

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!

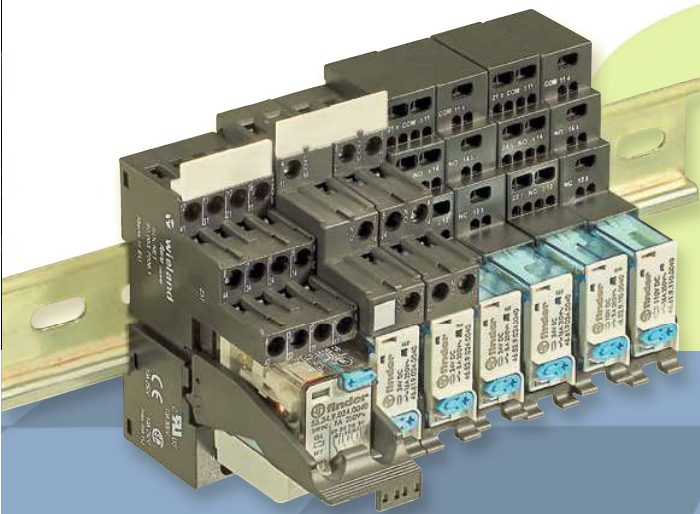
In control, transportation and production technology, coupling relays have been reliably accomplishing important tasks for years, and continue to do so.

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 × 10 ⁷			
Electrical life up to 230 V AC / 6A	6 × 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	80.010.5101.2	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 × 10 ⁷ / 1 × 10 ⁷		2 × 10 ⁷	
Electrical life AC 1	2 × 10 ⁵ / 1 × 10 ⁵		1 × 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, TÜV, UL	

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, TÜV, UL	

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 27 mm
- 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, TÜV, UL	



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		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 TÜV GS					

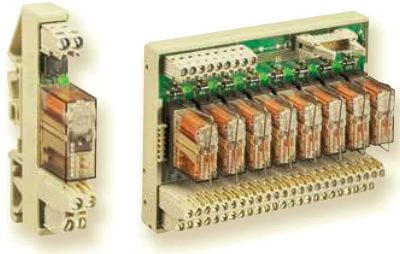
<p>flare</p> <ul style="list-style-type: none"> • Compact coupling relay • Overall width 6.2 mm / 12.4 (2 change-over contacts) • Screw terminals/ Cage clamp • Special Type 	Description		Part No.	Std. Pack	Part No.	Std. Pack	
	flare		Screw terminal		Cage clamp		
	24V Relay module AC/DC		80.010.4005.0	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 TÜV GS					



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



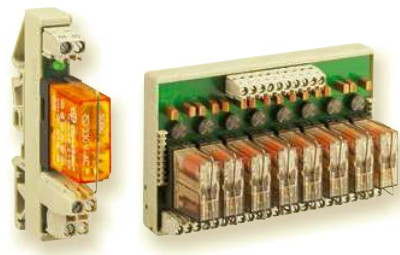
Description	Part No.	Std. Pack	Part No.	Std. Pack
Relay output modules	1 change-over contact		2 change-over contacts	
12V Module AC/DC 1 relay	87.220.7553.0	10		
24V Module DC 4 relay positive switching	87.220.1853.0	1	87.220.4753.3	1
24V Module DC 4 relay negative switching	87.221.5553.0	1		
24V Module 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 ⁶
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 