

Coupling relays

The safe way to achieve a perfect interface in process applications.

In the microchip age of bits and bytes, one might assume that there is no place left for electro-mechanical relays. Far from it!

In control, transportation and production technology, coupling relays have been reliably accomplishing important tasks for years, and continue to do so.

Together with control systems, they offer numerous possibilities of making your application even safer and less sensitive to disturbances.



Advantages:

- Safe galvanic separation
- Pluggable and compact solutions
- Mounts directly onto a 35-mm DIN rail
- Optional gold-plated contacts
- Screw clamp and tension spring termination
- Display and EMI suppression modules
- Also suitable for railway applications acc. to EN 50155



Coupling relays

flare MOVE

- Pluggable coupling relay
- Overall width 6.2 mm
- Screw terminals
- 1 change-over contact 6A



Description	Part No.	Std. Pack	Part No.	Std. Pack
flare MOVE	AgSnO₂		AgSnO₂ + gold (5μ)	
12V Relay module DC	80.010.4501.0	10	80.010.4501.1	10
12V Relay module AC/DC	80.010.4521.0	10	80.010.4521.1	10
24V Relay module DC	80.010.4502.0	10	80.010.4502.1	10
24V Relay module AC/DC spring clamp con.	80.010.4622.0	10		
24V Relay module AC/DC	80.010.4522.0	10	80.010.4522.1	10
115V Relay module AC/DC	80.010.4525.0	10	80.010.4525.1	10
230V Relay module AC/DC	80.010.4526.0	10	80.010.4526.1	10
Comb-shaped jumper 20pol. max 36A	80.063.4029.1	10		
Marking plate BM SF38	80.063.4129.3	1		
Replacement relay and socket	Information on request			
Technical data				
Maximum switching voltage	400 V AC			
Maximum switching current	6 A AC/DC			
Maximum starting current	10 A			
Mechanical life	1 x 10 ⁷			
Electrical life up to 230 V AC / 6A	6 x 10 ⁴			
Isolation voltage of input / output	4 kV eff			
Connectable via pluggable jumper	20 modules			
Wire range fine-stranded/solid	0.14 -1.5 mm ² (AWG 26-16) / 0.5 - 2.5 mm ² (AWG 22-14)			
Degree of protection / Mounting rail	IP 20 / TS35			
Dimensions (mm) W x H x D	6.2 x 88 x 76			
Ambient temperature	0 ... +50 °C			
Approvals	CE			

flare MOVE

- Pluggable coupling relay
- Overall width 15.8 mm
- Screw terminals
- 1 change-over contact 16A
- 2 change-over contacts 8A



Description	Part No.	Std. Pack	Part No.	Std. Pack
flare MOVE	1 change-over contact		2 change-over contacts	
12V Relay module DC	80.010.4901.3	10	80.010.5501.2	10
24V Relay module DC	80.010.4902.3	10	80.010.5102.2	10
24V Relay module AC	80.010.4912.3	10		
115V Relay module AC	80.010.4915.3	10	80.010.5315.2	10
230V Relay module AC	80.010.4916.3	10	80.010.5316.2	10
Comb-shaped jumper 8pol. for A1, A2 max 10A	80.063.5029.2	10		
Marking tag BZ SF-48	80.063.5029.3	10		
Replacement relay	Information on request			
Technical data				
Maximum switching voltage	400 V AC		250 V AC	
Maximum switching current	16 A / (10 A up to 12 V)		8 A	
Maximum starting current	30 A / (20 A up to 12 V)		15 A	
Mechanical life DC / AC	2 x 10 ⁷ / 1 x 10 ⁷		2 x 10 ⁷	
Electrical life AC 1	2 x 10 ⁵ / 1 x 10 ⁵		1 x 10 ⁵	
Isolation voltage of input / output	4 kV			
Connectable via pluggable jumper	8 modules			
Wire range fine-stranded/solid	0.25 - 4 mm ² (AWG 24-12) / 0.25 - 6 mm ² (AWG 24-10)			
Degree of protection / Mounting rail	IP 20 / TS35			
Dimensions (mm) W x H x D	15.8 x 78.6 x 76			
Ambient temperature	-40 ... +70 °C			
Approvals	CE			



Coupling relays

flare MOVE MR

- Pluggable coupling relay
- Robust pins
- Switching position is indicated mechanically
- Lockable test button
- For railway application accord. to EN 50 155
- Overall width 15.8 mm
- Screw terminals
- 1 change-over contact 16A
- 2 change-over contacts 8A



