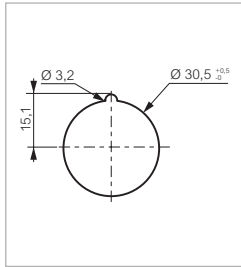
Separate cam switches

Dimensions (p. 260-261)

► SINGLE HOLE MOUNTING Ø 30

ONE-PIECE SELECTOR SWITCH

Cat. No.



The block consists of:
 - 1 head and a plastic bezel enabling single hole \varnothing 30 mounting
 - a grey/black small handle
 Max. number of contacts accepted: 24

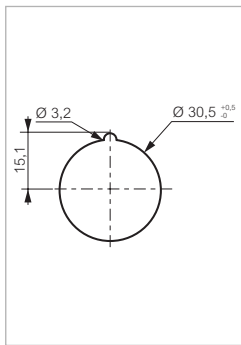
Price list code

PR 17	302PN	30PN
PR 21	303PN	30PN
PR 26	304PN	30PN

Extra charge for chrome brass bezel (instead of plastic) Y644⁽¹⁾ TO BE SPECIFIED

⁽¹⁾ To be added at the end of the reference and price list code

ONE-PIECE KEY OPERATED



The block consists of:
 - 1 head and a plastic bezel enabling single hole \varnothing 30 mounting
 - 2 keys no. 455 or 1424 A to be stated on order

The key acts as an operating handle
 The key is always captive:
 in positions 2-4-6-8
 The key is free:
 in positions 1-3-5-7 (form p. 287)
 The key can be captive:
 in positions 1 + 5 or 3 + 7
 The serrated edge of the key acts as an indicator of the switch position

Max. number of contacts accepted: 8

Price list code

PR 17		30C2	30C
PR 21		30C3	30C
PR 26		30C4	30C

Extra charges

Key with plastic grip (recommended for more than 4 contacts)	Y646	30CM
Chrome brass bezel	Y644 ⁽¹⁾	TO BE SPECIFIED
Other key (other than 455 or 1424)	Y645 ⁽¹⁾	TO BE SPECIFIED

⁽¹⁾ To be added at the end of the reference and price list code

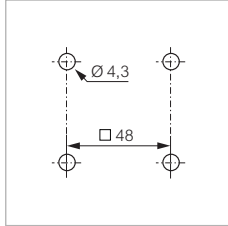
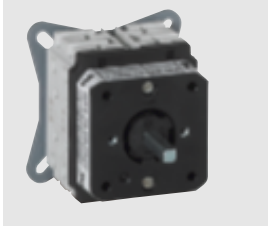
Separate cam switches

Dimensions (p. 255)

► REAR MOUNTING

2 SCREWS - INTERVAL □ 48 OR 68

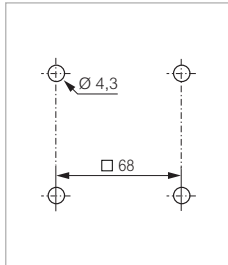
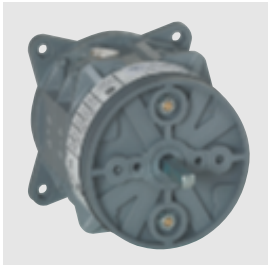
Cat. No.



For PR 12 to PR 160

Price list code

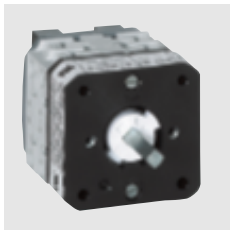
PR 12	Y513	S
PR 17	Y503	S
PR 21	Y504	S
PR 26	Y505	S



PR 40	Y507	S
PR 63	Y508	S
PR 125	Y511	S
PR 160	Y517	S

ON DIN RAIL

Cat. No.



For PR 12 to PR 26

Price list code

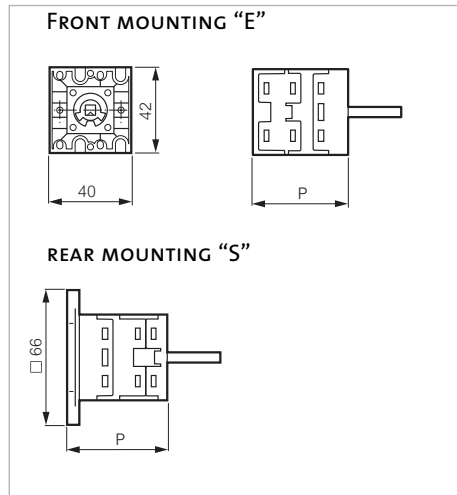
Max. number of contacts accepted: 8

PR 12	Y553	SX
PR 17	Y543	SX
PR 21	Y544	SX
PR 26	Y545	SX

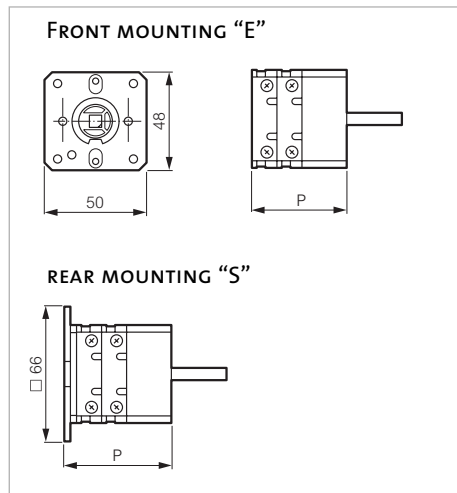
Separate cam switches

► DIMENSIONS

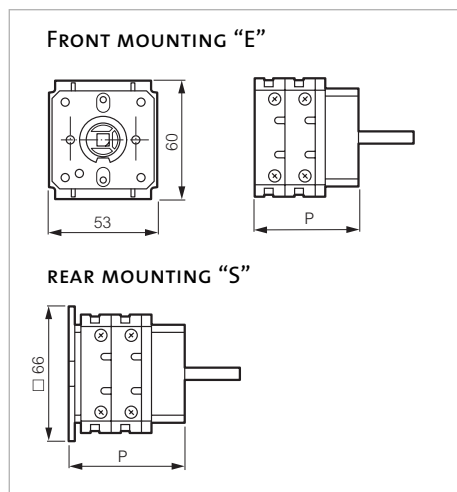
FRONT AND REAR MOUNTING (E AND S)



PR 12	No. of contacts	Front mounting P*	Rear mounting P*
	1-2	36	42
	3-4	46	52
	5-6	56	62
	7-8	66	72
	9-10	76	82
	11-12	86	92
	13-14	122	128
	15-16	132	138
	17-18	142	148
	19-20	152	158
	21-22	162	168
	23-24	172	178



PR 17/21	No. of contacts	Front mounting P*	Rear mounting P*
	1-2	33	39
	3-4	45	51
	5-6	57	63
	7-8	69	75
	9-10	81	87
	11-12	93	99
	13-14	105	111
	15-16	117	123
	17-18	129	135
	19-20	141	147
	21-22	153	159
	23-24	165	171



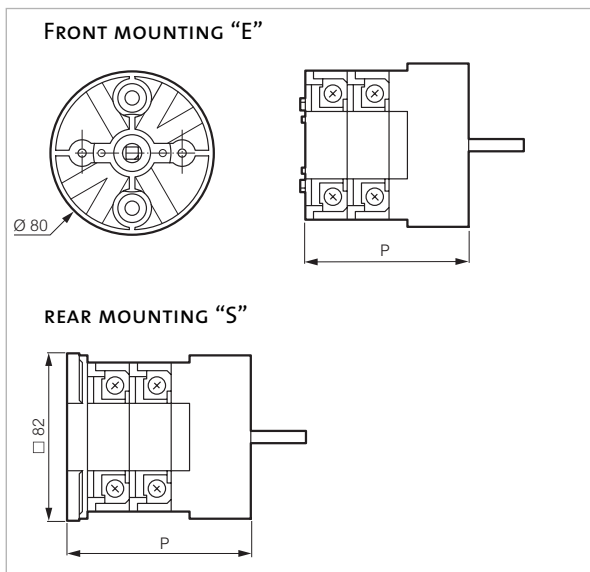
PR 26	No. of contacts	Front mounting P*	Rear mounting P*
	1-2	36	42
	3-4	51	57
	5-6	66	72
	7-8	81	87
	9-10	96	102
	11-12	111	117
	13-14	126	132
	15-16	141	147
	17-18	156	162
	19-20	171	177
	21-22	186	192
	23-24	201	207

* P = Depth

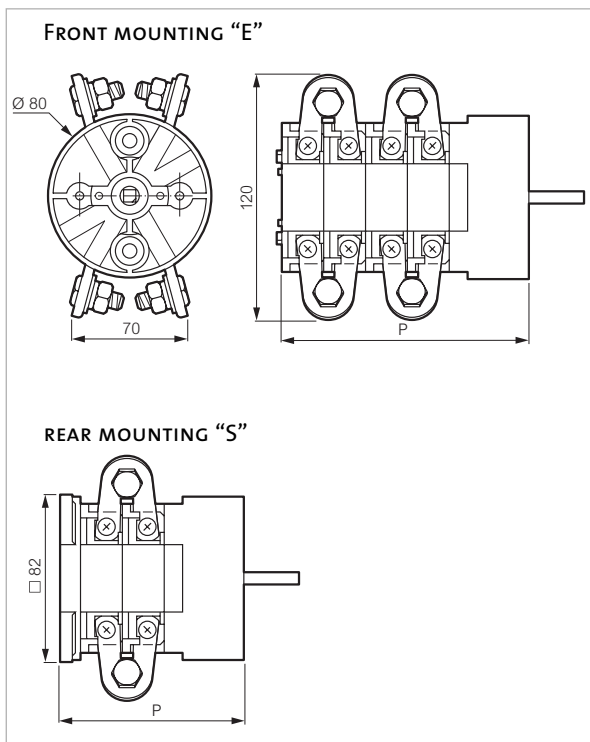
Separate cam switches

► DIMENSIONS (CONTINUED)

FRONT AND REAR MOUNTING (E AND S)



PR 40/63	No. of contacts	Front mounting P*	Rear mounting p*
	1-2	60	70
	3-4	80	90
	5-6	100	110
	7-8	120	130
	9-10	140	150
	11-12	160	170
	13-14	180	190
	15-16	200	210
	17-18	220	230
	19-20	240	250
	21-22	260	270
	23-24	280	290



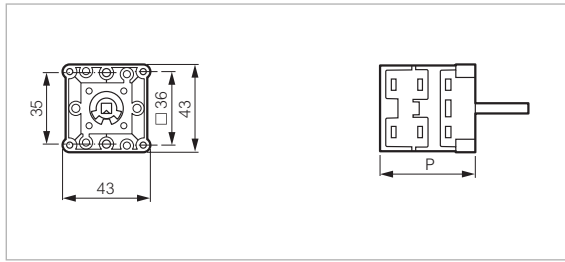
PR 125/160	No. of contacts	Front mounting P*	Rear mounting p*
	1-2	80	90
	3-4	120	130
	5-6	160	170
	7-8	200	210
	9-10	240	250
	11-12	280	290

* P = Depth

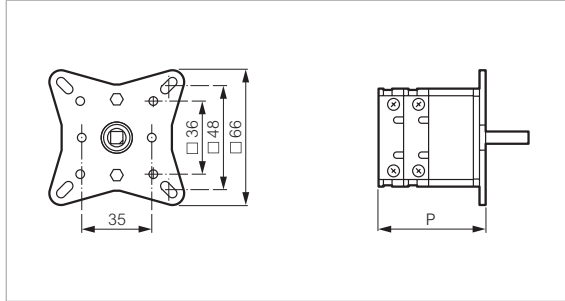
Separate cam switches

► DIMENSIONS (CONTINUED)

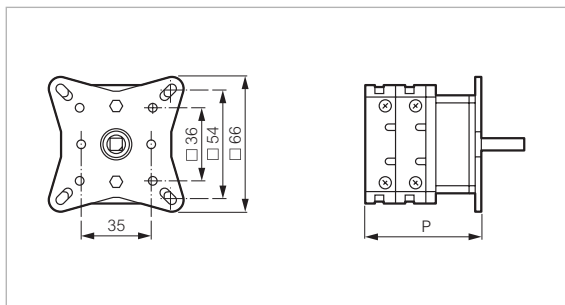
FRONT MOUNTING (EZ)



PR 12	No. of contacts	P*
	1-2	36
	3-4	46
	5-6	56
	7-8	66
	9-10	76
	11-12	86
	13-14	122
	15-16	132
	17-18	142
	19-20	152
	21-22	162
	23-24	172



PR 17/21	No. of contacts	P*
	1-2	39
	3-4	51
	5-6	63
	7-8	75
	9-10	87
	11-12	99
	13-14	111
	15-16	123
	17-18	135
	19-20	147
	21-22	159
	23-24	171



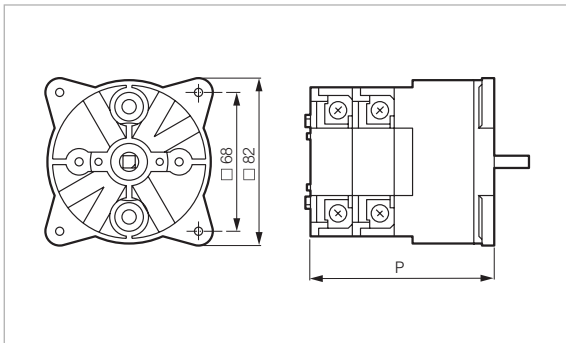
PR 26	No. of contacts	P*
	1-2	42
	3-4	57
	5-6	72
	7-8	87
	9-10	102
	11-12	117
	13-14	132
	15-16	147
	17-18	162
	19-20	177
	21-22	192
	23-24	207

* P = Depth

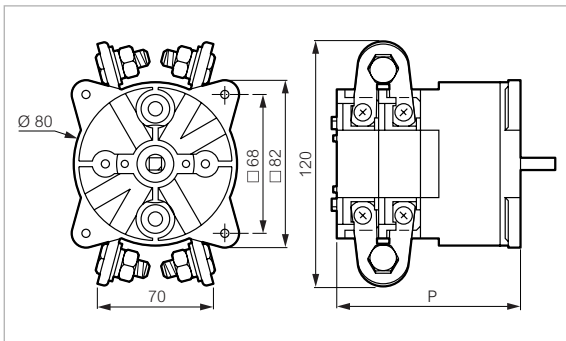
Separate cam switches

► DIMENSIONS (CONTINUED)

FRONT MOUNTING (EZ)



PR 40/63	No. of contacts	P*
	1-2	60
	3-4	80
	5-6	100
	7-8	120
	9-10	140
	11-12	160
	13-14	180
	15-16	200
	17-18	220
	19-20	240
	21-22	260
	23-24	280



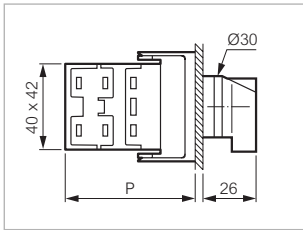
PR 125/160	No. of contacts	P*
	1-2	80
	3-4	120
	5-6	160
	7-8	200
	9-10	240
	11-12	280

* P = Depth

Separate cam switches

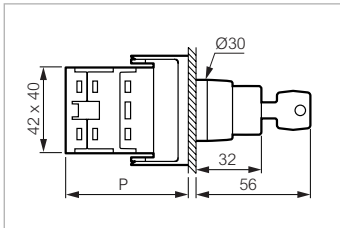
► DIMENSIONS (CONTINUED)

SINGLE HOLE MOUNTING Ø 22 (E N48MD50)

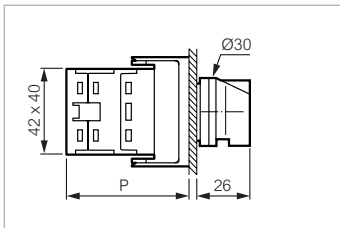


PR 12	No. of contacts	P*
	1-2	51
	3-4	61
	5-6	71
	7-8	81
	9-10	91
	11-12	101

SINGLE HOLE MOUNTING Ø 22 (E C21XXXX)



PR 12	No. of contacts	P*
With key		
	1-2	51
	3-4	61
	5-6	71
	7-8	81



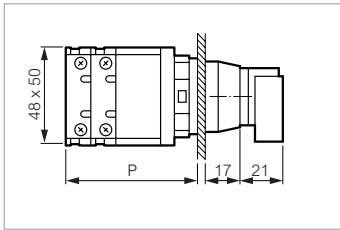
With handle/long handle		
	1-2	51
	3-4	61
	5-6	71
	7-8	81
	9-10	91
	11-12	101

* P = Depth

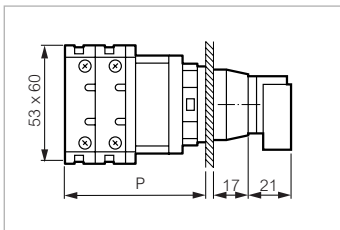
Separate cam switches

► DIMENSIONS (CONTINUED)

SINGLE HOLE MOUNTING Ø 30 (E 30PN)



PR 17/21	No. of contacts	P*
	1-2	47.5
	3-4	59.5
	5-6	71.5
	7-8	83.5
	9-10	95.5
	11-12	107.5
	13-14	119.5
	15-16	131.5
	17-18	143.5
	19-20	155.5
	21-22	167.5
	23-24	179.5



