

Electrical actuator *Rotary modular type*



ACTUATOR FEATURES

- Electronic control MODULATING Actuator
- Working angle 90° (100° Max.)
- Maximum torque from 49 to 1960 Nm. (see the table)
- Voltage 230 Vac 1Ph 50/60 Hz.
- Input signal 4~20 mA (1~5 Vdc).
- Output signal 4~20 mA (1~5 Vdc AM 20).
- High resolution 1/250 (adjustable 1/200 ~ 1/400).
- Adjustable zero/span.
- Direct/reverse function selector.
- Mode selector without OPEN-CLOSE-STOP signal
- Insulation resistance 100 M /500 Vdc
- Tension insulation 1500 Vac/1 minute
- Motor with Class E insulation
- Working temperature from -25°C to + 55°C (for use in temperatures below 0°C, we suggest anti-condensate elements)
- Protection according to NEMA 4,4X rules (IP65)
- Coupling flange for the valve from F05 to F14: ISO 5211.
- Auto-reset thermostatic protection in the motor.
- Open/close limit switches with cams adjustable along the whole stroke
- Limit switches with adjustable cams.
- Safety adjustable mechanical limit switches.
- Graduated visual position indicator
- Detachable lever for manual operation
- Electric connections with screw terminals
- Locking of supply cables by means of cable presses
- Maximum working noise 73 dB.

OPTIONAL (must be requested when placing the order)

Feeding voltage 115 Vac - 24 Vac. (*)

Input signal 4~12 mA (1~3 Vdc) - 12~20 mA (3~5 Vdc).

Auxiliary limit switches.

Torque limiters.

Space heater.

Drive socket.

Emergency gear box. (**)