Description	Part No.	Std. Pack	Part No.	Std. Pack
flare MOVE MR	1 change-over contact		2 change-over contacts	
24V Relay module DC	80.010.6002.2	10	80.010.6032.2	10
24V Relay module DC with gold (5µm)	80.010.6002.3	10	80.010.6032.3	
Replacement relay	Information on request			
Comb-shaped jumper 8 pole for A1, A2 max 10A	80.063.5029.2	10		
Marking plate BM MR-4C	80.063.6029.3	10		

Technical data

Maximum switching voltage	440 V AC	440 V AC
Maximum switching current	16 A	8 A
Maximum starting current	25 A	15 A
Mechanical life	1 x 10 ⁷	1 x 10 ⁷
Electrical life AC 1	1 x 10 ⁵	1 x 10 ⁵
Isolation voltage of input / output	6 kV	
Wire range fine-stranded/solid	0.25 - 4 mm ² (AWG 24-12) / 0.25 - 6 mm ² (AWG 24-10)	
Degree of protection / Mounting rail	IP 20 / TS35	
Dimensions (mm) W x H x D	15.8 x 82.9 x 68.1	
Ambient temperature	-40...+70 °C (>12A max 50 °C) -40...+70 °C	
Approvals	CE	

flare MOVE MR

- Pluggable coupling relay
- Robust pins
- Switching position is indicated mechanically
- Lockable test button
- For railway application accord. to EN 50 155
- Overall width 15.8mm
- Cage clamp
- 1 change-over contact 16A
- 2 change-over contacts 8A



Description	Part No.	Std. Pack	Part No.	Std. Pack
flare MOVE MR	1 change-over contact		2 change-over contacts	
24V Relay module DC	80.010.6102.2	10	80.010.6132.2	10
24V Relay module DC with gold (5µm)	80.010.6102.3	10	80.010.6132.3	
Replacement relay	Information on request			
Marking plate BM MR-4C	80.063.6029.3	10		

Technical data

Maximum switching voltage	400 V AC	400 V AC
Maximum switching current	16 A	8 A
Maximum starting current	25 A	15 A
Mechanical life	1 x 10 ⁷	1 x 10 ⁷
Electrical life AC 1	1 x 10 ⁵	1 x 10 ⁵
Isolation voltage of input / output	6 kV	
Wire range fine-stranded/solid	0.2 - 1.5 mm ² (AWG 24-16)	
Degree of protection / Mounting rail	IP 20 / TS35	
Dimensions (mm) W x H x D	15.8 x 82.9 x 68.1	
Ambient temperature	-25...+70 °C (>12A max 50 °C) -25...+70 °C	
Approvals	CE	

flare MOVE MR

- Pluggable coupling relay
- Robust pins
- Switching position is indicated mechanically
- Lockable test button
- For railway application accord. to EN 50 155
- Overall width 27mm
- Screw terminals
- 4 change-over contacts 7A







Description	Part No.	Std. Pack
flare MOVE MR	4 change-over contact	
24V Relay module DC	80.010.5702.2	10
Replacement relay	Information on request	





Technical data

Maximum switching voltage	250 V AC
Maximum switching current	7 A
Maximum starting current	15 A
Mechanical life	2 x 10 ⁷
Electrical life AC 1	1.5 x 10 ⁵
Isolation voltage of input / output	3.6 kV
Wire range fine-stranded/solid	0.25 - 4 mm ² (AWG 24-12) / 0.25 - 6 mm ² (AWG 24-10)
Degree of protection / Mounting rail	IP 20 / TS35
Dimensions (mm) W x H x D	27 x 76 x 86.9
Ambient temperature	-40 ... +70 °C
Approvals	CE