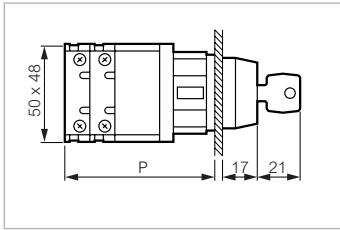
PR 26	No. of contacts	P*
	1-2	50.5
	3-4	65.5
	5-6	80.5
	7-8	95.5
	9-10	110.5
	11-12	125.5
	13-14	140.5
	15-16	155.5
	17-18	170.5
	19-20	185.5
	21-22	200.5
	23-24	215.5

* P = Depth

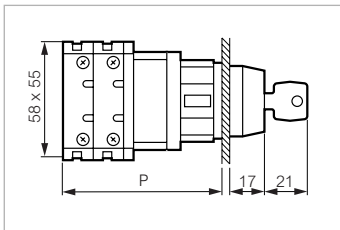
Separate cam switches

► DIMENSIONS (CONTINUED)

SINGLE HOLE MOUNTING Ø 30 (E 30C)



PR 17/21	No. of contacts	P*
	1-2	56.5
	3-4	68.5
	5-6	80.5
	7-8	92.5
	9-10	104.5
	11-12	116.5
	13-14	128.5
	15-16	140.5
	17-18	152.5
	19-20	164.5
	21-22	176.5
	23-24	188.5



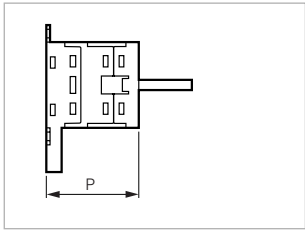
PR 26	No. of contacts	P*
	1-2	59.5
	3-4	74.5
	5-6	89.5
	7-8	104.5
	9-10	119.5
	11-12	134.5
	13-14	149.5
	15-16	164.5
	17-18	179.5
	19-20	194.5
	21-22	209.5
	23-24	224.5

* P = Depth

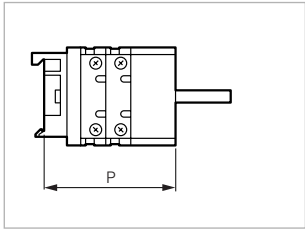
Separate cam switches

► DIMENSIONS (CONTINUED)

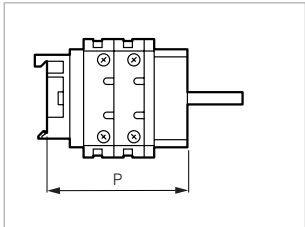
REAR MOUNTING ON DIN RAIL (SX)



PR 12	No. of contacts	P*
	1-2	36
	3-4	46
	5-6	56
	7-8	66



PR 17/21	No. of contacts	P*
	1-2	49
	3-4	61
	5-6	73
	7-8	85











PR 26	No. of contacts	P*
	1-2	52
	3-4	67
	5-6	82
	7-8	97

* P = Depth

Separate cam switches

To order your cam switch, it is essential to follow the 5-step procedure (see presentation on p. 126)
Mini cam switches are only available in standard formats.

► IV - CHOICE OF PRESENTATION

		Page
► Complete plate, frame and handle PR 12 to PR 16o		264 264
► Plate, frame and handle: other combinations Plate and frame for PR 12 to PR 16o Handles for PR 12 to PR 16o		265 265 266
► Padlockable Plate, frame and handle for PR 12 to PR 16o Clutch drive without door interlock for PR 12 to PR 16o		267 267 268
► Enclosure Compact size BPR for PR 12 Normal type BC for PR 12 to PR 26 Normal type BCF for PR 40 to PR 63		270 270 271 272
► With key locking Plate, frame and handle for PR 12 to PR 16o		274 274
► Parallel coupling of 2 switches With handle PR 12 to PR 16o		275 275
► Serial coupling of 2 switches With handle PR 12 to PR 16o		276 276
► Dual-voltage device With plate, frame and handle PR 12 to PR 26		277 277

Separate cam switches

Standard engraving (p. 286)

▶ PLATE, FRAME AND HANDLE

Type

Cat. No.



For PR 12 to PR 160

Aluminium plate + grey/black handle/long handle
Blank label
The price for the presentation includes engraving of the usual texts and symbols (engraving to be specified)

Price list code

PR 12 to PR 26

- **48 plate and frame**
- + small handle
- + duty label + small handle
- + small lever
- + Duty label + small lever

Q48PN	Q48PN50
Q480PN	Q480PN50
Q48PC	Q48PC50
Q480PC	Q480PC50

- **64 plate and frame**
- + small handle
- + duty label + small handle
- + small lever
- + Duty label + small lever

Q64PN	Q64PN50
Q640PN	Q640PN50
Q64PC	Q64PC50
Q640PC	Q640PC50

PR 40 to PR 160

- **64 plate and frame**
- + medium handle
- + duty label + medium handle
- + small lever
- + small lever

Q64MN	Q64MN60
Q640MN	Q640MN60
Q64PC	Q64PC60
Q640PC	Q640PC60

- **72 plate and frame**
- + medium handle
- + duty label + medium handle
- + small lever
- + Duty label + small lever

Q72MN	Q72MN60
Q720MN	Q720MN60
Q72PC	Q72PC60
Q720PC	Q720PC60

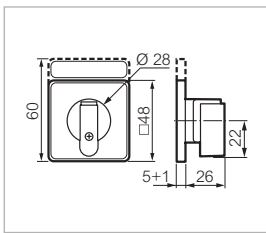
- **96 plate and frame**
- + large handle
- + large lever

Q96GN	Q96GN60
Q96GC	Q96GC60

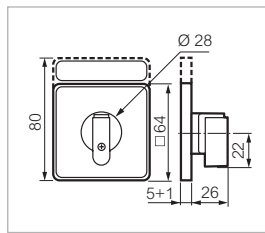
Extra charges

- Standard engraving
- Customised engraving

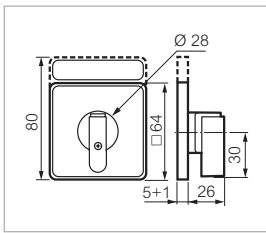
Y000
Y100



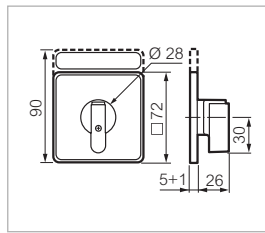
Q48PN



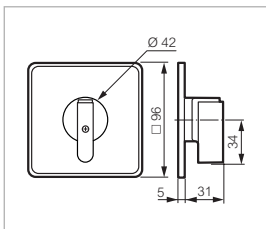
Q64PN



Q64MN



Q72MN



Q96GN

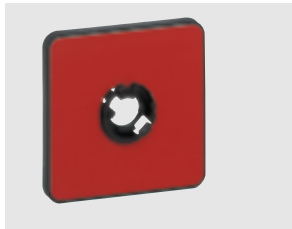
Separate cam switches

Standard engraving (p. 286)

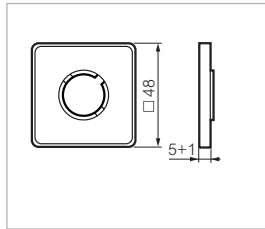
▶ PLATE AND FRAME

Other combinations

Cat. No.



Q61



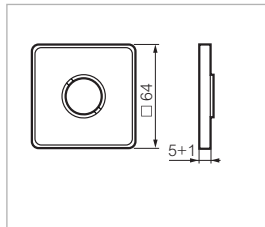
□ 48

For PR 12 to PR 160

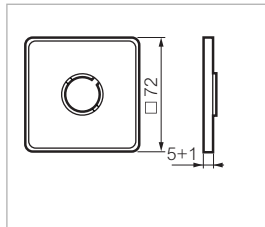
For complete presentation, add handle
The price for the presentation includes engraving of standard texts and symbols (p. 286)
Other engraving (form p. 287)
Duty label with aluminium plate



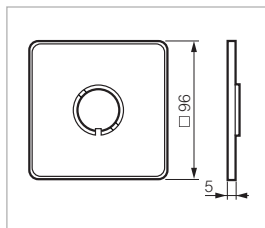
Q780



□ 64



□ 72



□ 96

□ 48 plate (PR 12 to PR 26)

- Red
- Red with duty label
- Black
- Black with duty label
- Yellow
- Yellow with duty label
- Aluminium
- Aluminium with duty label

□ 64 plate (PR 12 to PR 160)

- Red
- Red with duty label
- Black
- Black with duty label
- Yellow
- Yellow with duty label
- Aluminium
- Aluminium with duty label

□ 72 plate (PR 12 to PR 160)

- Red
- Red with duty label
- Black
- Black with duty label
- Yellow
- Yellow with duty label
- Aluminium
- Aluminium with duty label

□ 96 plate (PR 40 to PR 160)

- Red
- Black
- Yellow
- Aluminium

Price list code

Q41	Q41
Q410	Q410
Q43	Q43
Q430	Q430
Q45	Q45
Q450	Q450
Q48	Q48
Q480	Q480
Q61	Q61
Q610	Q610
Q63	Q63
Q630	Q630
Q65	Q65
Q650	Q650
Q64	Q64
Q640	Q640
Q71	Q71
Q710	Q710
Q73	Q73
Q730	Q730
Q75	Q75
Q750	Q750
Q72	Q72
Q720	Q720
Q91	Q91
Q93	Q93
Q95	Q95
Q96	Q96

Separate cam switches

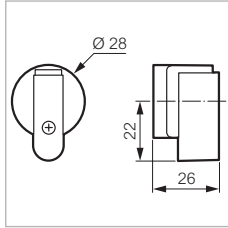
▶ HANDLES

Other combinations

Cat. No.



MN61



PN

For PR 12 to PR 160

For complete products, add plate + handle

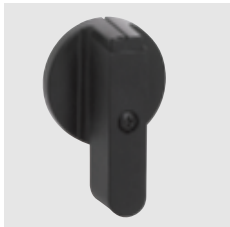
Price list code

PR 12 to PR 26

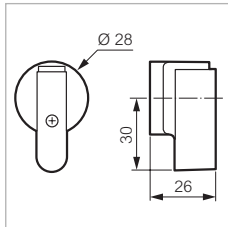
- Red - small handle
- Black - small handle
- Red - medium handle
- Black - medium handle
- Red - large handle
- Black - large handle
- Red - small lever
- Black - small lever

- PN51
- PN53
- MN51
- MN53
- GN51
- GN53
- PC51
- PC53

- PN51
- PN53
- MN51
- MN53
- GN51
- GN53
- PC51
- PC53



GN63



MN

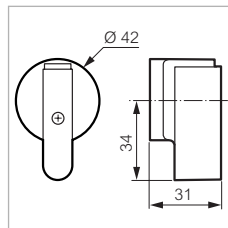
PR 40 to PR 160

- Red - medium handle
- Black - medium handle
- Red - large handle
- Black - large handle
- Red - small lever
- Black - small lever
- Red - large lever
- Black - large lever

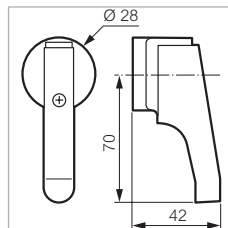
- MN61
- MN63
- GN61
- GN63
- PC61
- PC63
- GC61
- GC63

- MN61
- MN63
- GN61
- GN63
- PC61
- PC63
- GC61
- GC63

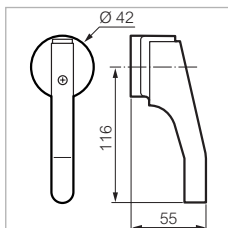
Version with foolproofing and other colours (see p. 279/280)



GN



PC

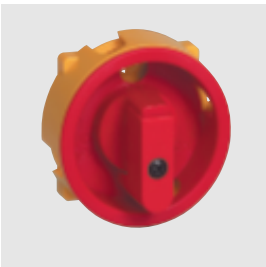
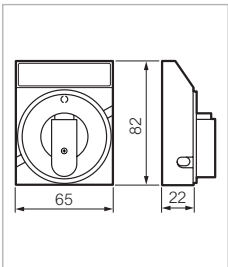

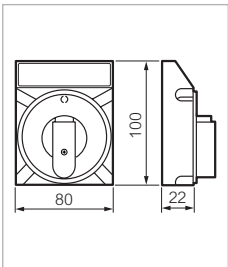
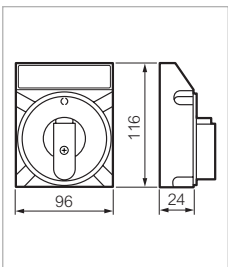
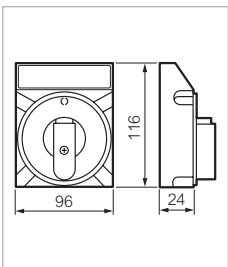
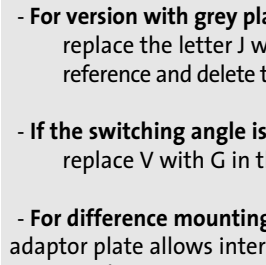
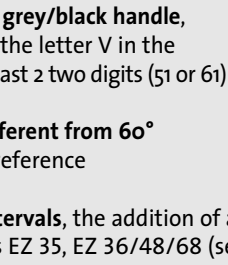
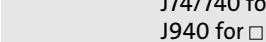
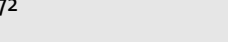


GC

Separate cam switches

Standard engraving (p. 286)

► PADLOCKABLE PRESENTATION

		Other combinations	Cat. No.	
		For PR 12 to PR 160		
		Yellow presentation, red handle for up to 4 padlocks		
J48PN51			Price list code	
PR 12 to PR 26 - Mounting 30 mm interval				
small frame □ 48,				
		Without engraving	J48PN51	J48PN51
		With engraving (state requirement)	J480PN51	J480PN51
		With engraving (Inter principal)	J481PN51	J481PN51
		With engraving (Hauptschalter)	J482PN51	J482PN51
		With engraving (Main switch)	J483PN51	J483PN51
V723MN		Medium frame □ 72,		
		Without engraving	J72MN51	J72MN51
		With engraving (state requirement)	J720MN51	J720MN51
		With engraving (Inter principal)	J721MN51	J721MN51
		With engraving (Hauptschalter)	J722MN51	J722MN51
		With engraving (Main switch)	J723MN51	J723MN51
J723MN		PR 40 to PR 160 - Mounting 50 mm interval		
Medium frame □ 72, medium red handle				
		Without engraving	J72MN61	J72MN61
		With engraving (state requirement)	J720MN61	J720MN61
		With engraving (Inter principal)	J721MN61	J721MN61
		With engraving (Hauptschalter)	J722MN61	J722MN61
		With engraving (Main switch)	J723MN61	J723MN61
J723MN61		Large frame □ 96,		
		With engraving (state requirement)	J960GN61	J960GN61
		With engraving (Inter principal)	J961GN61	J961GN61
		With engraving (Hauptschalter)	J962GN61	J962GN61
		With engraving (Main switch)	J963GN61	J963GN61
J963GN61		Extra charges		
		Standard engraving	Y000	
		Customised engraving	Y100	
		IP 65 version	Y661	
If the switching angle is different from 60°, replace J with H				

- For version with grey plate, grey/black handle,
replace the letter J with the letter V in the
reference and delete the last 2 two digits (51 or 61)

- If the switching angle is different from 60°
replace V with G in the reference

- For difference mounting intervals, the addition of an
adaptor plate allows intervals EZ 35, EZ 36/48/68 (see
p. 257/258)

The reference then becomes:

J44/440 for □ 48

J74/740 for □ 72

J940 for □ 96

Separate cam switches

Standard engraving (p. 286)

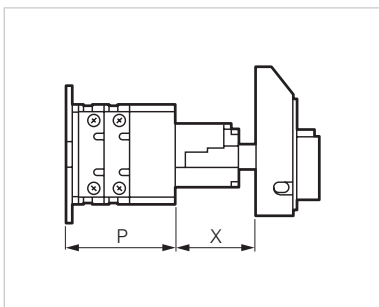
► PADLOCKABLE PRESENTATION (CONTINUED)

With clutch drive and without door interlock

Cat. No.



R5J48PN61



S mounting method (see p. 255)
 X = 45 to 65 mm (+ 31, 62 or 93 mm
 with extension piece)

For PR 12 to PR 160

Yellow presentation, red handle
 for up to 4 padlocks

Rear mounting

Price list code

PR 12 to PR 26

Small frame □ 48,
 Front mounting possible
 (A, C or D see p. 269)

Without engraving	R5J48PN61	R5J48PN61
With engraving (state requirement)	R5J480PN61	R5J480PN61
With engraving (Inter principal)	R5J481PN61	R5J481PN61
With engraving (Hauptschalter)	R5J482PN61	R5J482PN61
With engraving (Main switch)	R5J483PN61	R5J483PN61

Medium frame □ 72,
 Front mounting possible
 (A, C, D or E see p. 269)

Without engraving	R5J72MN61	R5J72MN61
With engraving (state requirement)	R5J720MN61	R5J720MN61
With engraving (Inter principal)	R5J721MN61	R5J721MN61
With engraving (Hauptschalter)	R5J722MN61	R5J722MN61
With engraving (Main switch)	R5J723MN61	R5J723MN61

If the switching angle is different from 60°:
 Replace J with H

Separate cam switches

Standard engraving (p. 286)

► PADLOCKABLE PRESENTATION (CONTINUED)

With clutch drive and without door interlock

Cat. No.