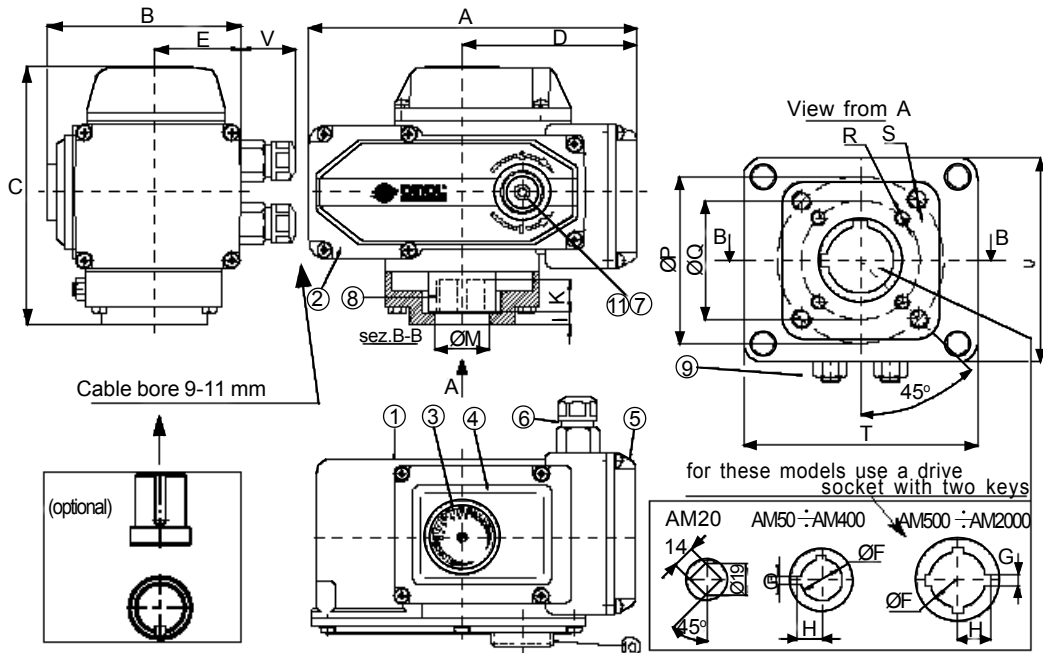
* AM 50-AM 100

** AM 50-AM 100-AM 200

FEATURES

MODEL		AM 20	AM 50	AM 100	AM 200	AM 400	AM 500	AE1000	AE1500	AE2000
	Nm	20	49	98	196	390	490	980	1470	1960
Time of cycle (50 Hz)	sec.	15	15	30	15	30	15	30	45	60
Time of cycle (60 Hz)	sec.	12.5	12.5	25	12.5	25	12.5	25	38	50
Power consumption 230Vac 50/60Hz A		0.4/0.5	0.35/0.4	0.35/0.4	0.9/1	0.9/1	1.3/1.4	1.3/1.4	1.3/1.4	1.3/1.4
Power consumption 115Vac 50/60Hz A		0.8/0.9	0.6/0.7	0.6/0.7	1.9/2	1.9/2	2.5/2.6	2.5/2.6	2.5/2.6	2.5/2.6
Power consumption 24Vac 50/60Hz A		---	1.7/1.8	1.7/1.8	----	----	—	—	—	—

“AM” Rotary modular type



MATERIAL TABLE

1	Body	Aluminium
2	Manual gear box cap	Aluminium
3	Position indicator	Glass
4	Electric-set cap	Aluminium
5	Terminal-box cap	Aluminium
6	Cable press	Zinc alloy
7	Lever connection	Steel
8	Female shaft	Zinc alloy (AM 1500 - AM 2000: Steel)
9	Security stops	Stainless steel
10	Protections for lever connection	NBR
11	Lever	Stainless steel

DIMENSION TABLE

Model	AM 20	AM 50	AM 100	AM 200	AM 400	AM 500	AE 1000	AE 1500	AE 2000
A mm.	168.8	207.5	207.5	256.5	256.5	381	381	381	381
B mm.	114.5	122.5	122.5	156.5	156.5	242	242	253.5	253.5
C mm.	119.5	163.5	163.5	185	185	234	234	234	234
D mm.	83.3	110	110	133.5	133.5	199.5	199.5	199.5	199.5
E mm.	51	54.5	54.5	62.5	62.5	105	105	105	105
ØF mm.	—	28	28	36	36	56	56	56	56
G mm.	—	6	6	8	8	10	10	10	10
H mm.	—	16.5	16.5	21.3	21.3	31.3	31.3	31.3	31.3
I mm.	1	11.5	11.5	12	12	8	8	8	8
K mm.	16	29	29	34	34	54	54	54	54
L mm.	12	40.5	40.5	46	46	62	62	62	62
ØM mm.	26	35	35	40	40	65	65	65	65
ØP mm.	50 F05	70 F07	70 F07	102 F10	102 F10	125 F12	125 F12 *	140 F14	140 F14
ØQ mm.	36 F03	50 F05	50 F05	70 F07	70 F07	102 F10	102 F10 *	—	—
R x depth mm.	M6x12	M8x12	M8x12	M10x16	M10x16	M12x20	M12x20 *	M16x25	M16x25
S x depth mm.	M5x10	M6x10	M6x10	M8x13	M8x13	M10x20	M10x20 *	—	—
T mm.	80	98	98	135	135	160	160	160	160
U mm.	72	86	86	106	106	140	140	140	140
V mm.	40	44	44	44	44	—	—	—	—
Weight Kg.	3.1	4.5	4.5	8.7	8.7	22.8	22.8	22.8	22.8