Coupling relays

<p>flare</p> <ul style="list-style-type: none"> • Compact coupling relay • Overall width 6.2 mm • Screw terminals/ Cage clamp • 1 change-over contact 6 A 	Description	Part No.	Std. Pack	Part No.	Std. Pack	
	flare MOVE		Screw terminal		Cage clamp	
	12V Relay module DC				80.010.4106.0	10
	24V Relay module DC	80.010.4000.0		10	80.010.4100.0	10
	115V Relay module AC				80.010.4131.0	10
	230V Relay module AC				80.010.4141.0	10
	Pluggable jumper max 2A	Z8.000.0200.8		10		
	Jumper for potential distribution red	Z8.000.0202.3		5		
	Jumper for potential distribution blue	Z8.000.0202.4		5		
	Endcaps for jumper, red	Z8.000.0202.1		20		
	Endcaps for jumper, blue	Z8.000.0202.2		20		
	8 digit marking tag, unmarked, 60 pcs.	Z4.242.5153.0		10		
	Technical data					
	Maximum switching voltage	250 V AC / 300 V DC				
	Maximum switching current	6 A AC / 2 A DC				
Maximum starting current	10 A					
Mechanical life	1 x 10 ⁷					
Electrical life up to 230V AC / 6A	8 x 10 ⁴					
Isolation voltage of input / output	4 kV _{eff}					
Connectable via pluggable jumper	50 modules					
Wire range fine-stranded/solid	0.5 - 2.5 mm ² (AWG 22 - 14) / 0.25 - 1.5 mm ² (AWG 24 - 16) / 0.25 - 4 mm ² (AWG 24 - 12) 0.25 - 2.5 mm ² (AWG 24 - 14)					
Degree of protection / Mounting rail	IP 20 / TS35					
Dimensions (mm) W x H x D	6.2 x 89 x 70					
Ambient temperature	0 ... +60 °C					
Approvals	CE   					

<p>flare</p> <ul style="list-style-type: none"> • Compact coupling relay • Overall width 6.2 mm / 12.4 (2 change-over contacts) • Screw terminals/ Cage clamp • Special Type 	Description	Part No.	Std. Pack	Part No.	Std. Pack	
	flare		Screw terminal		Cage clamp	
	24V Relay module AC/DC	80.010.4005.0		10	80.010.4105.0	10
	1 change-over contact DC 48V 20mA with gold (3µm)					
	24V Relay module DC				80.010.4103.0	5
	2 change-over contact AC 250V 6A AC/DC 300 V 2A DC					
	24V Knife edge disconnect relay AC/DC				80.010.4120.0	10
	1 change-over contact AC 250V 6A / DC 300 V 2 A					
	24V HAND-0-AUTO-Relay				80.010.4101.0	10
	1 normally open contact AC 250V 6A / DC 300V 2A					
	Technical data					
	Mechanical life	2 x 10 ⁷				
	Electrical life up to 230V AC / 6A	6 x 10 ⁴				
	Isolation voltage of input / output	4 kV _{eff}				
	Connectable via pluggable jumper	50 modules				
Wire range fine-stranded/solid	0.5 - 2.5 mm ² (AWG 22 - 14) / 0.25 - 1.5 mm ² (AWG 24 - 16) / 0.25 - 4 mm ² (AWG 24 - 12) 0.25 - 2.5 mm ² (AWG 24 - 14)					
Degree of protection / Mounting rail	IP 20 / TS35					
Dimensions (mm) W x H x D	6.2 x 89 x 70 / 12.4 x 89 x 70 (2 change-over contacts)					
Ambient temperature	0 ... +60 °C 6 mm ²					
Approvals	CE   					



Coupling relays

Relay output modules

- Pluggable coupling relay
- Screw terminals
- 1 change-over contact / 2 change-over contacts
- 1 relay up to 16 relays
- 5 A switching capacity per output
- 12 V and 24 V



Description	Part No.	Std. Pack	Part No.	Std. Pack
Relay output modules	1 change-over contact		2 change-over contacts	
12V Module AC/DC 1 relay	87.220.7553.0	10		
24V Module DC 4 relay positive switching	87.220.1853.0	1	87.220.4753.3	1
24V Module DC 4 relay negative switching	87.221.5553.0	1		
24V Module DC 8 relay positive switching	87.220.1953.3	1	87.220.4853.3	1
24V Module DC 16 relay positive switching	87.220.2253.3	1		
Replacement relay	Z8.000.0056.9	10	Z8.000.0035.5	10

Technical data	
Maximum switching voltage	250 V AC/DC
Maximum switching current	5 A AC/DC
Maximum starting current	8 A AC/DC
Mechanical life	3 x 10 ⁷
Electrical life 230V AC / 5A	6 x 10 ⁵
Isolation voltage of input / output	4 kV
Wire range fine-stranded/solid	0.25 - 2.5 mm ² (AWG 24-14) / 0.5 - 4 mm ² (AWG 22-12)
Mounting rail	TS 35 / TS 32
Dimensions (mm) W x H x D	1 relay: 12.5 x 80 x 58.3 4/8/16 relay: 70/128/280 x 80 x 71
Ambient temperature	-25 ... +50 °C (Derating)
Approvals	CE

Relay output modules

- Pluggable coupling relay
- Screw terminals
- 1 change-over contact 4 A / 2 change-over contacts 5 A
- 1 relay up to 8 relays
- 115 V and 230 V AC/DC