A		B		For PR 12 to PR 160	
				Yellow presentation, red handle for up to 4 padlocks	
				Rear mounting	
					Price list code
				PR 40 to PR 160	
C		D		Medium frame □ 72, Front mounting possible (B, C, D or E)	
				Without engraving	R6J72MN61
				With engraving (state requirement)	R6J720MN61
				With engraving (Inter principal)	R6J721MN61
				With engraving (Hauptschalter)	R6J722MN61
				With engraving (Main switch)	R6J723MN61
				Large frame □ 96, Front mounting possible (B, C, D, E, or G)	
E		F		With engraving (state requirement)	R6J960GN61
				With engraving (Inter principal)	R6J961GN61
				With engraving (Hauptschalter)	R6J962GN61
				With engraving (Main switch)	R6J963GN61
				Extra charges	
				Extra charge for standard engraving	Y000
				Extra charge for customised engraving	Y100
				Extra charge for IP 65 version	Y662
				Accessories	
				Adjusting clips for door alignment	WR01
				Extension piece 31 mm, for control shaft (max. 3 per switch)	WR02
				Relay terminals 16 mm ² (pair)	WR03
				Operating key, when door open	WR04
				If the switching angle is different from 60°: Replace J with H	

- For version with grey plate, grey/black handle
replace the letter J with the letter V in the
reference and delete 61

- For clutch drive with door interlock
replace the letter R with V in the reference

Separate cam switches

Standard engraving (p. 286)

► ENCLOSURE

TYPE BPR

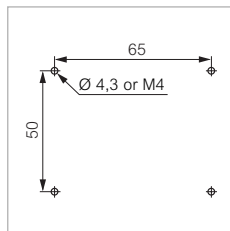
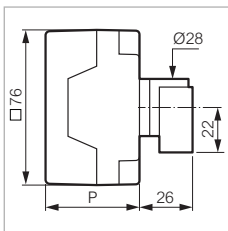
Compact size

Cat. No.



PR 12 for mounting in enclosure, special version with inverted terminals

Base mounting PR 12
Enclosure in light grey, self-extinguishing thermoplastic
IP 40
4 knock-out \varnothing 19 cable entries for Pg 11 with nut
The price for the presentation includes engraving of the standard texts and symbols



P *	Price list code	Contacts
46	BPR01	1-2 CONTACTS
58	BPR02	3-4 CONTACTS

P * = Depth

- for other legend plate colours

replace Q48 (in the reference and price list code) with:

- Q41 - \square 48 red legend plate
- Q43 - \square 48 black legend plate
- Q45 - \square 48 yellow legend plate

- for other handle colours

replace PN (in the reference) with:
PN51 - small red handle
PN53 - small black handle

PR 12 - 1 or 2 contacts

- 48 plate and frame
- Aluminium, small grey/black handle
- Yellow, padlockable presentation small red handle
- Grey, padlockable presentation, small grey-black handle

Price list code

BPR01Q48	BPRQ48PN
BPR01J	BPRJ48PN51
BPR01V	BPRV48PN

PR 12 - 3 or 4 contacts

- 48 plate and frame
- Aluminium, small grey/black handle
- Yellow, padlockable presentation small red handle
- Grey, padlockable presentation, small grey-black handle

BPR02Q48	BPRQ48PN
BPR02J	BPRJ48PN51
BPR02V	BPRV48PN

Accessories

Cable gland Pg11 with nut	CM10P	CM10P
---------------------------	-------	-------

Extra charges

Standard engraving	Y000
Customised engraving	Y100
IP 65 version	Y632

Foolproofing (see p. 291)

Separate cam switches

Standard engraving (p. 286)

► ENCLOSURE

TYPE BC

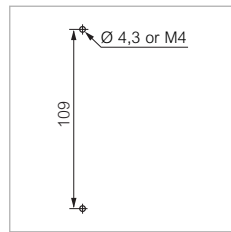
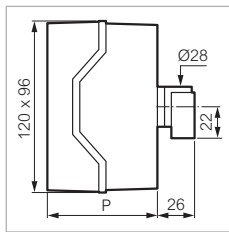
Standard size enclosure

Cat. No.



PR 12 to PR 26

Version with base mounted cam switch
Enclosure in self-extinguishing thermoplastic
black base, light grey cover
IP 40
4 knock-out \varnothing 23 cable entries for Pg 16 with nut
The price for the presentation includes engraving
standard texts and symbols



	Price list code	
PR 12 - 1 to 6 contacts		
<input type="checkbox"/> 64 plate and frame		
● Aluminium, black handle	BC21Q3	BCQ3
<input type="checkbox"/> 48 plate and frame		
● Yellow, padlockable presentation red handle	BC21J48	BCJ48
● Grey, padlockable presentation, grey/black handle	BC21V48	BCV48
PR 12 - 7 to 10 contacts		
<input type="checkbox"/> 64 plate and frame		
● Aluminium, black handle	BC22Q3	BCQ3
<input type="checkbox"/> 48 plate and frame		
● Yellow, padlockable presentation red handle	BC22J48	BCJ48
● Grey, padlockable presentation, grey/black handle	BC22V48	BCV48
PR 17-21 - 1 to 6 contacts		
PR 26 - 1 to 4 contacts		
<input type="checkbox"/> 64 plate and frame		
● Aluminium, black handle	BC23Q3	BCQ3
<input type="checkbox"/> 48 plate and frame		
● Yellow, padlockable presentation red handle	BC23J48	BCJ48
● Grey, padlockable presentation, grey/black handle	BC23V48	BCV48
PR 17-21 - 7 to 10 contacts		
PR 26 - 5 to 8 contacts		
<input type="checkbox"/> 64 plate and frame		
● Aluminium, black handle	BC24Q3	BCQ3
<input type="checkbox"/> 48 plate and frame		
● Yellow, padlockable presentation red handle	BC24J48	BCJ48
● Grey, padlockable presentation, grey/black handle	BC24V48	BCV48
Accessories		
Cable gland Pg16 with nut	CM14P	CM14P
Relay terminals (pair)	WR03	WR03
Tamperproof screw (pair)	WR05	WR05
Extra charges		
Standard engraving	Y000	
Customised engraving	Y100	
IP 65 version	Y663	

P *	Price list code	Contacts
77	BC21-23	1-6 CONTACTS (1-4 PR26)
101	BC22-24	7-10 CONTACTS (5-8 PR26)

P * = Depth

- for other colours, legend plates and handles
replace Q3 (in the reference and price list code with:
Q1 - aluminium legend plate, red handle
R1 - red legend plate, red handle
J1 - red legend plate, yellow handle
N3 - black legend plate, black handle

Separate cam switches

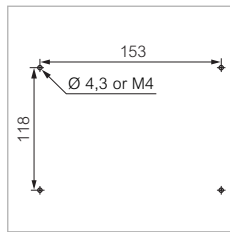
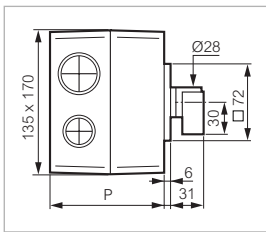
Standard engraving (p. 286)

► ENCLOSURE

TYPE BCF

Standard size enclosure

Cat. No.



PR 40 to PR 63

Version with base mounted cam switch
Enclosure in light grey, self-extinguishing thermoplastic

IP 40

10 knock-out cable entries:

6 x Ø 29 for Pg 21

(2 above and below, 1 on each side)

4 x Ø 38 for Pg 29 (1 on each side)

The price for the presentation includes engraving of the standard texts and symbols

Price list code

PR 40-63 - 1 and 2 contacts

Without presentation

□ 72 plate and frame

● Aluminium, medium grey/black handle

● Yellow, padlockable presentation

medium red handle

□ 96 plate and frame

● Aluminium, large grey/black handle

BCF140

BCF

BCF140Q72

BCFQ72MN

BCF140J72

BCFJ72MN61

BCF140Q96

BCFQ96GN

PR 40-63 - 3 and 4 contacts

Without presentation

□ 72 plate and frame

● Aluminium, medium grey/black handle

● Yellow, padlockable presentation

medium red handle

□ 96 plate and frame

● Aluminium, large grey/black handle

BCF240

BCF

BCF240Q72

BCFQ72MN

BCF240J72

BCFJ72MN61

BCF240Q96

BCFQ96GN

P	Price list code	Contacts
107	BCF140-240	1-4 CONTACTS
145	BCF340-440	5-8 CONTACTS

P * = Depth

Separate cam switches

Standard engraving (p. 286)

► ENCLOSURE

TYPE BCF (continued)

Standard size enclosure

Cat. No.



PR 40-63 - 5 and 6 contacts

Without presentation

□ 72 plate and frame

● Aluminium,
medium grey/black handle

● Yellow, padlockable presentation
medium red handle

□ 96 plate and frame

● Aluminium,
large grey/black handle

Price list code

BCF340

BCF

BCF340Q72

BCFQ72MN

BCF340J72

BCFJ72MN61

BCF340Q96

BCFQ96GN

PR 40-63 - 7 and 8 contacts

Without presentation

□ 72 plate and frame

● Aluminium,
medium grey/black handle

● Yellow, padlockable presentation
medium red handle

□ 96 plate and frame

● Aluminium,
large grey/black handle

BCF440

BCF

BCF440Q72

BCFQ72MN

BCF440J72

BCFJ72MN61

BCF440Q96

BCFQ96GN

Accessories

Cable gland Pg 21 with nut

Cable gland Pg 29 with nut

CM18P

CM18P

CM24P

CM24P

Extra charges

Standard engraving

Customised engraving

IP 55 version

Y000

Y100

Y647

Separate cam switches

Standard engraving (p. 286)

▶ KEYLOCKING DEVICE

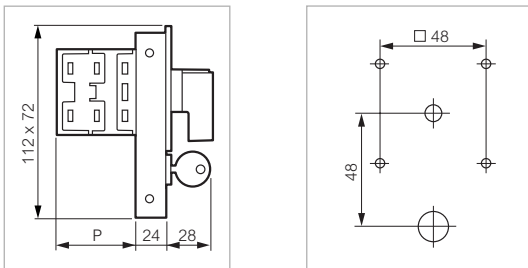
Plate and frame (quadral)

Cat. No.



For PR 12 to PR 160
For switch in front mounting mode
With keylocking

Handle locked in all positions
key no. 455
(or 1424A, state requirement on order, no extra charge)
Key can be withdrawn in locked and unlocked positions
On request, the handle can be:
- locked in certain positions (to be stated on order)
The key can be:
- withdrawn in locked position only (to be stated on order)



P *: front mounting E (p. 255)

* P = Depth

Price list code

PR 12 to PR 160

- 64 plate and frame
 - Aluminium, medium grey/black handle
- 72 plate and frame
 - Aluminium, medium grey/black handle

Q64MNC

Q64MNC

Q72MNC

Q72MNC

Extra charges

Other combinations

Y645

Foolproofing and special shaft (see p. 291)

- for other plate colours

- replace (in the reference and price list code)

Q64 with:

- Q61 - red plate
- Q63 - black plate
- Q65 - yellow plate

- replace (in the reference and price list code)

Q72 with:

- Q71 - red plate
- Q73 - black plate
- Q75 - yellow plate

- for other medium handle colours PR 12 to PR 26

- replace (in the reference and price list code)

MN with:

- MN51 - red medium handle
- MN53 - black medium handle

- for other handle colours PR 40 to PR 160

- replace (in the reference and price list code)

MN with:

- MN61 - red medium handle
- MN63 - black medium handle

Separate cam switches

Standard engraving (p. 286)

▶ PARALLEL COUPLING OF 2 SWITCHES

Plate and frame (quadral)

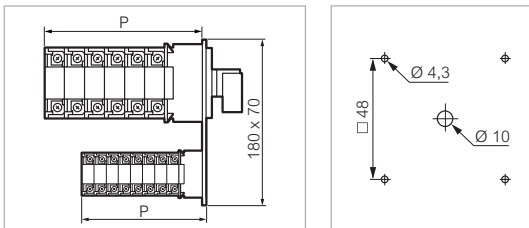
Cat. No.



For PR 12 to PR 160
For switch in front mounting mode

Applications:
- For diagrams requiring more contacts than the maximum number possible
- where there is limited depth available

There is a driving switch actuated by the handle, and a driven switch actuated by a gear train
Both switches have the same switching angle and number of positions



P*: front mounting E (p. 255)

* P = Depth

- for other plate colours, replace (in the reference and the price list code)

Q64 with:

- Q61 - red plate
- Q63 - black plate
- Q65 - yellow plate

Q72 with:

- Q71 - redplate
- Q73 - blackplate
- Q75 - yellow plate

Q96 with:

- Q91 - red plate
- Q93 - black plate
- Q95 - yellow plate

- for other handle colours, replace (in reference and price list code)

For PR 12 to PR 26, MN or PC with:

- MN51 or PC51 - red medium handle / small lever
- MN53 or PC53 - black medium handle / small lever

lever

For PR40 to PR 160, MN or PC with:

- MN61 or PC61 - red medium handle / small lever
- MN63 or PC63 - black medium handle / small lever

For PR40 to PR 160, GN or GC with:

- GN61 or GC61 - red large handle / large lever
- GN63 or GC63 - black large handle / large lever

Price list code

PR 12 to PR 160

Driving switch presentation

- 64 plate and frame
 - Aluminium, medium grey/black handle
- 72 plate and frame
 - Aluminium, medium grey/black handle
- 96 plate and frame
 - Aluminium, large grey/black handle

Q64MNAP

Q64MNAP

Q72MNAP

Q72MNAP

Q96GNAP

Q96GNAP

Extra charges

Foolproofing and special shaft (see p. 291)

Possibility of coupling 2 cam switches in parallel:

Driven switch	Driving switch				
	PR 12	PR 17 - PR 21	PR 26	PR 40 - PR 63	PR 125 - PR 160
PR 12	X	X	X	X	X
PR 17 - PR 21		X	X	X	X
PR 26			X	X	X
PR 40 - PR 63				X	

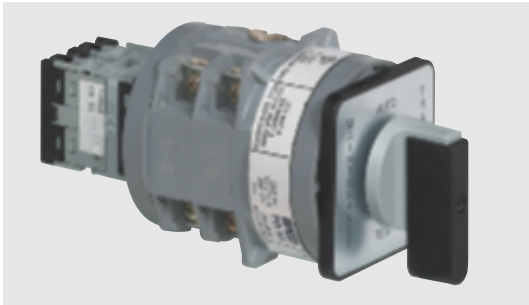
Separate cam switches

Standard engraving (p. 286)

► SERIAL COUPLING OF 2 SWITCHES

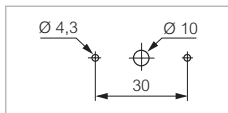
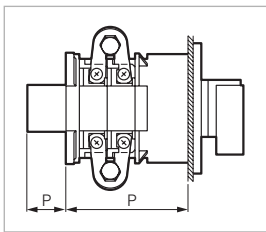
Plate and frame (quadral)

Cat. No.

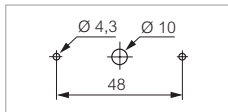


For PR 12 to PR 160
For switch in front mounting mode

Applications:
- for very different current circuits
- limited to 12 contact stages in total
(1 PR stage 125-160 = 2 stages)
There is a driving switch actuated by the handle,
and a driven switch
Both switches have the same switching angle and number of positions



PR 12 to PR 26



PR 40 to PR 160

P*: see front mounting E (p. 255)

* P = Depth

- for other plate colours, replace (in the reference and the price list code)

Q64 with:

- Q61 - red plate
- Q63 - black plate
- Q65 - yellow plate

Q72 with:

- Q71 - red plate
- Q73 - blackplate
- Q75 - yellow plate

Q96 with:

- Q91 - red plate
- Q93 - black plate
- Q95 - yellow plate

- for other handle colours, replace (in reference and price list code)

For PR 12 to PR 26, MN or PC with:

- MN51 or PC51 - red medium handle / small lever
- MN53 or PC53 - black medium handle / small lever

lever

For PR40 to PR 160, MN or PC with:

- MN61 or PC61 - red medium handle / small lever
- MN63 or PC63 - black medium handle / small lever

For PR40 to PR 160, GN or GC with:

- GN61 or GC61 - red large handle / large lever
- GN63 or GC63 - black large handle / large lever

Price list code

PR 12 to PR 160

Driving switch presentation

- 64 plate and frame
 - Aluminium, medium grey/black handle
- 72 plate and frame
 - Aluminium, medium grey/black handle
- 96 plate and frame
 - Aluminium, large grey/black handle

Q64MNAS

Q64MNAS

Q72MNAS

Q72MNAS

Q96GNAS

Q96GNAS

Extra charges

Foolproofing and special shaft (see p. 291)

Possibility of coupling 2 cam switches in series:

Driven switch	Driving switch				
	PR 12	PR 17 - PR 21	PR 26	PR 40 - PR 63	PR 125 - PR 160
PR 12		X	X	X	X
PR 17 - PR 21			X	X	X
PR 26				X	X
PR 40 - PR 63					X

Separate cam switches

Standard engraving (p. 286)

► DUAL-VOLTAGE DEVICE

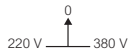
Plate and frame (quadral)

Cat. No.

