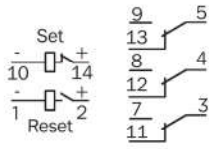
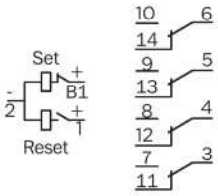
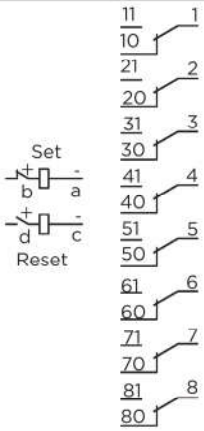
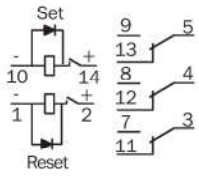
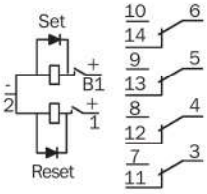
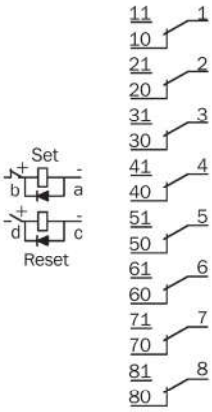
GENERAL PURPOSE LATCHING RELAYS

Model	BF-3	BF-4	BJ-8
			
Applications	Relays with two stable positions. Required when the position memory (open-close, automatic-manual, local-remote...) is needed.		
Construction characteristics			
Contacts no.	3 Changeover	4 Changeover	8 Changeover
Connections			
Options	Options are not available		
Weight (g)	300		600
Dimensions (mm)	45 x 45 x 96,5 (F short Type)		90 x 50 x 100,5 (J short Type)
Coil characteristics			
Standard voltages[1]	24, 48, 72, 110, 125, 220 Vdc / 63,5, 110, 127, 230 Vac (50-60 Hz)		
Voltage range	+25% -30% U_N		
Pick-up voltage	See pick-up voltage / temperature curves for Latching relays		
Consumptions only in the change-over	≤6 W		≤12 W
Operating time			
Pick-up time	<20 ms		
Contacts			
Contact material	AgNi		
Distance between contacts	1,8 mm		
Permanent current	10 A		
Instantaneous current	80 A during 200 ms / 200 A during 10 ms		
Max. making capacity	40 A / 0,5 s / 110 Vdc		
Breaking capacity	See breaking capacity curves (1 contact configuration)		
Max. breaking capacity	See value for 50.000 operations		
U_{max} opened contact	250 Vdc / 400 Vac		
Performance data			
Mechanical endurance	10^7 operations		
Operating temperature	-40°C +70°C		
Storage temperature	-40°C +70°C		
Max. operating humidity	93% / +40°C		
Operating altitude[2]	<2000 m		

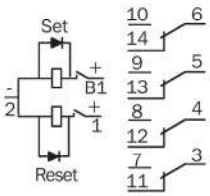
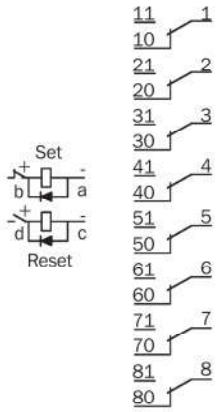
[1] Other voltage upon request
[2] Ask for higher altitudes

TRIP AND LOCKOUT RELAYS (I)

Model	BF-3R	BF-4R	BJ-8R
			
Applications	Intended for trip and lockout applications where high demanding requirements in operating time and breaking capacity are needed.		
Construction characteristics			
Contacts no.	3 Changeover	4 Changeover	8 Changeover
Connections			
Options	Options are not available		
Weight (g)	300		600
Dimensions (mm)	45 x 45 x 96,5 (F short Type)		90 x 50 x 100,5 (J short Type)
Coil characteristics			
Standard voltages[1]	24, 48, 72, 110, 125, 220 Vdc / 63,5, 110, 127, 230 Vac (50-60 Hz)		
Voltage range	+10% -20% U_N		
Pick-up voltage	See pick-up voltage / temperature curves for Latching relays		
Consumptions only in the change-over	27 W	23 W	35,5 W
Operating time			
Pick-up time	<10 ms (Vdc) <20 ms (Vac)		<10 ms (Vdc) <20 ms (Vac)
Contacts			
Contact material	AgNi		
Distance between contacts	1,8 mm		
Permanent current	10 A		
Instantaneous current	80 A during 200 ms / 200 A during 10 ms		
Max. making capacity	40 A / 0,5 s / 110 Vdc		
Breaking capacity	See breaking capacity curves (1 contact configuration)		
Max. breaking capacity	See value for 50.000 operations		
U_{max} opened contact	250 Vdc / 400 Vac		
Performance data			
Mechanical endurance	10^7 operations		
Operating temperature	-40ºC +70ºC		
Storage temperature	-40ºC +70ºC		
Max. operating humidity	93% / +40ºC		
Operating altitude[2]	<2000 m		