Description	Part No.	Std. Pack	Part No.	Std. Pack
Relay output modules	1 change-over contact		2 change-over contacts	
230 V Module AC/DC 1 relay	80.010.0011.0	10	80.010.1100.0	5
115 V Module AC/DC 4 relay	80.010.1102.0	1	80.010.1104.0	1
115 V Module AC/DC 8 relay	80.010.1110.0	1	80.010.1112.0	1
230 V Module AC/DC 4 relay	80.010.1106.0	1	80.010.1108.0	1
230 V Module AC/DC 8 relay	80.010.1114.0	1	80.010.1116.0	1
Replacement relay	Z8.000.0181.0	10	Z8.000.0176.2	10


Technical data	
Maximum switching voltage	250 V AC/DC
Maximum switching current	4 A AC/DC
Maximum starting current	6 A AC/DC
Mechanical life	3 x 10 ⁷
Electrical life 230V AC/nominal current	1.5 x 10 ⁵
Isolation voltage of input / output	4 kV
Wire range fine-stranded/solid	0.25 - 2.5 mm ² (AWG 24-14) / 0.5 - 4 mm ² (AWG 22-12)
Mounting rail	TS 35 / TS 32
Dimensions (mm) W x H x D	1 relay: 12.5 x 80 x 70 4/8 relay: 70/128 x 80 x 71
Ambient temperature	-40 ... +50 °C (Derating)
Approvals	CE






Coupling relays

Relay system


- Bridgeable relay system
- Screw terminals
- 1 normally open contact / 1 change-over contact
- 24 V AC/DC






Description	Part No.	Std. Pack	Part No.	Std. Pack
Relay system	Output		Input	
24V Module AC/DC 1 normally open contact	80.010.0005.0	10	80.010.0007.0	10
24V Module AC/DC 1 change-over contact	80.010.0008.0	10	80.010.0009.0	10
Pluggable jumper max. 0.5A	Z8.000.0103.4	10		
Technical data				
Maximum switching voltage	250 V AC/DC		48 V DC (10 µm gold)	
Maximum switching current	5 A AC/DC		20 mA	
Maximum starting current	8 A AC/DC			
Mechanical life	3 x 10 ⁷		3 x 10 ⁷	
Electrical life (up to nominal rating)	2.5 x 10 ⁵		3 x 10 ⁶	
Isolation voltage of input / output	4 kV			
Wire range fine-stranded/solid	0.5 - 2.5 mm ² (AWG 22-14) / 0.5 - 4 mm ² (AWG 22-12)			
Mounting rail	TS 35 / TS 32			
Dimensions (mm) W x H x D	12.5 x 80 x 60			
Ambient temperature	-25 ... +50 °C (Derating up to 65 °C)			
Approvals	CE   			

Relay system


- Bridgeable relay system
- Screw terminals
- 2 change-over contacts 5 A
- 24 V AC/DC






Description	Part No.	Std. Pack	Part No.	Std. Pack
Relay system	Output		Input	
24V Module AC/DC 2 change-over contacts	80.010.1003.0	5	80.010.1002.0	5
Pluggable jumper max. 0.5 A	Z8.000.0103.4	10		
Technical data				
Maximum switching voltage	250 V AC/DC		48 V DC (10 µm gold)	
Maximum switching current	5 A AC/DC		20 mA	
Maximum starting current	6 A AC/DC			
Mechanical life	3 x 10 ⁷		3 x 10 ⁷	
Electrical life (up to nominal rating)	2.5 x 10 ⁵		3 x 10 ⁶	
Isolation voltage of input / output	4 kV			
Wire range fine-stranded/solid	0.5 - 2.5 mm ² (AWG 22-14) / 0.5 - 4 mm ² (AWG 22-12)			
Mounting rail	TS 35 / TS 32			
Dimensions (mm) W x H x D	22.5 x 80 x 60			
Ambient temperature	-25 ... +50 °C			
Approvals	CE   			

Relay system

- Bridgeable relay system
- Screw terminals
- 1 change-over contact 16 A
- 24 V AC/DC




Description	Part No.	Std. Pack
Relay system	Output	
24 V Module AC/DC 1 change-over contact	80.010.0010.0	5
Pluggable jumper max. 0.5 A	Z8.000.0103.4	10
Technical data		
Maximum switching voltage	250 V AC/DC	
Maximum switching current	16 A AC/DC	
Maximum starting current	16 A AC/DC	
Mechanical life	3 x 10 ⁷	
Electrical life (up to nominal rating)	1.8 x 10 ⁵	
Isolation voltage of input / output	4 kV	
Wire range fine-stranded/solid	0.5 - 2.5 mm ² (AWG 22-14) / 0.5 - 4 mm ² (AWG 22-12)	
Mounting rail	TS 35 / TS 32	
Dimensions (mm) W x H x D	22.5 x 80 x 60	
Ambient temperature	-25 ... +50 °C (Derating up to 65 °C)	
Approvals	CE   	