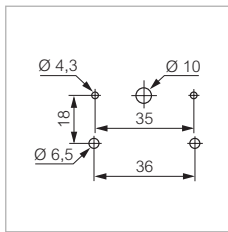
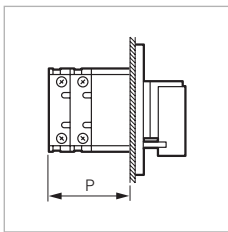


For PR 12 to PR 26
For switch in front mounting mode

Applications:
For locking the handle in the right or left position,
to prevent wrong switching



Example: Off position in the middle
and max. 90° rotation
to right or left



P*: see front mounting E (p. 255)

* P = Depth

- for other plate colours, replace (in the reference and the price list code)

EZS64 with:

- EZS61 - red plate
- EZS63 - black plate
- EZS65 - yellow plate

EZS72 with:

- EZS71 - red plate
- EZS73 - black plate
- EZS75 - yellow plate

- for other medium handle colours, replace (in reference and price list code)

MN with:

- MN51 - red medium handle
- MN53 - black medium handle

Price list code

PR 12

Dual-voltage device
with □ 64 plate and frame
● Aluminium,
medium grey/black handle

EZS64MN

EZS64MN

PR 17-21 and PR 26

Dual-voltage device
with □ 72 plate and frame
● Aluminium,
medium grey/black handle

EZS72MN

EZS72MN

Extra charges


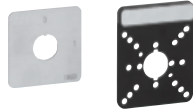
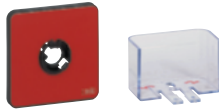

Foolproofing and special shaft (see p. 291)

Separate cam switches

To order your cam switch, it is essential to follow the 5-step procedure (see presentation on p. 126)
Mini cam switches are only available in standard formats.

► V - OPTIONS AND COMPONENTS

FUNCTIONS

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Separate cam switches

▶ HANDLES

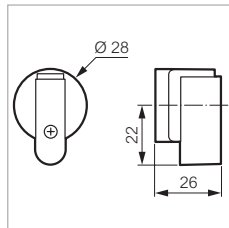
HANDLES

FOR PR 12 TO PR 26

Cat. No.



PN50



PN

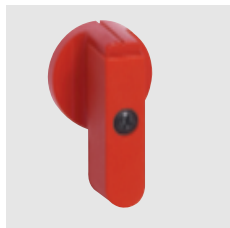
For □ 5 shaft

Small handle

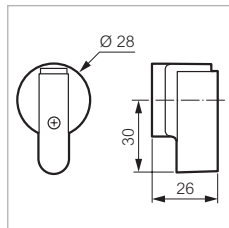
- Grey-black, without foolproofing
- Grey-black, with foolproofing
- Red, without foolproofing
- Red, with foolproofing
- Black, without foolproofing
- Black, with foolproofing

Price list code

PN50	PN50
PND50	PND50
PN51	PN51
PND51	PND51
PN53	PN53
PND53	PND53



MN51

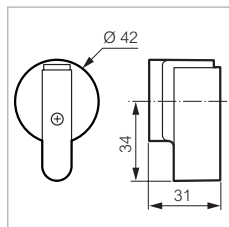


MN

Medium handle

- Grey-black, without foolproofing
- Grey-black, with foolproofing
- Red, without foolproofing
- Red, with foolproofing
- Black, without foolproofing
- Black, with foolproofing

MN50	MN50
MND50	MND50
MN51	MN51
MND51	MND51
MN53	MN53
MND53	MND53



GN

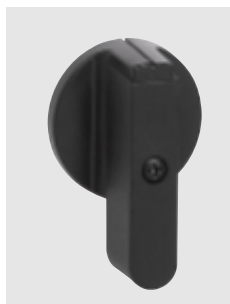
Large handle

- Grey-black, without foolproofing
- Grey-black, with foolproofing
- Red, without foolproofing
- Red, with foolproofing
- Black, without foolproofing
- Black, with foolproofing

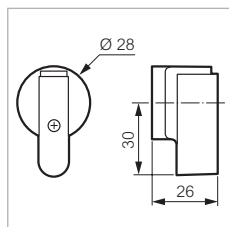
GN50	GN50
GND50	GND50
GN51	GN51
GND51	GND51
GN53	GN53
GND53	GND53

FOR PR 40 TO PR 160

Cat. No.



GN63



MN

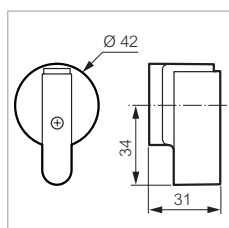
For □ 6 shaft

Medium handle

- Grey-black, without foolproofing
- Grey-black, with foolproofing
- Red, without foolproofing
- Red, with foolproofing
- Black, without foolproofing
- Black, with foolproofing

Price list code

MN60	MN60
MND60	MND60
MN61	MN61
MND61	MND61
MN63	MN63
MND63	MND63



GN

Large handle

- Grey-black, without foolproofing
- Grey-black, with foolproofing
- Red, without foolproofing
- Red, with foolproofing
- Black, without foolproofing
- Black, with foolproofing

GN60	GN60
GND60	GND60
GN61	GN61
GND61	GND61
GN63	GN63
GND63	GND63

Separate cam switches

▶ LEVERS

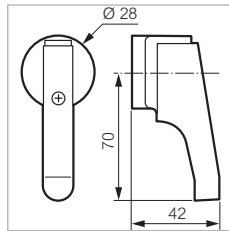
LEVERS

For PR 12 to PR 40

Cat. No.



PC50



PC

For □ 5 shaft

Small levers

- Grey-black, without foolproofing
- Grey-black, with foolproofing
- Red, without foolproofing
- Red, with foolproofing
- Black, without foolproofing
- Black, with foolproofing

Price list code

Price list code	Cat. No.
PC50	PC50
PCD50	PCD50
PC51	PC51
PCD51	PCD51
PC53	PC53
PCD53	PCD53

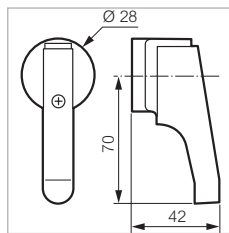
LEVERS

For PR 40 to PR 160

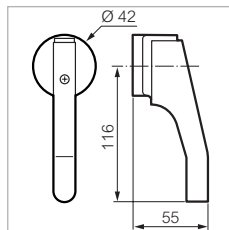
Cat. No.



PC60



PC



GC

For □ 6 shaft

Small levers

- Grey-black, without foolproofing
- Grey-black, with foolproofing
- Red, without foolproofing
- Red, with foolproofing
- Black, without foolproofing
- Black, with foolproofing

Price list code

Price list code	Cat. No.
PC60	PC60
PCD60	PCD60
PC61	PC61
PCD61	PCD61
PC63	PC63
PCD63	PCD63

Large levers

- Grey-black, without foolproofing
- Grey-black, with foolproofing
- Red, without foolproofing
- Red, with foolproofing
- Black, without foolproofing
- Black, with foolproofing

Price list code	Cat. No.
GC60	GC60
GCD60	GCD60
GC61	GC61
GCD61	GCD61
GC63	GC63
GCD63	GCD63

Separate cam switches

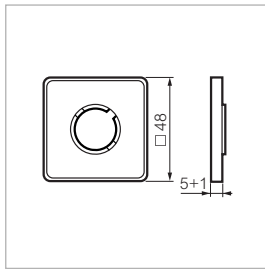
Standard engraving (p. 286)

▶ PLATES

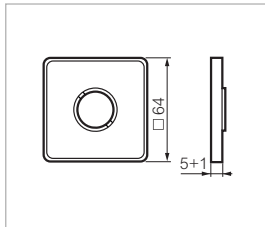
Cat. No.



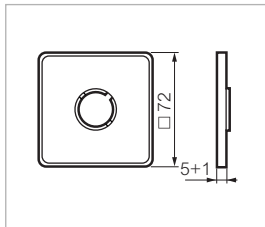
WE70000



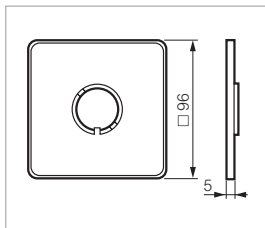
□ 48



□ 64



□ 72



□ 96

Fit onto frame and onto one-hole mounting \varnothing 22 head (except □ 96)

Price list code

□ 48

- Aluminium
- Red
- Black
- Yellow
- Transparent

WE40	WE40
WE41	WE41
WE43	WE43
WE45	WE45
WE47	WE47

- Aluminium - with engraving
- Red - with engraving
- Black - with engraving
- Yellow - with engraving
- Transparent - with engraving

WE40000	WE40000
WE41000	WE41000
WE43000	WE43000
WE45000	WE45000
WE47000	WE47000

□ 64

- Aluminium
- Red
- Black
- Yellow
- Transparent

WE60	WE60
WE61	WE61
WE63	WE63
WE65	WE65
WE67	WE67

- Aluminium - with engraving
- Red - with engraving
- Black - with engraving
- Yellow - with engraving
- Transparent - with engraving

WE60000	WE60000
WE61000	WE61000
WE63000	WE63000
WE65000	WE65000
WE67000	WE67000

□ 72

- Aluminium
- Red
- Black
- Yellow
- Transparent

WE70	WE70
WE71	WE71
WE73	WE73
WE75	WE75
WE77	WE77

- Aluminium - with engraving
- Red - with engraving
- Black - with engraving
- Yellow - with engraving
- Transparent - with engraving

WE70000	WE70000
WE71000	WE71000
WE73000	WE73000
WE75000	WE75000
WE77000	WE77000

□ 96

- Aluminium
- Red
- Black
- Yellow

WE90	WE90
WE91	WE91
WE93	WE93
WE95	WE95

- Aluminium - with engraving
- Red - with engraving
- Black - with engraving
- Yellow - with engraving


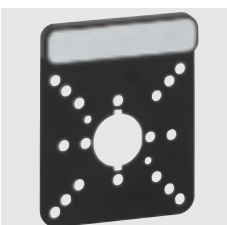

WE90000	WE90000
WE91000	WE91000
WE93000	WE93000
WE95000	WE95000

For version with engraving see form (p. 287)

Separate cam switches

Standard engraving (p. 286)

▶ PLATES, DUTY LABELS AND FRAMES

PLATES	Cat. No.																		
 <p>UF36</p>	<p>For single hole mounting \varnothing 30 Aluminium legend</p> <p>Price list code</p> <table> <tr> <td><input type="checkbox"/> 48</td> <td>UF36</td> <td>UF36</td> </tr> <tr> <td>● Black plate</td> <td>UF36000</td> <td>UF36000</td> </tr> <tr> <td>● Black plate - with engraving</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> 64</td> <td>UF38</td> <td>UF38</td> </tr> <tr> <td>● Black plate</td> <td>UF38000</td> <td>UF38000</td> </tr> <tr> <td>● Black plate - with engraving</td> <td></td> <td></td> </tr> </table>	<input type="checkbox"/> 48	UF36	UF36	● Black plate	UF36000	UF36000	● Black plate - with engraving			<input type="checkbox"/> 64	UF38	UF38	● Black plate	UF38000	UF38000	● Black plate - with engraving		
<input type="checkbox"/> 48	UF36	UF36																	
● Black plate	UF36000	UF36000																	
● Black plate - with engraving																			
<input type="checkbox"/> 64	UF38	UF38																	
● Black plate	UF38000	UF38000																	
● Black plate - with engraving																			
<p>DUTY LABELS</p>  <p>Q072</p>	<p>To be used with frame</p> <p>Price list code</p> <table> <tr> <td><input type="checkbox"/> 48</td> <td>Q048</td> <td>Q048</td> </tr> <tr> <td><input type="checkbox"/> 64</td> <td>Q064</td> <td>Q064</td> </tr> <tr> <td><input type="checkbox"/> 72</td> <td>Q072</td> <td>Q072</td> </tr> <tr> <td>○ Transparent insert (only for Qo48)</td> <td>IF7</td> <td>IF7</td> </tr> <tr> <td>● Aluminium insert (only for Qo48)</td> <td>IF9</td> <td>IF9</td> </tr> </table>	<input type="checkbox"/> 48	Q048	Q048	<input type="checkbox"/> 64	Q064	Q064	<input type="checkbox"/> 72	Q072	Q072	○ Transparent insert (only for Qo48)	IF7	IF7	● Aluminium insert (only for Qo48)	IF9	IF9			
<input type="checkbox"/> 48	Q048	Q048																	
<input type="checkbox"/> 64	Q064	Q064																	
<input type="checkbox"/> 72	Q072	Q072																	
○ Transparent insert (only for Qo48)	IF7	IF7																	
● Aluminium insert (only for Qo48)	IF9	IF9																	
<p>FRAMES</p>  <p>CQ64</p>	<p>Cat. No.</p> <p>Price list code</p> <table> <tr> <td>Frame</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> 48</td> <td>CQ48</td> <td>CQ48</td> </tr> <tr> <td><input type="checkbox"/> 64</td> <td>CQ64</td> <td>CQ64</td> </tr> <tr> <td><input type="checkbox"/> 72</td> <td>CQ72</td> <td>CQ72</td> </tr> <tr> <td><input type="checkbox"/> 96</td> <td>CQ96</td> <td>CQ96</td> </tr> </table>	Frame			<input type="checkbox"/> 48	CQ48	CQ48	<input type="checkbox"/> 64	CQ64	CQ64	<input type="checkbox"/> 72	CQ72	CQ72	<input type="checkbox"/> 96	CQ96	CQ96			
Frame																			
<input type="checkbox"/> 48	CQ48	CQ48																	
<input type="checkbox"/> 64	CQ64	CQ64																	
<input type="checkbox"/> 72	CQ72	CQ72																	
<input type="checkbox"/> 96	CQ96	CQ96																	

Separate cam switches

Standard engraving (p. 286)
Dimensions (p. 265)

▶ PLATES + FRAMES


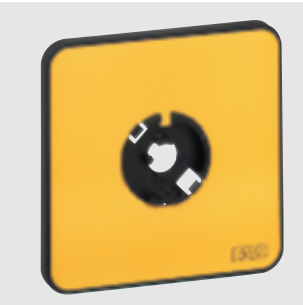

	Plate + frame		Cat. No.
	<p>□ 48</p> <ul style="list-style-type: none"> ● Aluminium ● Red ● Black ● Yellow 	<p>Price list code</p>	
			<p>Q48 Q48</p> <p>Q41 Q41</p> <p>Q43 Q43</p> <p>Q45 Q45</p>
Q61			
	<p>□ 64</p> <ul style="list-style-type: none"> ● Aluminium ● Red ● Black ● Yellow 	<p>Q64 Q64</p> <p>Q61 Q61</p> <p>Q63 Q63</p> <p>Q65 Q65</p>	
			<p>Q64 Q64</p> <p>Q61 Q61</p> <p>Q63 Q63</p> <p>Q65 Q65</p>
Q95			
	<p>□ 72</p> <ul style="list-style-type: none"> ● Aluminium ● Red ● Black ● Yellow 	<p>Q72 Q72</p> <p>Q71 Q71</p> <p>Q73 Q73</p> <p>Q75 Q75</p>	
			<p>Q72 Q72</p> <p>Q71 Q71</p> <p>Q73 Q73</p> <p>Q75 Q75</p>
	<p>□ 96</p> <ul style="list-style-type: none"> ● Aluminium ● Red ● Black ● Yellow 	<p>Q96 Q96</p> <p>Q91 Q91</p> <p>Q93 Q93</p> <p>Q95 Q95</p>	
			<p>Q96 Q96</p> <p>Q91 Q91</p> <p>Q93 Q93</p> <p>Q95 Q95</p>

	Plate + frame + duty label		Cat. No.
	<p>With aluminium duty label</p>	<p>Price list code</p>	
			<p>□ 48</p> <ul style="list-style-type: none"> ● Aluminium ● Red ● Black ● Yellow
Q720			
	<p>□ 64</p> <ul style="list-style-type: none"> ● Aluminium ● Red ● Black ● Yellow 	<p>Q640 Q640</p> <p>Q610 Q610</p> <p>Q630 Q630</p> <p>Q650 Q650</p>	
			<p>Q640 Q640</p> <p>Q610 Q610</p> <p>Q630 Q630</p> <p>Q650 Q650</p>
	<p>□ 72</p> <ul style="list-style-type: none"> ● Aluminium ● Red ● Black ● Yellow 	<p>Q720 Q720</p> <p>Q710 Q710</p> <p>Q730 Q730</p> <p>Q750 Q750</p>	
			<p>Q720 Q720</p> <p>Q710 Q710</p> <p>Q730 Q730</p> <p>Q750 Q750</p>

Separate cam switches

▶ PLATE + FRAME + DUTY LABEL

Ø 22 MOUNTING

Frame + legend plate

Cat. No.



N480

With aluminium duty label
Plate and frame for single hole mounting Ø 22 presentation
Max. panel thickness: 1.5 mm

Price list code

48

Aluminium

N480

N480

▶ TERMINAL COVERS

Cat. No.



CB4

For PR 12 to PR 160
Insulating material for switch with 4 contacts max.
Transparent material for PR 12 to PR 63
Opaque material for PR 125-160

With rear mounting the terminal cover is fixed in S mode (p. 254) with:

- for PR 12 to PR 26: 2 screws
- for PR 40 to PR 160: 2 screws

With front mounting, the terminal cover is fixed in E mode (p. 250) with:

- for PR 12: 2 screws supplied
- for PR 17 to PR 63: 2 special nuts supplied
- for PR 125 and PR 160: 2 H4 nuts supplied

Price list code

PR 12	CB4N	CB4
PR 17	CB3D	CB3
PR 21	CB3F	CB3
PR 26	CB3E	CB3
PR 40	CB5H	CB5
PR 63	CB5I	CB5
PR 125-160	CB6L	CB6

Terminal covers

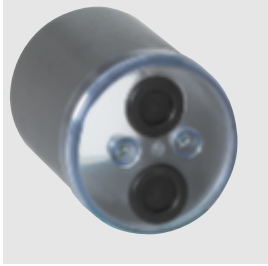
PR 40-63 CB8 CB8

Pair of terminal covers in insulating material providing IP 20 protection of 2 electrical contacts located on 1 coil (provide the same number of pairs of terminal covers as coils)
Clip into place after electrical connection of the terminals

Separate cam switches

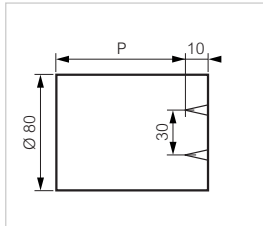
► REAR PROTECTIVE SHROUD

Cat. No.