* On request the flange is available with M16x25 on Ø100 F14 holes

Electrical actuator codes and option

Electrical actuator "AE" on-off type F03 F14 attachment													
Voltage	Sizes and actuator codes												
	AE 10	AE 10	AE 40	AE 40	AE 100	AE 200	AE 400	AE 600	AE 600	AE 1000	AE 1000	AE 1500	AE 2000
	F03-F05	F04	F03-F05	F04	F05-F07	F07-F10	F07-F10	F10-F12	F14	F10-F12	F14	F14	F14
230V 50/60 Hz	AE160001	AE161001	AE160004	AE161004	AE160010	AE160020	AE160040	AE160060	AE161060	AE160100	AE161100	AE160150	AE160200
115V 50/60 Hz	AE150001	AE151001	AE150004	AE151004	AE150010	AE150020	AE150040	AE150060	AE151060	AE150100	AE151100	AE150150	AE150200
24V 50/60 Hz	AE120001	AE121001	AE120004	AE121004	AE120010	AE120020	---	---	---	---	---	---	---
24V dc	---	---	AE020004	AE021004	AE020007	AE020020	---	---	---	---	---	---	---

Electrical actuator "AM" modulating type F05 F14 attachment													
Voltage	Sizes and actuator codes												
			AM 20	AM 50	AM 100	AM 200	AM 400	AM 500	AM 500	AM 1000	AM 1000	AM 1500	AM 2000
			F03-F05	F05-F07	F05-F07	F07-F10	F07-F10	F10-F12	F14	F10-F12	F14	F14	F14
230V 50/60 Hz			AM160002	AM160005	AM160010	AM160020	AM160040	AM160050	AM161050	AM160100	AM161100	AM160150	AM160200
115V 50/60 Hz			AM150002	AM150005	AM150010	AM150020	AM150040	AM150050	AM151050	AM150100	AM151100	AM150150	AM150200
24V 50/60 Hz			---	AM120005	AM120010	---	---	---	---	---	---	---	---

EXTRA ACCESSORIES FOR ELECTRICAL ACTUATOR AND CORRESPONDANT IDENTIFICATION

DESCRIPTION

CONFIGURATOR

auxiliary limit-switches	L2
Potentiometer 135 ohm	P1
Potentiometer 500 ohm	P2
Potentiometer 1000 ohm	P3
R/I convertor 4 20 mA	RI
Speed control	SC
Close torque limiter	T1
Open and close torque limiter	T2
Anti-condensate element	SH
Wheel for manual operation	HW

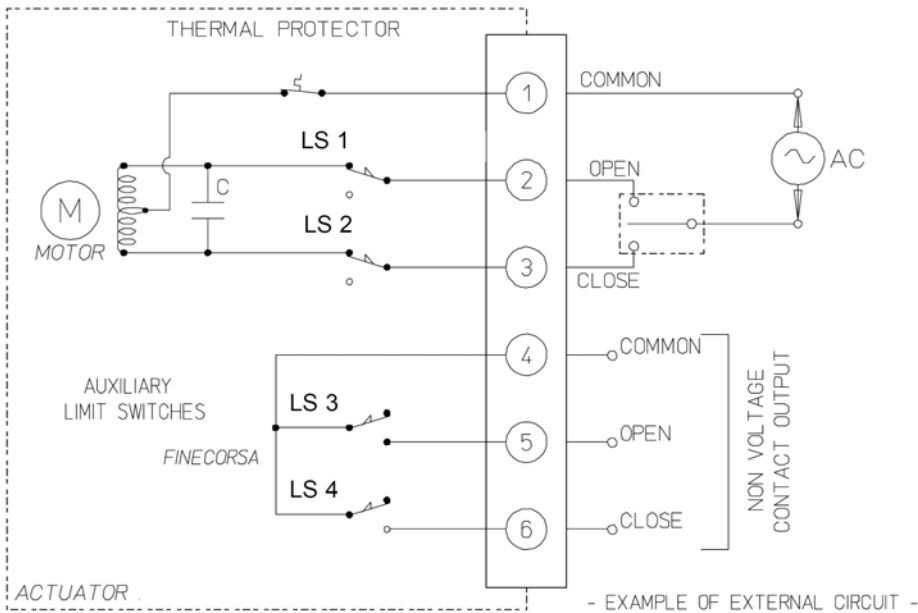
MAXIMUM CONFIGURATION FOR THE SUPPLY OF ACTUATORS