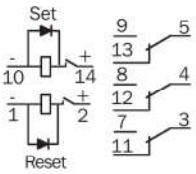
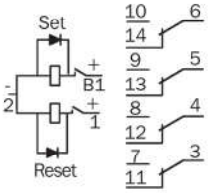
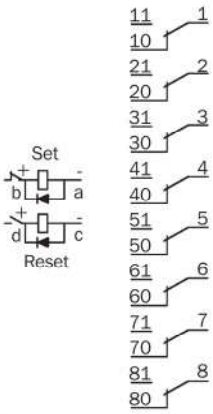
[1] Other voltage upon request
[2] Ask for higher altitudes

TRIP AND LOCKOUT RELAYS (II)

Model	BF-4RP	BJ-8RP
		
Applications	Intended for tripping and locking applications where high quality requirements in operating time and breaking capacity are needed, with manual reset.	
Construction characteristics		
Contacts no.	4 Changeover	8 Changeover
Connections		
Options	Options are not available	
Weight (g)	300	600
Dimensions (mm)	45 x 45 x 96,5 (F short Type)	90 x 50 x 100,5 (J short Type)
Coil characteristics		
Standard voltages[1]	24, 48, 72, 110, 125, 220 Vdc 63,5, 110, 127, 230 Vac (50-60 Hz)	
Voltage range	+10% -20% U_N	
Pick-up voltage (20ºC)	See pick-up voltage / temperature curves for Latching relays	
Consumptions only in the change-over	23 W	35,5 W
Operating time		
Pick-up time	<10 ms (Vdc) <13 ms (Vac)	<10 ms (Vdc) <20 ms (Vac)
Contacts		
Contact material	AgNi	
Distance between contacts	1,8 mm	
Permanent current	10 A	
Instantaneous current	80 A during 200 ms / 200 A during 10 ms	
Max. making capacity	40 A / 0,5 s / 110 Vdc	
Breaking capacity	See breaking capacity curves (1 contact configuration)	
Max. breaking capacity	See value for 50,000 operations	
U_{max} opened contact	250 Vdc / 400 Vac	
Performance data		
Mechanical endurance	10^7 operations	
Operating temperature	-40ºC +70ºC	
Storage temperature	-40ºC +70ºC	
Max. operating humidity	93% / +40ºC	
Operating altitude[2]	<2000 m	

[1] Other voltage upon request
[2] Ask for higher altitudes

LATCHING RELAYS WITH COIL OVERVOLTAGE PROTECTION

Model	BF-3BB	BF-4BB	BJ-8BB
			
Applications	Intended to protect the contact of the equipment that feeds the coil in our relay.		
Construction characteristics			
Contacts no.	3 Changeover	4 Changeover	8 Changeover
Connections			
Options	Options are not available		
Weight (g)	300		600
Dimensions (mm)	45 x 45 x 96,5 (F large Type)		90 x 50 x 100,5 (J large Type)
Coil characteristics			
Standard voltages[1]	24, 48, 72, 110, 125, 220 Vdc[3]		
Voltage range	+25% -30% U_N		
Pick-up voltage	See pick-up voltage / temperature curves for Latching relays		
Consumptions only in the change-over	≤6 W		≤12 W
Operating time			
Pick-up time	<20 ms		
Contacts			
Contact material	AgNi		
Distance between contacts	1.8 mm		
Permanent current	10 A		
Instantaneous current	80 A during 200 ms / 200 A during 10 ms		
Max. making capacity	40 A / 0,5 s / 110 Vdc		
Breaking capacity	See breaking capacity curves (1 contact configuration)		
Max. breaking capacity	See value for 50,000 operations		
U_{max} opened contact	250 Vdc / 400 Vac		
Performance data			
Mechanical endurance	10^7 operations		
Operating temperature	-40ºC +70ºC		
Storage temperature	-40ºC +70ºC		
Max. operating humidity	93% / +40ºC		
Operating altitude[2]	<2000 m		

[1] Other voltage upon request
[2] Ask for higher altitudes
[3] Vac voltages upon request