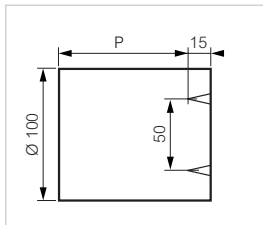


CA41N *

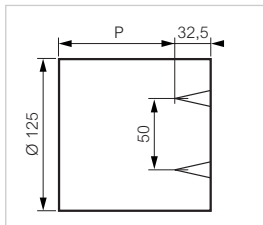
* Length of shroud to be stated when ordering the cam switch only



PR 12



PR 17 to PR 26



PR 40 to PR 63

For PR 12 to PR 63

Composition:

- Grey insulating body
- Transparent insulating cover
- IP 40 - protection against direct finger contact
- IP 55 - protection against splashing water
- PR 12 - the shroud fits on 1 standard type E switch
- PR 17 to PR 63 - the shroud must be specified when ordering the switch (rear mounting on a special plate)

Price list code

PR 12 - 1 to 12 contacts

IP 40	CA41N	CA41N
IP 55	CAE41N	CAE41N

PR 12 - 13 to 24 contacts

IP 40	CA42N	CA42N
IP 55	CAE42N	CAE42N

PR 17-21 - 1 to 12 contacts

IP 40	CA10D	CA10D
IP 55	CAE10D	CAE10D

PR 17-21 - 13 to 24 contacts

IP 40	CA11D	CA11D
IP 55	CAE11D	CAE11D

PR 26 - 1 to 12 contacts

IP 40	CA20F	CA20F
IP 55	CAE20F	CAE20F

PR 26 - 13 to 24 contacts

IP 40	CA21F	CA21F
IP 55	CAE21F	CAE21F

PR 40-63 - 1 to 12 contacts

IP 40	CA30I	CA30I
IP 55	CAE30I	CAE30I

PR 40-63 - 13 to 24 contacts

IP 40	CA31I	CA31I
IP 55	CAE31I	CAE31I

Plastic cable gland

Pg 16 for PR 12 to PR 21	CM14P	CM14P
Pg 21 for PR 26	CM18P	CM18P
Pg 29 for PR 40-63	CM24P	CM24P

Number of contacts	Depth (P)					
	PR 12	PR 17	PR 21	PR 26	PR 40	PR 63
1-2	42	45	45	48	74	74
3-4	52	57	57	63	94	94
5-6	62	69	69	78	114	114
7-8	72	81	81	93	134	134
9-10	82	93	93	108	154	154
11-12	92	105	105	123	174	174
13-14	128	117	117	138		
15-16	138	129	129	153		
17-18	148	141	141	168		
19-20	158	153	153	183		
21-22	168	165	165	198		
23-24	178	177	177	213		

Separate cam switches

To order engravings, fill in the form (p. 287)
 To price a switch with customised engraving, please contact us

▶ ENGRAVING

STANDARD ENGRAVING

These are engraving according to switching angle (as illustrated plates on p. 216)
 These standard engravings are not invoiced, the charge is included in the price for the plate or duty label

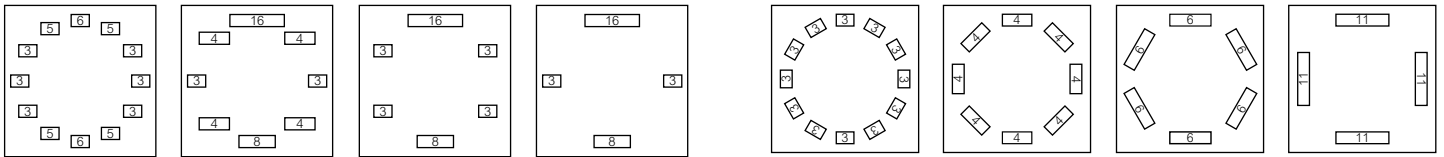
CUSTOMISED ENGRAVING

These are all the alphanumeric engravings (excluding logos, drawings, symbols) which are defined by the following parameters



- For square legend plates:** type WE40 to WE95 (p. 281)
type UF36, UF38 (p. 284)
- For square legend plates:** type Q41 to Q96 (p. 281)

- Maximum number of alphanumeric characters per position:



- Character height:

- 48 : 3 mm; 64: 4 mm; 72: 4.5 mm; 96: 6 mm

The engraving is laser-etched or silk-screen printed according to type

- Colour of engraving:

Black on aluminium and yellow plate
 White on red and black plate

For duty labels: type Q048, Q064 and Q072 (p. 282)

- Maximum number of characters:

per line: 13

Maximum number of lines: 2

- Character height

- 48 : 3 mm ; 64: 4 mm ; 72: 4.5 mm

- Colour of engraving:

Black on aluminium plate

Special engravings:

These are engravings not covered by the technical parameters used for creating standard engravings and which therefore require a special execution.

This applies to all alphanumeric engravings outside the limits defined above, and also logos, drawings or symbols



Separate cam switches

Please specify the spring return on the form (p. 287)

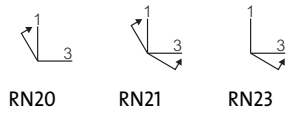
▶ AUTOMATIC SPRING RETURN

REDUCED TYPE RN

Cat. No.



For PR 12
This device makes it possible to incorporate spring returns without extra charge and without increasing switch dimension
Number of spring return contacts per position: max. 2



Price list code

PR 12	-	RNxx(1)
(1) Complete according to spring return chosen opposite		

NORMAL TYPE R

Cat. No.

30°



For PR 12 to PR 63
This device makes it possible to incorporate spring returns without increasing switch dimensions
The maximum number of contacts per spring return position varies according to the rating
The spring return positions are always at 30°
The switching angle is at 30°-45°-90° (for PR 12 to PR 26)
The switching angle is at 45°-90° (for PR 40 and PR 63)

45°

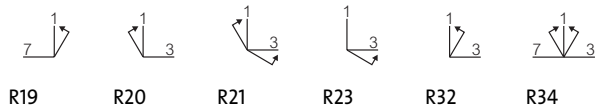


Price list code

PR 12 (4 spring return contacts)	Y652	Rxx(1)
PR 17 (4 spring return contacts)	Y639	Rxx(1)
PR 21 (4 spring return contacts)	Y639	Rxx(1)
PR 26 (4 spring return contacts)	Y639	Rxx(1)
PR 40 (2 spring return contacts)	Y640	Rxx(1)
PR 63 (2 spring return contacts)	Y640	Rxx(1)

(1) Complete according to spring return chosen opposite

90°



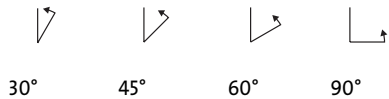
Separate cam switches

Please specify the spring return on the form (p. 287)

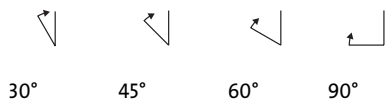
► AUTOMATIC SPRING RETURN (CONTINUED)

SPECIAL REINFORCED TYPE RS

Cat. No.



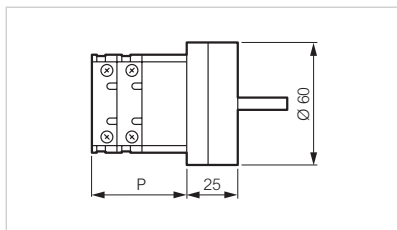
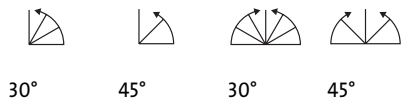
For PR 12 to PR 26
For E or S mounting
Modified sizing
Enables greater number of spring return contacts per position than with standard "R" spring return
Spring returns possible with pass-through contact



PR 12 to PR 26

Price list code

Y626 RS

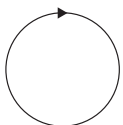


E and S mounting methods (see p. 255)

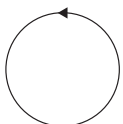
► MISCELLANEOUS VERSIONS

ONE-WAY ROTATION (SRO)

Cat. No.



SRO to the right



SRO to the left

For PR 12 to PR 160
This device makes it impossible to turn the handle in the opposite direction to the one stipulated
Available for switching angles 90°, 60° and 45°
No change to switch dimensions

Price list code

PR 12	Y649	(1)
PR 17 to PR 26	Y642	(1)
PR 40 to PR 160	Y643	(1)

(1) No reference, write "direction of rotation to xxx" in the designation

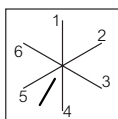
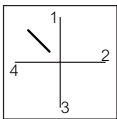
Separate cam switches

► MISCELLANEOUS VERSIONS (CONTINUED)

BLOCKING-OFF BETWEEN 2 POSITIONS

Cat. No.

Examples



For PR 12 to PR 160
 This device prevents the switch being turned between 2 consecutive positions.
 Indicate which positions (see form on p. 287)
 Available for switching angles 90° and 60°
 No change to switch dimensions
 Not compatible with one-way rotation device (SRO)

	Price list code	
PR 12	-	(1)
PR 17 to PR 26	Y634	(1)
PR 40 to PR 160	Y635	(1)

(1) No reference, write “blocking-off between X and X” in the designation

TROPICALISED VERSION

Cat. No.

For PR 12 to PR 160
 (standard on the PR 12)
 The cost of this version is calculated as a fixed charge per switch and a variable extra charge (multiplied by the number of contacts)

	Price list code	
PR 12	-	-
PR 17	Y 562 + (Y563 x no. of contacts)	(1)
PR 21	Y 564 + (Y565 x no. of contacts)	(1)
PR 26	Y 566 + (Y567 x no. of contacts)	(1)
PR 40	Y 570 + (Y571 x no. of contacts)	(1)
PR 63	Y 572 + (Y573 x no. of contacts)	(1)
PR 125	Y 578 + (Y579 x no. of contacts)	(1)
PR 160	Y 580 + (Y581 x no. of contacts)	(1)

(1) No reference, write “tropicalised” in the designation

FASTON TERMINALS

Cat. No.

For PR 12 to PR 26
 Terminals 6.35 (and/or 2 x 2.8 for PR 12)
 Multiply the extra charge by the number of terminals

	Price list code	
PR 12	Y653 (per terminal)	(1)
PR 17 to PR 26	Y620 (per terminal)	(1)

(1) No reference, write out the text and the terminal positions in full in the designation

Separate cam switches

► MISCELLANEOUS VERSIONS (CONTINUED)

REINFORCED IP RATING

Cat. No.

Standard IP rating - IP 40

Price list code

IP 55

For PR 12	Y651	(1)
For PR 17 to PR 160	Y627	(1)
For PR 40-63 (in BCF enclosure)	Y647	(1)

IP 65

For PR 12 to PR 160	Y632	(1)
For PR 12 (in BPR enclosure)	Y632	(1)
For PR 12 to PR 26 (in BC enclosure)	Y663	(1)
For PR 12 to PR 160 (with padlockable presentation)	Y661	(1)
For PR 12 to PR 160 (clutch drive + frame)	Y662	(1)
For PR 12 (∅ 22 mounting)	Y667	(1)

(1) No reference, write:
"IPxx" in the designation

SPECIAL SHAFTS

Cat. No.

Price list code

Shaft with foolproof profile 

For PR 12 (E-EZ mounting) ≤ 12 contacts foolproofed shaft	-	D
For PR 17 to PR 160 and PR 12 (other mounting than those below)	Y613	D

Special dimension shaft

Standard dimension - PR 12 to PR 26 = 26 mm - PR 40 to PR 160 = 27 mm		
For PR 12 to PR 160	Y617	(1)

(1) No reference, write:
"shaft dimension xx"
(size of projection in mm)

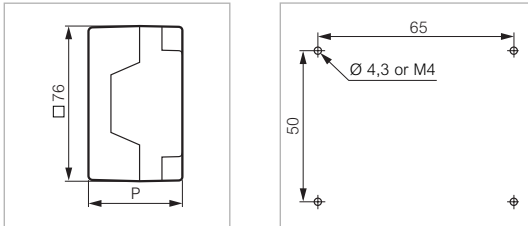
Separate cam switches

▶ EMPTY ENCLOSURES

TYPE BPR

For PR12*

Cat. No.



Technical specifications (p. 270)
Delivered with blank aluminium plate
Possibility to use a padlockable presentation

Price list code

For PR 12 -1-2 contacts
For PR 12 -3-4 contacts

BPR01
BPR02

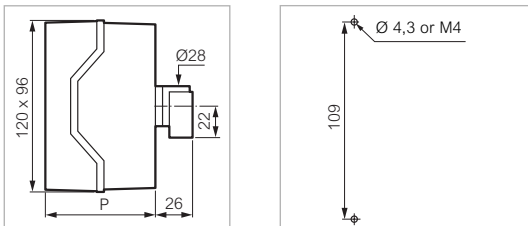
BPR01
BPR02

P *	Price list code	Contacts
46	BPR01	1-2 CONTACTS
58	BPR02	3-4 CONTACTS

P * = Depth

TYPE BC

Cat. No.



Technical specifications (p. 271)
With a 64 blank aluminium plate and a black handle
(see p. 271 for enclosure customisation)
for PR 12* to PR 26 mounting, bare shaft version

Price list code

For PR 12 -1-2 contacts
For PR 12 -3-6 contacts
For PR 12 - 7-10 contacts
For PR 17-21 -1-2 contacts
For PR 17-21 -3-6 contacts
For PR 17-21 - 7-10 contacts
For PR 26 -1-2 contacts
For PR 26 -3-4 contacts
For PR 26 -5-6 contacts
For PR 26 - 7-8 contacts

BC05Q3
BC06Q3
BC07Q3
BC11Q3
BC12Q3
BC13Q3
BC14Q3
BC15Q3
BC16Q3
BC13Q3

BC05Q3
BC06Q3
BC07Q3
BC11Q3
BC12Q3
BC13Q3
BC14Q3
BC15Q3
BC16Q3
BC13Q3

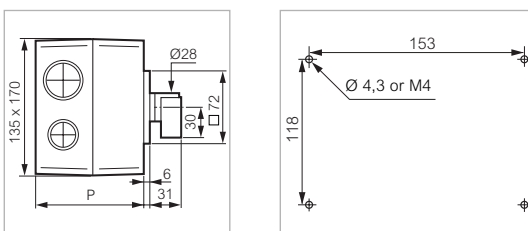
P *	Price list code	Contacts
77	BC01-02-0-06 11-12-14-15	1-6 CONTACTS (1-4 PR26)
101	BC03-04-07 13-16	7-10 CONTACTS (5-8 PR26)

P * = Depth

* Switch version with terminals reversed

TYPE BCF

Cat. No.



For PR40-63
Technical specifications (p. 272)
Delivered with a complete
72-96 plate and frame
or padlockable presentation

Price list code

For PR 40-63 -1-2 contacts
For PR 40-63 -3-4 contacts
For PR 40-63 -5-6 contacts
For PR 40-63 - 7-8 contacts

BCF140
BCF240
BCF340
BCF440

BCF140
BCF240
BCF340
BCF440

P *	Price list code	Contacts
107	BCF140-240	1-4 CONTACTS
145	BCF340-440	5-8 CONTACTS

P * = Depth

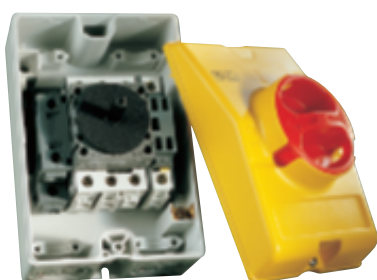
Switch disconnectors

A modular and flexible range



Contact gap
7 mm
(norm >5.5 mm)

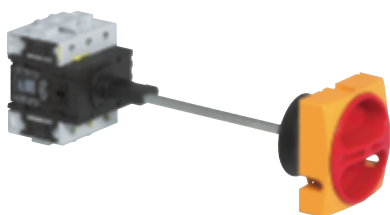
**Reversible
terminal feature**



► IN ENCLOSURE

- Degree of protection: up to IP 66
- For 25A to 100A size switches (see lthe (A) p. 316)
- Cable entries with pre-formed knockouts
- Tamper-proof cover with padlockable handle
- Recessed area for optional plate
- A wide choice of associated contact blocks and enclosures versions available

Pages 299 and 305



► WITH CLUTCH DRIVE

- Metal cuttable shafts
- With or without door interlock system
- Short or long metal shaft available

Pages 298 and 303

Complete switch disconnectors 20 A

IP 40 as standard, IP 65 on request



Characteristics (p. 316)

▶ FRONT MOUNTING

PADLOCKABLE PRESENTATION

Cat. No.



172921

20 A - non-reversible terminals

3P

3P+NC/NO(1)

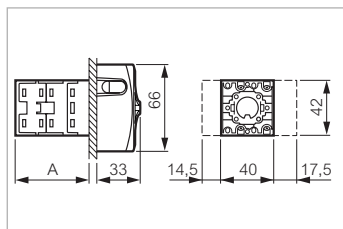
4P

172901

172911

172921

(1) Padlock with \varnothing 6 to 8 mm



Dimensions

A: 46 (3P/4P)

56 (3P+NC/NO)

ACCESSORIES

Cat. No.