Solid-State relays

flare

- Compact solid-state relay
- Overall width 6.2 mm
- Spring cage clamp
- Output 48 V DC




Description	Part No.	Std. Pack	Part No.	Std. Pack
flare	Output 0,5 A		Output 2 A	
24 V Module DC / Output 48 V	80.020.4100.0	10	80.020.4101.0	10
115 V Module AC/DC / Output 48 V	80.020.4102.0	10		
230 V Module AC/DC / Output 48 V	80.020.4103.0	10		
Pluggable jumper max 2 A	Z8.000.0200.8	10		
8 digit marking tag, unmarked, 60 pcs.	Z4.242.5153.0	10		




Technical data	
Maximum switching voltage	48 V DC (4,4...53 V DC)
Maximum switching current	0,5 A
Min. switching current	0,1 mA
Isolation voltage of input / output	3,75 kV
Connectable via pluggable jumper	50 modules
Wire range fine-stranded/solid	0,25 -1,5 (AWG 24–16) / 0,25 - 2,5 mm ² (AWG 24–14)
Degree of protection / Mounting rail	IP 20 / TS35
Dimensions (mm) W x H x D	6,2 x 89 x 70
Ambient temperature	0 ... +50 °C (Derating)
Approvals	CE   

flare

- Compact solid-state relay
- Overall width 6.2 mm
- Spring cage clamp
- Output 230 V AC




Description	Part No.	Std. Pack
flare	Output 0,5 A	
24V Module DC / Output 230 V AC	80.020.4150.0	10
Pluggable jumper max 2 A	Z8.000.0200.8	10
8 digit marking tag, unmarked, 60 pcs.	Z4.242.5153.0	10



Technical data	
Maximum switching voltage	250 V AC
Maximum switching current	0,5 A
Min. switching current	0,1 mA
Isolation voltage of input / output	2,5 kV
Connectable via pluggable jumper	50 modules
Wire range fine-stranded/solid	0,25 -1,5 mm ² (AWG 24–16) / 0,25 - 2,5 mm ² (AWG 24–14)
Degree of protection / Mounting rail	IP 20 / TS35
Dimensions (mm) W x H x D	6,2 x 89 x 70
Ambient temperature	0 ... +50 °C (Derating)
Approvals	CE   

Solid-state relay

- Bridgeable
- Screw terminals
- Output 60 V DC




Description	Part No.	Std. Pack	Part No.	Std. Pack
Solid-State-Relay	Output 3 A		Output 5 A	
24 V Module DC / Output 48 V	80.020.2003.0	10	80.020.2004.0	10
Pluggable jumper	Z8.000.0103.4	10		

Technical data	
Maximum switching voltage	60 V DC (3...60 V)
Maximum switching current	3 A DC (Derating)
Min. switching current	20 mA
Isolation voltage of input / output	4 kV
Connectable via pluggable jumper	20 modules
Wire range fine-stranded/solid	0,5 -2,5 mm ² (AWG 22–14) / 0,5 - 4 mm ² (AWG 22–12)
Mounting rail	TS 35 / TS 32
Dimensions (mm) W x H x D	12,5 x 80 x 64
Ambient temperature	-20 ... +50 °C (Derating)
Approvals	CE  

Solid-state relay

- Bridgeable
- Screw terminals
- Output 250 V AC



Description	Part No.	Std. Pack	Part No.	Std. Pack
Solid-State-Relay	Output 4 A		Output 6 A	
24 V Module DC / Output 250 V AC	80.020.2001.0	10	80.020.0004.0	10
Pluggable jumper	Z8.000.0103.4	10		

Technical data	
Maximum switching voltage	280 V AC (48...280 V)
Maximum switching current	4 A
Min. switching current	60 mA
Isolation voltage of input / output	4 kV
Connectable via pluggable jumper	20 modules
Wire range fine-stranded/solid	0,5 -2,5 mm ² (AWG 22–14) / 0,5 - 4 mm ² (AWG 22–12)
Mounting rail	TS 35 / TS 32
Dimensions (mm) W x H x D	12,5 x 80 x 56
Ambient temperature	-25 ... +50 °C (Derating)
Approvals	CE 