	P(1-2-3)	T1/T2	SH	RI	SC	HW	L2
AE 10 - AE 40 Voltage AC - DC	YES	YES(T1)	YES	NO	NO	NO	
AE 100 - AE 200 Voltage AC	YES	YES	YES	NO	YES	YES	
AE 100 - AE 200 Voltage AC	NO	YES	YES	YES	NO	YES	
AE 100 - AE 200 Voltage DC	YES	YES	YES	NO	NO	YES	
AE 400 ÷ AE 2000 Voltage AC	YES	YES	YES	NO	YES	NO	
AE 400 ÷ AE 2000 Voltage AC	YES	YES	YES	YES	NO	NO	
AM 20	NO	NO	NO	NO	NO	NO	NO
AM 400 ÷ AM 2000	NO	YES	YES	NO	NO	NO	YES
AM 50 ÷ AM 200	NO	YES	YES	NO	NO	YES	YES

Legend

STD = standard accessory , YES = available accessory , NO = accessory not available

Note: All extra accessories must be requested when placing the order.



Electrical actuator

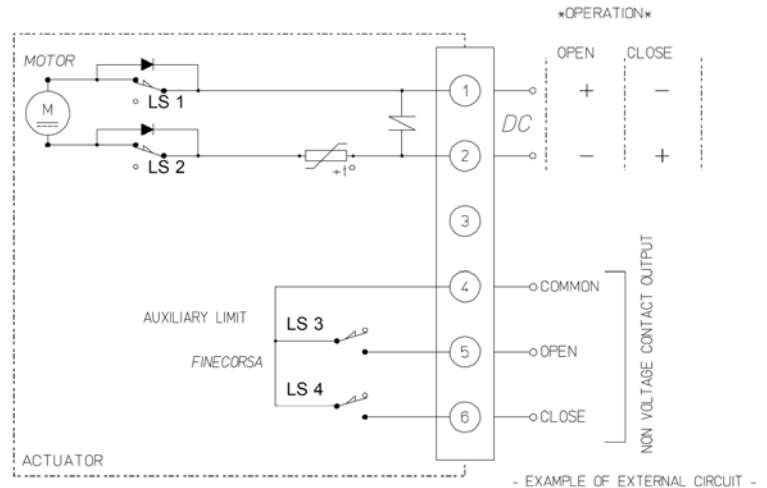
electric plan and connection examples

Electrical actuator ON-OFF AE type
 Example of standard connection circuit with alternative tension feeding.

AE Vac

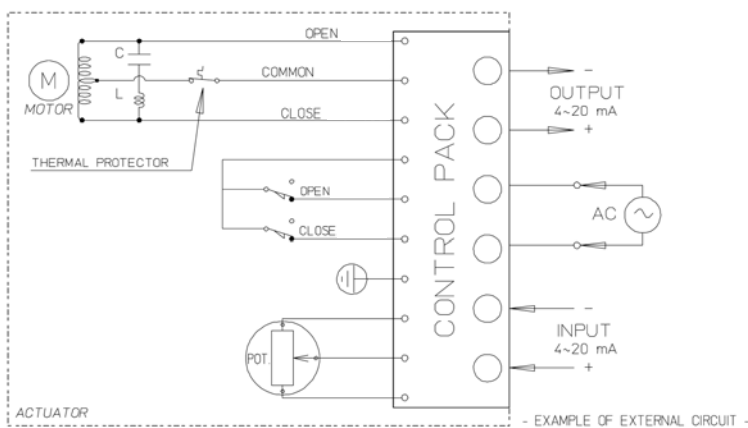
AE Vac

Electrical actuator ON-OFF AE type
 Example of standard connection circuit with direct tension feeding.



AE Vdc

AE Vdc



AM Vac

Electrical actuator Modulating AM type
 Example of standard connection circuit with alternative tension feeding.

AM Vac