172945

IP65 seal kit

For front mounting with screws

172945

Terminal covers

For front mounting with screws

172965

Complete switch disconnectors 25 to 100 A

IP 40 as standard, IP 65 on request

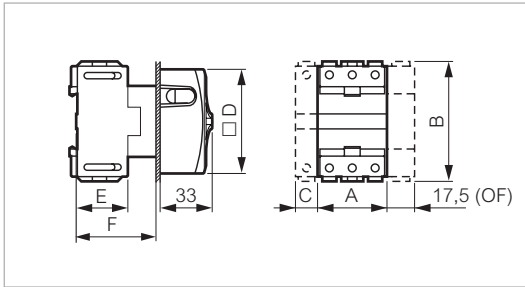


Characteristics (p. 316)

FRONT MOUNTING

PADLOCKABLE PRESENTATION

Cat. No.



Safety switch to disconnect and isolate poles.
 IP 20 "finger safe"
 Double break type load switching
 Red padlockable handle on yellow plate
 Actual position (ON or OFF) clearly visible
 Conform to standards:
 IEC EN 60947-3
 Approved by UL - cUL – Suitable as motor disconnect



172001

Dimensions	
A:	44
B:	75.4
C:	14.5
D:	□ 66
E:	36
F:	50

25 A

3P
 3P+NC/NO (1)
 4P neutral on left

172001
172011
172021

32 A

3P
 4P neutral on left

172101
172121



172201

Dimensions	
A:	53.6
B:	85
C:	17.9
D:	□ 66
E:	50.3
F:	60

50 A

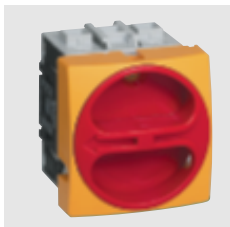
3P
 4P neutral on left

172201
172221

63 A

3P
 4P neutral on left

172301
172321



172401

Dimensions	
A:	71.8
B:	93
C:	26.8
D:	□ 86
E:	63.8
F:	70

80 A

3P
 4P neutral on left

172401
172421

100 A

3P

172501

(1) Padlock: ø 6 to 8 mm

Complete switch disconnectors 25 to 100 A

IP 40 as standard, IP 65 on request

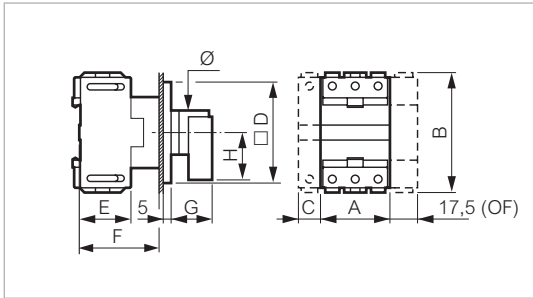


Characteristics (p. 316)

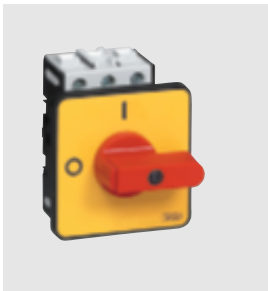
FRONT MOUNTING

WITH PLATE, FRAME AND HANDLE

Cat. No.



Safety switch to disconnect and isolate poles.
 IP 20 "finger safe"
 Double break type load switching
 Red handle on yellow plate
 Actual position (ON or OFF) clearly visible
 Conform to standards:
 IEC EN 60947-3
 Approved by UL - cUL – Suitable as motor disconnect



172002

Dimensions	
A:	44
B:	75.4
C:	14.5
D:	□ 64
E:	36
F:	50
G:	26
H:	22
Ø:	28

25 A

3P

172002

32 A

3P

172102



172202

Dimensions	
A:	53.6
B:	85
C:	17.9
D:	□ 72
E:	50.3
F:	60
G:	26
H:	30
Ø:	28

50 A

3P

172202

63 A

3P

172302



172402

Dimensions	
A:	71.8
B:	93
C:	26.8
D:	□ 96
E:	63.8
F:	70
G:	31
H:	34
Ø:	42

80 A

3P

172402

100 A

3P

172502

Complete switch disconnectors 25 to 100 A

IP 65

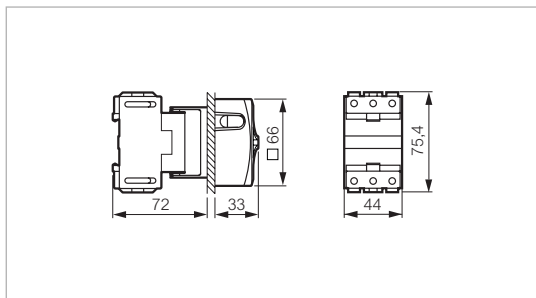


Characteristics (p. 316)

▶ FRONT MOUNTING

PADLOCKABLE PRESENTATION Ø 22 SINGLE-HOLE MOUNTING

Cat. No.



Safety switch to disconnect and isolate poles.
 IP 20 "finger safe"
 Double break type load switching
 Red handle on yellow plate
 Actual position (ON or OFF) clearly visible
 Conform to standards:
 IEC EN 60947-3
 Approved by UL - cUL – Suitable as motor disconnect

25 A

3P

172003

32 A

3P

172103



172003

Complete switch disconnectors 25 to 100 A

IP 40 as standard, IP 65 on request

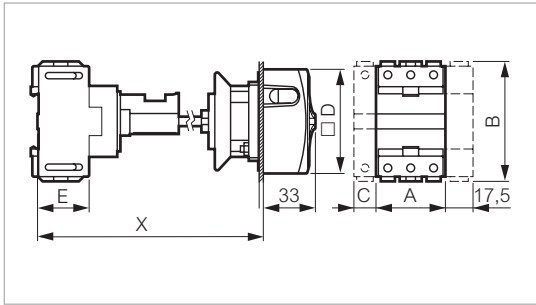


Characteristics (p. 316)

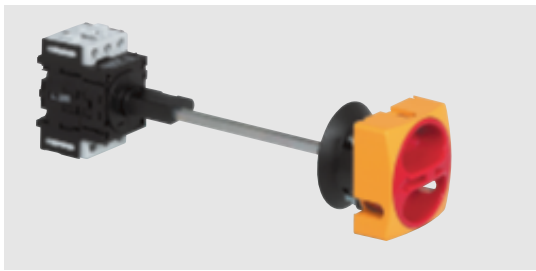
► REAR MOUNTING WITH CLUTCH DRIVE

PADLOCKABLE PRESENTATION

Cat. No.



Safety switch to disconnect and isolate poles.
 IP 20 "finger safe"
 With clutch drive and door interlock
 Double break type load switching
 Red handle on yellow plate
 Actual position (ON or OFF) clearly visible
 Conform to standards:
 IEC EN 60947-3
 Approved by UL - cUL – Suitable as motor disconnect



165009

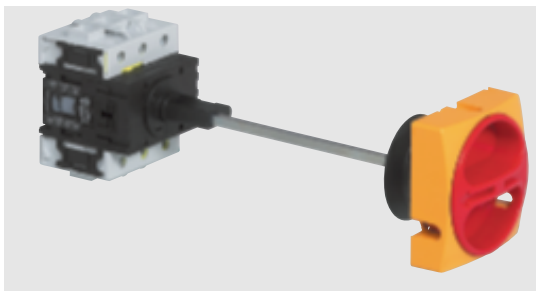
25 A
 3P (short shaft) **165009**

32A
 3P (short shaft) **165109**

25 and 32 A dimensions	50 and 63 A dimensions
A: 44	A: 53.6
B: 75.4	B: 85
C: 14.5	C: 17.9
D: □ 66	D: □ 66
E: 31.5	E: 42.2
X: 125 to 250 (short shaft) 250 to 400 (long shaft)	X: 135 to 260 (short shaft) 260 to 410 (long shaft)

50 A
 3P (short shaft) **165209**

63 A
 3P (short shaft) **165309**



165409

80 A
 3P (long shaft) **165409**

100 A
 3P (long shaft) **165509**

80 and 100 A dimensions
A: 71.8
B: 93
C: 26.8
D: □ 86
E: 52.6
X: 145 to 270 (short shaft) 270 to 420 (long shaft)

Complete switch disconnectors 25 to 100 A

IP 40 as standard, IP 65 on request
and IP 66 on enclosure version with integral handle version

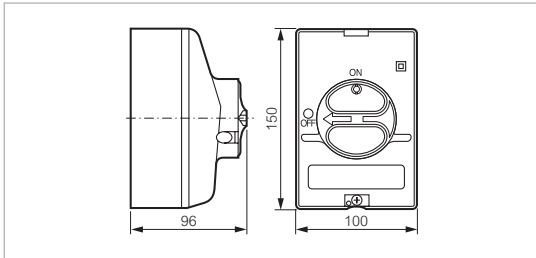


Characteristics (p. 316)

► ENCLOSURES

INTEGRAL PADLOCKABLE PRESENTATION

Cat. No.



Safety switch to disconnect and isolate poles.
IP 20 "finger safe"
With clutch drive and door interlock
Double break type load switching
Red handle on yellow plate
Actual position (ON or OFF) clearly visible
Conform to standards:
IEC EN 60947-3



172061

IP 66 - IK 07

20 A

3P

3P+NC/NO ⁽¹⁾

4P

172961

172971

172981

25 A

3P

3P+NC/NO ⁽¹⁾

172061

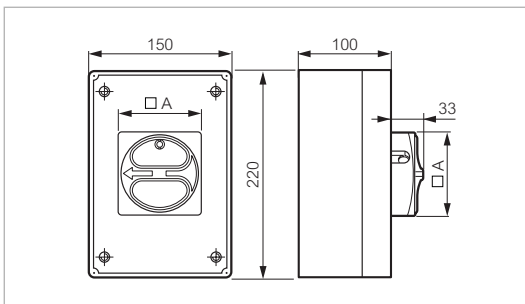
172071

32 A

3P

172161

PADLOCKABLE PRESENTATION



IP 40 ⁽²⁾

50 A

3P

172261

63 A

3P

172361

80 A

3P

172461

100 A

3P

172561

⁽¹⁾ Padlock: Ø 6 to 8 mm

⁽²⁾ IP 65 seal kit ref. 172267 (50 to 63 A)

172277 (80 to 100 A)



172261

50 and 63 A dimensions

A: 66

80 and 100 A dimensions

A: 86

Complete switch disconnectors 20 A

IP 40 as standard, IP 65 on request
Grey presentation



Characteristics (p. 316)

▶ FRONT MOUNTING

PADLOCKABLE PRESENTATION

Cat. No.

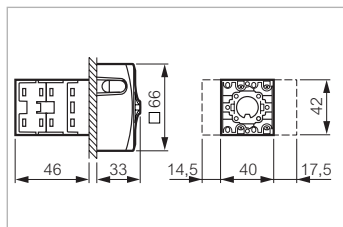


174901

20 A - non-reversible terminals

3P

174901



ACCESSORIES

Cat. No.



172945

IP 65 seal kit

For front mounting with screws

172945

Terminal covers

For front mounting with screws

172965

Complete switch disconnectors 25 to 100 A

IP 40 as standard, IP 65 on request
Grey presentation

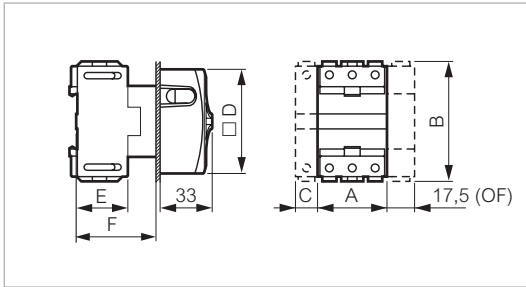


Characteristics (p. 316)

FRONT MOUNTING

PADLOCKABLE PRESENTATION

Cat. No.



Safety switch to disconnect and isolate poles.
IP 20 "finger safe"
Double break type load switching
Grey padlockable handle on grey plate
Actual position (ON or OFF) clearly visible
Conform to standards:
IEC EN 60947-3
Approved by UL - cUL – Suitable as motor disconnect



Dimensions

A: 44
B: 75.4
C: 14.5
D: □ 66
E: 36
F: 50

25 A

3P

174001

174001



Dimensions

A: 53.6
B: 85
C: 17.9
D: □ 66
E: 50.3
F: 60

32 A

3P

174201

174301



Dimensions

A: 71.8
B: 93
C: 26.8
D: □ 86
E: 63.8
F: 70

50 A

3P

174301

174401

63 A

3P

174401

80 A

3P

174501

(1) Padlock: ø 6 to 8 mm

Complete switch disconnectors 25 to 100 A

IP 40 as standard, IP 65 on request
Grey presentation

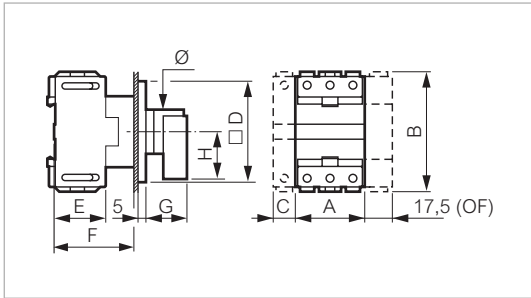


Characteristics (p. 316)

FRONT MOUNTING

WITH PLATE, FRAME AND HANDLE

Cat. No.



Safety switch to disconnect and isolate poles.
IP 20 "finger safe"
Double break type load switching
Black handle on aluminium plate
Actual position (ON or OFF) clearly visible
Conform to standards:
IEC EN 60947-3
UL - cUL approved – Suitable as motor disconnect



Dimensions

A: 44
B: 75.4
C: 14.5
D: □ 64
E: 36
F: 50
G: 26
H: 22
Ø: 28

25 A

3P

174002

32 A

3P

174102

174002



Dimensions

A: 53.6
B: 85
C: 17.9
D: □ 72
E: 50.3
F: 60
G: 26
H: 30
Ø: 28

50 A

3P

174202

63 A

3P

174302

174202



Dimensions

A: 71.8
B: 93
C: 26.8
D: □ 96
E: 63.8
F: 70
G: 31
H: 34
Ø: 42

80 A

3P

174402

100 A

3P

174502

174402

Complete switch disconnectors 25 to 100 A

IP 40 as standard, IP 65 on request
Grey presentation

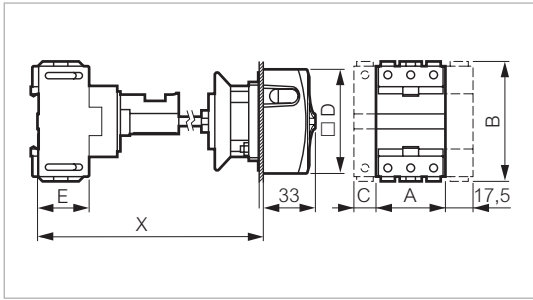


Characteristics (p. 316)

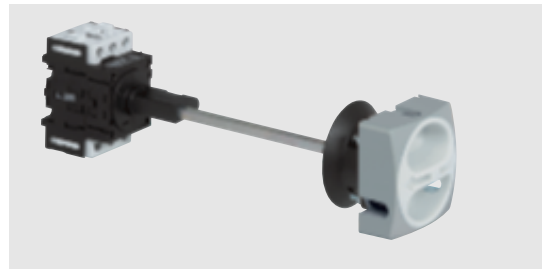
► REAR MOUNTING

PADLOCKABLE PRESENTATION

Cat. No.



Safety switch to disconnect and isolate poles.
IP 20 "finger safe"
With clutch drive and door interlock
Double break type load switching
Grey padlockable handle on grey plate
Actual position (ON or OFF) clearly visible
Conform to standards:
IEC EN 60947-3
Approved by UL - cUL – Suitable as motor disconnect



165009

25 A

3P (short shaft)

168009

32A

3P (short shaft)

168109

25 and 32 A dimensions	50 and 63 A dimensions
A: 44	A: 53.6
B: 75.4	B: 85
C: 14.5	C: 17.9
D: □ 66	D: □ 66
E: 31.5	E: 42.2
X: 125 to 250 (short shaft) 250 to 400 (long shaft)	X: 135 to 260 (short shaft) 260 to 410 (long shaft)

50 A

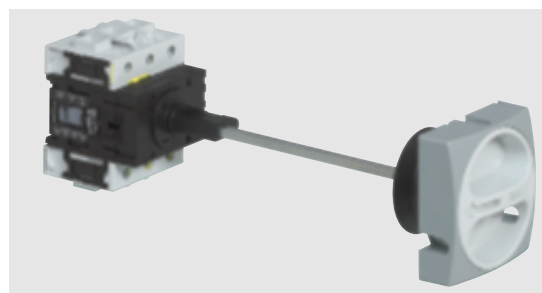
3P (short shaft)

168209

63 A

3P (short shaft)

168309



165409

80 A

3P (long shaft)

168409

100 A

3P (long shaft)

168509

80 and 100 A dimensions
A: 71.8
B: 93
C: 26.8
D: □ 86
E: 42.6
X: 145 to 270 (short shaft) 270 to 420 (long shaft)

Complete switch disconnectors 25 to 100 A

IP 40 as standard, IP 65 on request
Grey presentation

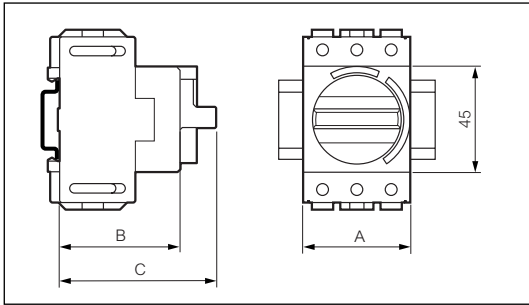


Characteristics (p. 316)

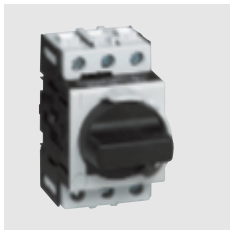
REAR MOUNTING

MODULAR IN-PANEL PRESENTATION

Cat. No.



Safety switch to disconnect and isolate poles.
IP 20 "finger safe"
Double break type load switching
Black handle on grey plate
Actual position (ON or OFF) clearly visible
Conform to standards:
IEC EN 60947-3
Approved by UL - cUL – Suitable as motor disconnect



Dimensions	
A:	44
B:	53
C:	79

25 A
3P **174005**

32 A
3P **174105**

174005



Dimensions	
A:	53.6
B:	63
C:	89

50 A
3P **174205**

63 A
3P **174305**

174205



Dimensions	
A:	71.8
B:	73
C:	99

80 A
3P **174405**

100 A
3P **174505**

174405

Complete switch disconnectors 25 to 100 A

IP 40 as standard, IP 65 on request and
IP66 on enclosure version with integral handle version
Grey presentation

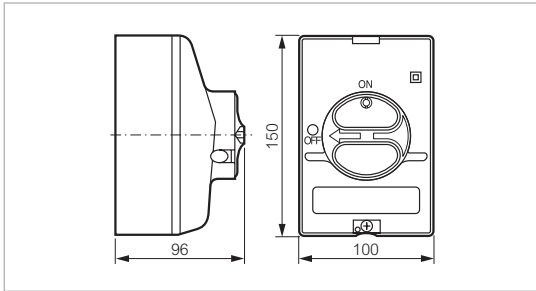


Characteristics (p. 316)

► ENCLOSURES

INTEGRAL PADLOCKABLE PRESENTATION

Cat. No.



Safety switch to disconnect and isolate poles.
IP 20 "finger safe"
With clutch drive and door interlock
Double break type load switching
Grey padlockable handle
Actual position (ON or OFF) clearly visible
Conform to standards:
IEC EN 60947-3

IP 66 - IK 07

25 A
3P

174061

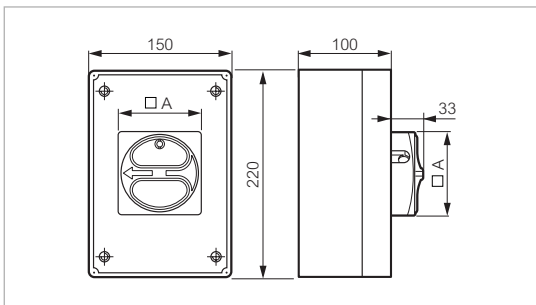
32 A
3P

174161



174061

PADLOCKABLE PRESENTATION



IP 40 (1)

50 A
3P

174261

63 A
3P

174361

80 A
3P

174461

100 A
3P

174561

(1) IP 65 with seal ref. 172267 (50 to 63 A)
172277 (80 to 100 A)



174261

50 and 63 A dimensions
A: □ 66

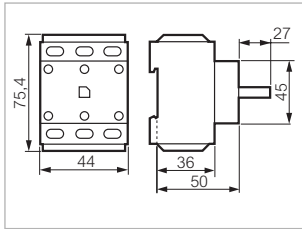
80 and 100 A dimensions
A: □ 86

Separate switch disconnectors - 25 and 32 A

 Characteristics (p. 316)

► BLOCKS

Cat. No.

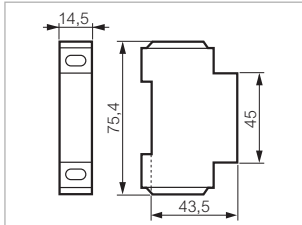


3-pole switch body without presentation

25 A
32 A

172000
172100

172000



Additional pole
(for use in enclosure only)

25 A
32 A

172075
172175

172065

172185

Additional pole without rear screw
(Rear mounting only)

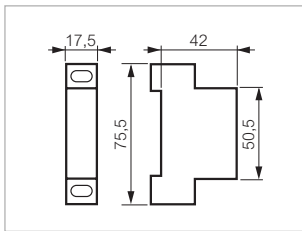
32 A

172174

Neutral pole

25 A
32 A

172065
172165



Junction block

 or N

172185

Auxiliary contact

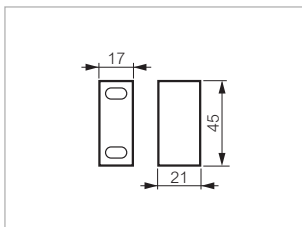
NC/NO

172179

1 pole early break

172195

172179



172195

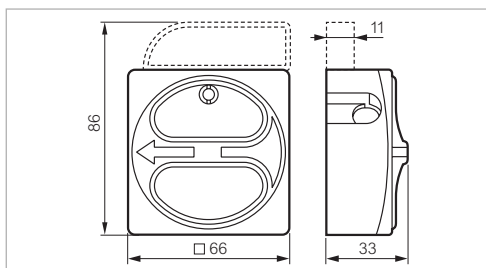
Separate switch disconnectors - 25 and 32 A



Characteristics (p. 316)

PRESENTATION

Cat. No.



Padlockable presentation

Padlock with $\varnothing 6$ to 8 mm

- 66 - Yellow/Red
- 66 - Grey
- 66 - $\varnothing 22$ single-hole-mounting - Yellow/Red

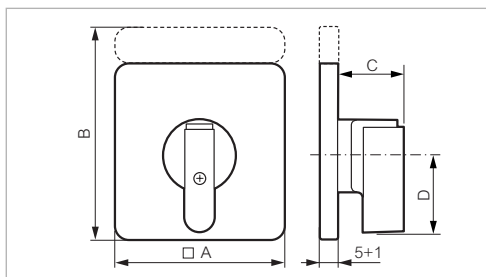
172601

174601

172603



172601



With plate, frame and handle

- 64 - Yellow/Red
- 48 - $\varnothing 22$ single-hole-mounting - Yellow/Red

172602

172604



172602

Dim. Ref. 172 602

A: $\square 64$

B: 80

Dim. ref. 172 604

A: $\square 48$

B: 65

Separate switch disconnectors - 25 and 32 A

 Characteristics (p. 316)

▶ EMPTY ENCLOSURES

PADLOCKABLE PRESENTATION

Cat. No.



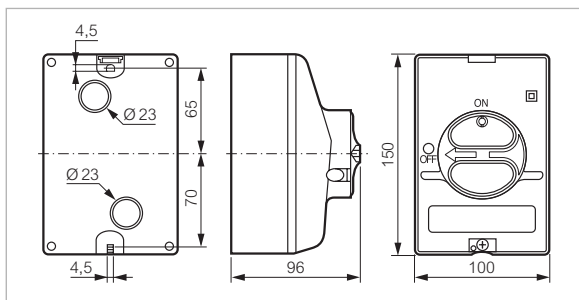
172399

Dimensions 150 x 100 x 96 mm
 Supplied with padlockable handle,
 weatherproof seal and relay terminal
 For 3 and 4-pole switches
 with and without NC/NO

IP66-IK07

Grey base - yellow cover - red handle
 Grey base - grey cover - grey handle

172399
174399

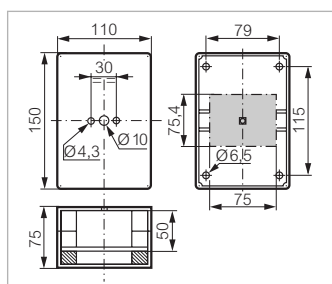


WITHOUT PRESENTATION

Cat. No.



172549



Grey - Up to 4 poles + auxiliary contact
 150 x 110 x 75 mm

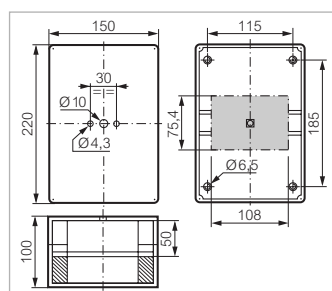
172549

PADLOCKABLE OR WITHOUT PRESENTATION

Cat. No.



172559



Grey - Up to 6 poles + auxiliary contact
 220 x 150 x 100 mm





172559

Separate switch disconnectors - 25 and 32 A




Characteristics (p. 316)


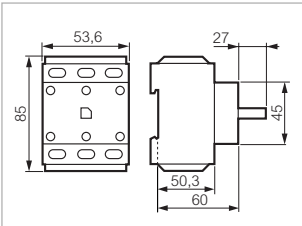

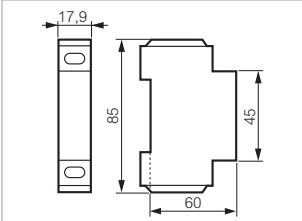



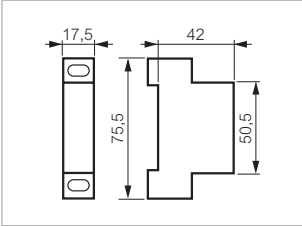

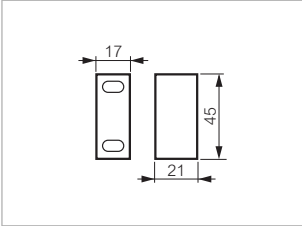
▶ ACCESSORIES

	Cat. No.
 <p>172167</p>	<p>Terminal covers</p> <p>For 3-pole body switch 172167 For additional pole, neutral pole or junction block 172177 For auxiliary contact NC/NO (pair) 172189 For early break auxiliary contact 172199</p>
 <p>174569</p>	<p>Connection terminal kit</p> <p>Terminal connection for ground or neutral 174449</p>
 <p>174189</p>	<p>Self-adhesive plates (for enclosures)</p> <p>Blank 174599 Engraved INTER PRINCIPAL 174559 Engraved MAIN SWITCH 174569</p>
 <p>172177</p>	<p>Duty labels</p> <p>Blank 172629 Engraved INTER PRINCIPAL 172639 Engraved MAIN SWITCH 172649</p>
	<p>Kit for clutch drive presentation</p> <p>Short shaft without door interlock 174189 Long shaft without door interlock 174199 Without shaft and without door interlock 174179</p>
	<p>Kit for door interlock 174249</p>
	<p>IP 65 seal kit</p> <p>For front mounting switches and enclosures</p> <p>Padlockable <input type="checkbox"/> 66 or plate and frame <input type="checkbox"/> 64 or <input type="checkbox"/> 72 172267 Padlockable <input type="checkbox"/> 86 or plate and frame <input type="checkbox"/> 96 172277</p> <p>For rear mounting switches with clutch drive</p> <p>Padlockable <input type="checkbox"/> 66 or plate and frame <input type="checkbox"/> 64 or <input type="checkbox"/> 72 174259 Padlockable <input type="checkbox"/> 86 or plate and frame <input type="checkbox"/> 96 174269</p>

Separate switch disconnectors - 50 and 63 A

 Characteristics (p. 316)

► BLOCKS

		Cat. No.
		<p>3-pole body switch without presentation</p> <p>50 A 172200</p> <p>63 A 172300</p>
172300		
		<p>Additional pole (for use in enclosure only)</p> <p>50 A 172275</p> <p>63 A 172375</p>
172375		
		<p>Neutral pole</p> <p>50 A 172265</p> <p>63 A 172365</p>
172385		
		<p>Junction block</p> <p> or N 172385</p>
		<p>Auxiliary contact</p> <p>NC/NO 172179</p> <p>1 pole early break 172395</p>
172179		
		
172395		

Separate switch disconnectors - 50 and 63 A

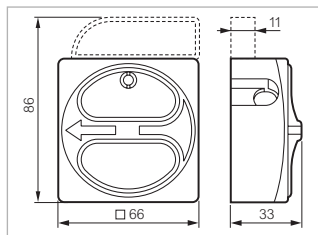
 Characteristics (p. 316)

► PRESENTATION

Cat. No.



172061



Padlockable presentation

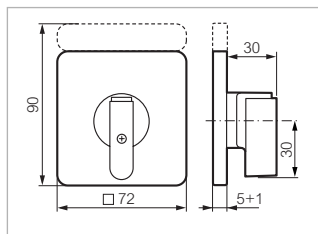
Padlock: \varnothing 6 to 8 mm

- 66 - Yellow/Red
- 66 - Grey

172601
174601



172612



With plate, frame and handle

- 72 - Yellow/Red

172612

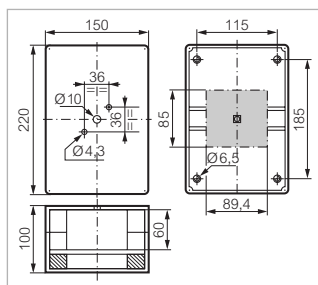
► EMPTY ENCLOSURES

WITHOUT PRESENTATION

Cat. No.



172569

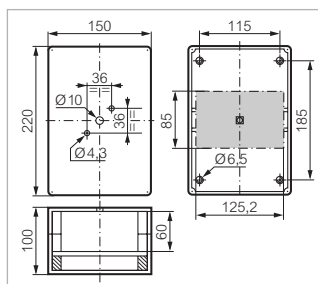


Grey - Up to 4 poles + auxiliary contact
220 x 150 x 100 mm

172569



172579



Grey - Up to 6 poles + auxiliary contact
220 x 150 x 100 mm




172579

Separate switch disconnectors - 50 and 63 A



Characteristics (p. 316)

▶ ACCESSORIES

		Cat. No.
 172367	Terminal covers	
	For 3-pole switch	172367
	For additional pole, neutral pole or junction block	172377
	For NC/NO auxiliary contact (pair)	172189
	For early break auxiliary contact	172199
 172649	Duty labels	
	Blank	172629
	Engraved INTER PRINCIPAL	172639
	Engraved MAIN SWITCH	172649
 172267	Kit for clutch drive presentation	
	Short shaft without door interlock	174189
	Long shaft without door interlock	174199
	Without shaft and without door interlock	174179
	kit for door interlock	174249
	IP 65 seal kit	
	For front mounting switches and enclosures	
	Padlockable <input type="checkbox"/> 66	
	or plate and frame <input type="checkbox"/> 64 or <input type="checkbox"/> 72	172267
	Padlockable <input type="checkbox"/> 86	
	or plate and frame <input type="checkbox"/> 96	172277
	For rear mounting with clutch drive	
	Padlockable <input type="checkbox"/> 66	
	or plate and frame <input type="checkbox"/> 64 or <input type="checkbox"/> 72	174259
	Padlockable <input type="checkbox"/> 86	
	or plate and frame <input type="checkbox"/> 96	174269

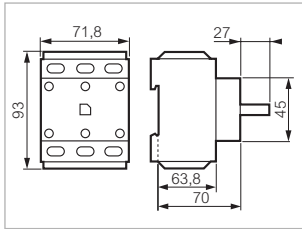
Separate switch disconnectors - 80 and 100 A



Characteristics (p. 316)

► BLOCKS

Cat. No.

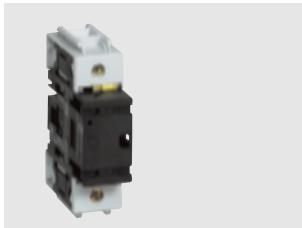


3-pole body switch without presentation

80 A
100 A

172400
172500

172400



Additional pole
(for use in enclosure only)

80 A
100 A

172475
172575

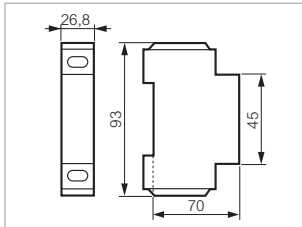
172475

172465

Neutral pole

80 A
100 A

172465
172565

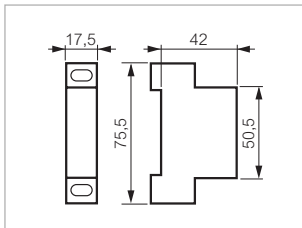


Junction block

⏏ or N

172585

172585



Auxiliary contact

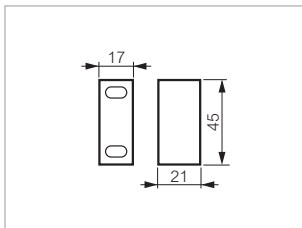
NC/NO

172179

1 pole early break

172595

172179



172595

Separate switch disconnectors - 80 and 100 A

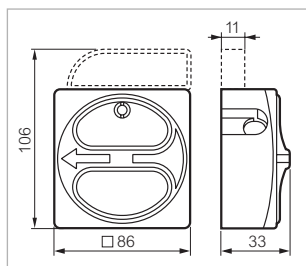
 Characteristics (p. 316)

► PRESENTATION

Cat. No.



172621



Padlockable presentation

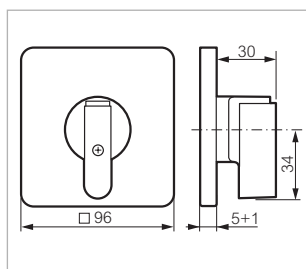
Padlock: \varnothing 6 to 8 mm

- 86 - Yellow/Red
- 86 - Grey

172621
174621



172622



With plate, frame and handle

- 96 - Yellow/Red

172622

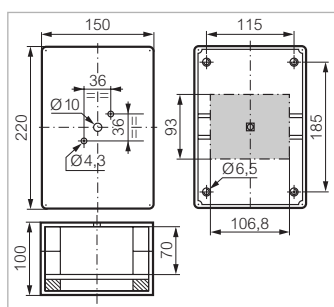
► EMPTY ENCLOSURES

WITHOUT PRESENTATION

Cat. No.



172589

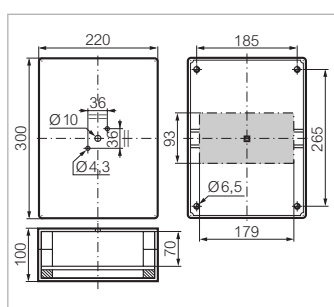


Grey - Up to 3 poles + auxiliary contact
220 x 150 x 100 mm

172589



172599



Grey - Up to 6 poles + auxiliary contact
300 x 200 x 100 mm




172599

Separate switch disconnectors - 80 and 100 A



Characteristics (p. 316)

▶ ACCESSORIES

	Cat. No.
 <p>172567</p>	<p>Terminal covers</p> <p>For 3-pole body switch 172567 For additional pole, neutral pole or junction block 172577 For NC/NO auxiliary contact (pair) 172189 For early break auxiliary contact 172199</p>
 <p>172649</p>	<p>Duty labels</p> <p>Blank 172629 Engraved INTER PRINCIPAL 172639 Engraved MAIN SWITCH 172649</p>
 <p>172267</p>	<p>Kit for clutch drive presentation</p> <p>Short shaft without door interlock 174189 Long shaft without door interlock 174199 Without shaft and without door interlock 174179</p> <p>kit for door interlock 174249</p>
	<p>IP 65 seal kit</p> <p>For front mounting switches and enclosures</p> <p>Padlockable <input type="checkbox"/> 66 or plate and frame <input type="checkbox"/> 64 or <input type="checkbox"/> 72 172267 Padlockable <input type="checkbox"/> 86 or plate and frame <input type="checkbox"/> 96 172277</p> <p>For rear mounting with clutch drive</p> <p>Padlockable <input type="checkbox"/> 66 or plate and frame <input type="checkbox"/> 64 or <input type="checkbox"/> 72 174259 Padlockable <input type="checkbox"/> 86 or plate and frame <input type="checkbox"/> 96 174269</p>

Technical characteristics

► GENERAL

Characteristics	20 A	25 A	32 A	50 A	63 A	80 A	100 A
► Rated insulation voltage U_i (V)	690	690	690	690	690	690	690
► Conventional free air thermal current I_{th}							
Uninterrupted rated current I_u (A)	20	25	32	50	63	80	100
► Conventional enclosed thermal current I_{the} (A)	16	20	25	40	50	63	80
► Rated impulse withstand voltage (overvoltage category III - pollution degree 3) U_{imp} (kV)	4	6	6	6	6	6	6
► Rated operating current I_e (A) AC - 21 A/22 A Conform to IEC 60947-3	16	25	32	50	63	80	100
► Rated operating power (kW)							
AC 23 A 3 x 230 V	4	5.5	5.5	15	15	18.5	22
3 x 400 V	7.5	7.5	11	18.5	22	30	37
3 x 500 V	5.5	7.5	11	22	30	37	45
3 x 690 V	4	7.5	11	18.5	22	22	30
AC 3 3 x 230 V	3	4	4	7.5	11	15	18.5
3 x 400 V	4	5.5	7.5	15	18.5	22	30
3 x 500 V	5.5	5.5	7.5	15	22	30	37
3 x 690 V	3	5.5	7.5	15	18.5	18.5	22
► Make - break characteristics ($A_{eff}/400$ V)							
Rated make capacity	-	710	710	1270	1270	1970	1970
Rated break capacity	-	330	330	800	800	800	800
► Short circuit characteristics							
Rated short term withstand current I_{cw} ($A_{eff}/400$ V/1 s)	250	350	430	500	760	1100	1500
Rated short circuit make capacity I_{cm} (kA peak/400 V)	-	1	1	1.8	1.8	2.8	2.8
Short circuit current (kA $e_{ff}/400$ V)	6	10	10	10	10	10	10
with fuse gI/gG (A)	16	25	32	50	63	80	100
► Mechanical life AC 20 (million)	1	0.1	0.1	0.04	0.04	0.04	0.04
► Connections							
Stranded wire + (min/max) cap (mm ²)	0.75/2.5	0.75/6	0.75/6	1.5/16	1.5/16	2.5/35	2.5/35
Solid wire (mm ²)	4	10	10	25	25	50	50
► Storage temperature	-30°C TO +70 °C						
► Operating temperature	- 30°C TO +70 °C						
► Protection rating	rear of panel: IPxxB front of panel IP 40 in standard version (IP 65 on request)						
► Conformity to standards	IEC 60947-3, UL508, CSA22.2						
► Approvals	UL - cUL (USA - Canada) suitable as motor disconnect. CB certification						
► Climatic resistance							
Tropical atmosphere according to	IEC 60068-2-30 Cyclic damp heat						

Technical characteristics

▶ AUXILIARY CONTACTS

Characteristics	20 A	25 A	32 A	50 A	63 A	80 A	100 A
▶ Rated insulation voltage U_i (V)	400	400	400	400	400	400	400
▶ Conventional free air thermal current I_{th}							
Continuous rated current I_u (A)	20	10	10	10	10	10	10
▶ Rated operating current I_e (A)							
AC 15							
230 V	6	6	6	6	6	6	6
400 V	-	4	4	4	4	4	4
▶ PROTECTION AGAINST SHORT CIRCUIT BY FUSE GG (A)	16	10	10	10	10	10	10
▶ Max. connection stranded wire (mm ²)	2 x 2.5	2 x 2.5	2 x 2.5	2 x 2.5	2 x 2.5	2 x 2.5	2 x 2.5

▶ ENCLOSURES

Characteristics	150x100x96	220x150x100	220x150x100	220x150x100	220x150x100	300x200x100
▶ Rating	20, 25 and 32 A	25 and 32 A	50 and 63 A	50 and 63 A	80 and 100 A	80 et 100 A
+NC/NO	3P to 4P +NC/NO 20 A - 6P	6P and 6P +NC/NO	3P to 4P +NC/NO	6P and 6P +NC/NO	3P and 3P +NC/NO	4P to 6P
▶ Cable inputs	2 x 2 Pg 16 OR 2 x 2 M25	2 x 2 Pg 21	2 x 2 Pg 21	2 x 2 Pg 29	2 x 2 Pg 29	2 x 2 Pg 21 and 2 x 2 Pg 29
▶ Ø knockouts (mm)	Pg 16: 22.5 ISO M25: 25	28.5	28.5	37.5	37.5	37.5 and 28.5
▶ No. of knockouts (top and bottom)	2	2	2	2	2	4
▶ Panel mount	by 2 screws	by 4 screws				
▶ Base/cover assembly	by 1 screws self-tapping stainless steel	by 4 screws self-tapping stainless steel				by 6 screws self-tapping stainless steel
▶ Switch/base assembly	on 35 mm DIN rail (this rail is notched for positioning the switch)					
▶ Handles mounting	screwing on shaft pre-pierced cover					
▶ Insulation	Class II installed (provided that the correct insulation plugs are used with the enclosure)					
▶ Impact withstand	IK07					
▶ Flameproof	650°C					
▶ Protection rating	IP 66	IP 40 (IP 65 upon request)				
▶ Contact operating diagram						
▶ Switch padlocking	In general: up to 3 padlocks \varnothing 4 to 8 mm Switch with 1 auxiliary contact NC/NO: up to 3 padlocks \varnothing 6 to 8 mm Modular presentation: 1 padlock \varnothing 6 to 8 mm					

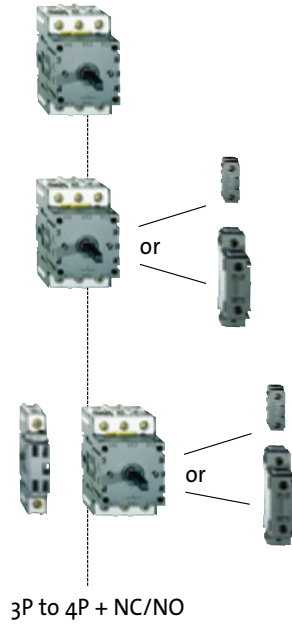
Enclosure selection guide

► 25 AND 32 A

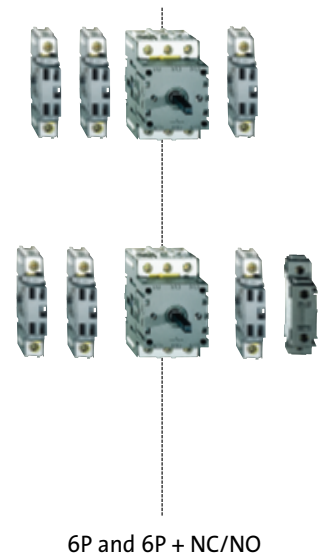


Example: switch disconnecter 32 A
Enclosed 4 poles,
padlockable presentation

Enclosure 150 x 100 x 96 mm



Enclosure 220 x 150 x 100 mm

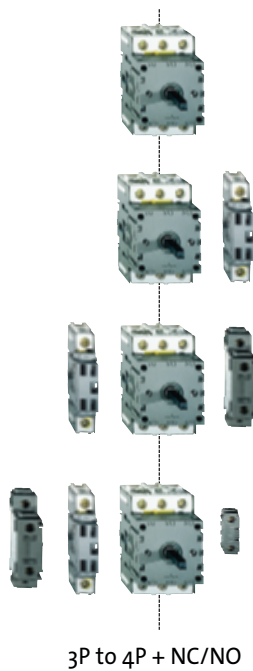


► 50 AND 63 A

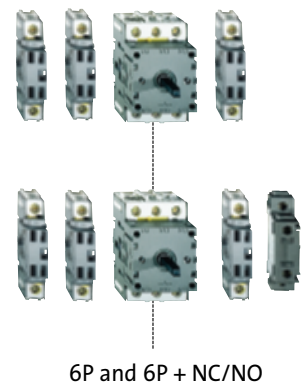


Example: switch disconnecter 50 A
Enclosed 6 poles,
Plate, frame and handle presentation

Enclosure 220 x 150 x 100mm



Enclosure 220 x 150 x 100 mm



Enclosure selection guide

▶ 80 AND 100 A



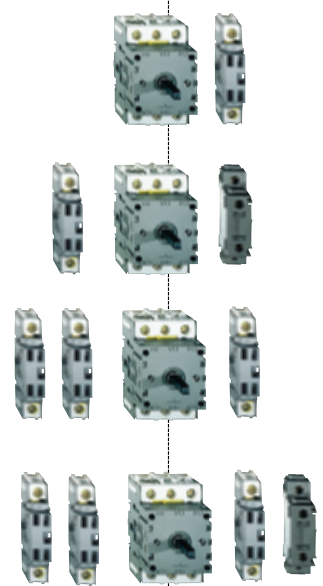
Example: switch disconnecter 100 A
Enclosed 4 poles,
padlockable presentation

Enclosure 220 x 150 x 100 mm



3P and 3P + NC/NO

Enclosure 300 x 220 x 100 mm



4P and 6P + NC/NO

LEGEND



basic 3-pole block



additional pole
additional neutral pole
junction block

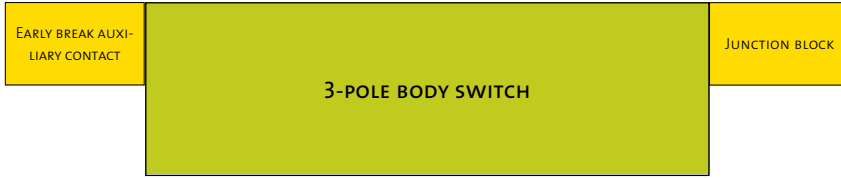


Auxiliary contact NC/NO

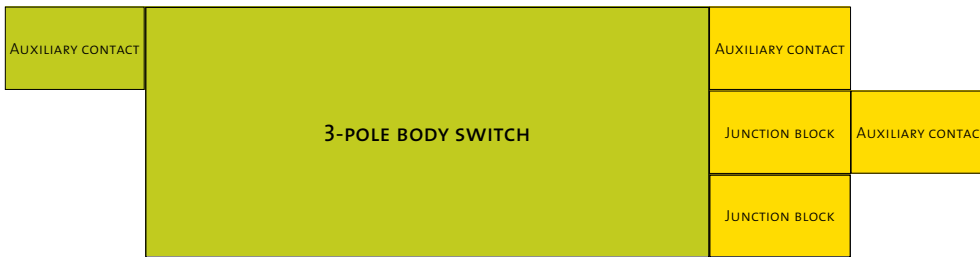


early break auxiliary contact

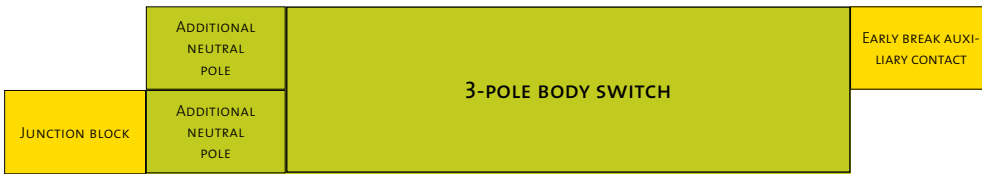
Possible configurations



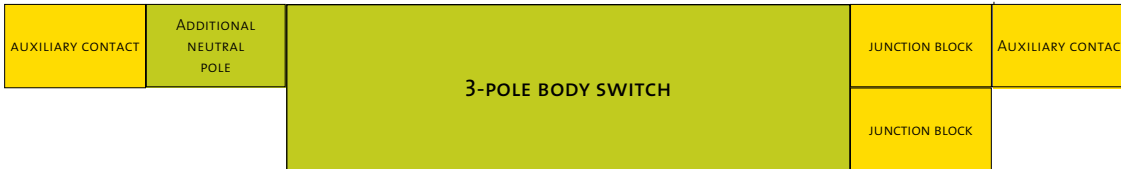
OR



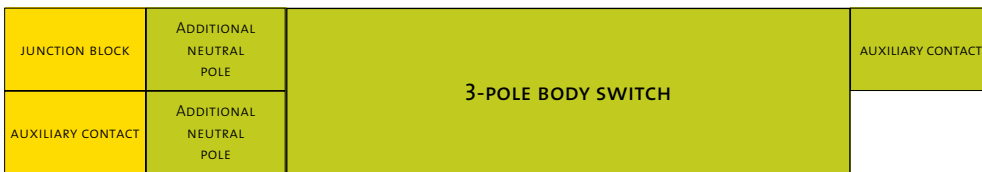
OR



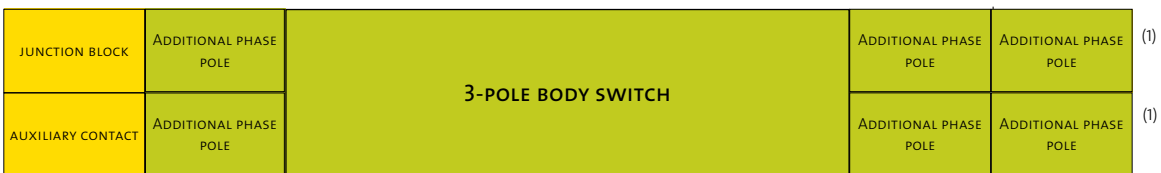
OR



OR



OR



(1) version with enclosure only

- Complete switch disconnecter p. 284 to 295
- Permitted auxiliaries

Protection class

The IP (Ingress Protection) rating system is published by the IEC (International Electrotechnical Commission) and classifies the degree of protection against solid objects and liquids in order to operate the electrical equipment.

IP XX
1 2

1 Protection Against Solid Objects

2 Protection Against Liquids

First digit of IP-Codes

1.digit		Meaning	
ISO 20653	IEC 60529	Protection against objects	Effective against
0	0	No protection	No protection
1	1	Solid objects $\geq 50\text{mm}$	Any large surface of the body, such as the back of a hand, but no protection against deliberate contact with a body part
2	2	Solid objects $\geq 12.5\text{mm}$	Fingers or similar objects
3	3	Solid objects $\geq 2.5\text{mm}$	Tools, thick wires, etc.
4	4	Solid objects $\geq 1\text{mm}$	Most wires, screws, etc.
5K	5	Dust protected	Ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment; complete protection against contact
6K	6	Dust tight	No ingress of dust; complete protection against contact

Second digit of IP-Codes

2.digit		Meaning
ISO 20653	IEC 60529	Protection against water
0	0	No protection
1	1	Dripping water (vertically falling drops) shall have no harmful effect.
2	2	Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position.
3	3	Water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect.
4	4	Water splashing against the enclosure from any direction shall have no harmful effect.
5	5	Water projected by a nozzle (6.3 mm) against enclosure from any direction shall have no harmful effects.
6	6	Water projected in powerful jets (12.5 mm nozzle) against the enclosure from any direction shall have no harmful effects.
7	7	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1 m of submersion).
8	8	The equipment is suitable for continuous immersion in water under conditions which shall be specified by the manufacturer. Normally, this will mean that the equipment is hermetically sealed. However, with certain types of equipment, it can mean that water can enter but only in such a manner that it produces no harmful effects.
	9	Protected against close-range high pressure, high temperature spray downs.
9K		Protected against close-range high pressure, high temperature spray downs, specific for cars.

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