

General information

Active interface modules are located in every system and available in several versions. Relay interface modules are meant to separate 2 different potential levels. The control side is galvanically isolated from the load and contact side to protect inadmissible voltage. Interfaces are able to adjust various signal levels for every occasion.

With the help of active modules expensive PLC output cards can be reduced into smaller output ratings. Separation level can be realized with single or multiple modules as relay or opto-coupler. They are used as amplifier- and protection modules for switched control electronics, as well as for level adaption. EMC problems at the load side of the relay modules won't be transmitted to the input side because of the galvanically isolation. Modular modules with a minus plug link and a potential rail comb allows a quick installation on the coupler level.

Murrelektronik offers simple modules, which are used as row terminals, modules for building management systems with "HAND-O-AUTO" switches, as well as pluggable relay- and time modules with a wide time range.

Relay features

Electromechanically relays are preferably used as interface modules between PLC and periphery components such as control-, alarm- and regulated installations. A level and load adaption, as well as a galvanically isolation takes place at the same time.

At various possibilities, in different industrial areas, it is necessary to match a suitable contact material of the output side. Several contact loads deny the usage of universal materials. Dependent on the contact load different contact materials are corresponding to the "Contact material table".

Contact life / no. of operations

Each load comprises a resistive, capacitive and an inductive component. It is mainly the inductive component which affects the lifetime. Inductive loads such as solenoids, motors and contactors produce a voltage when switched off which is many times greater than supply voltage. This can quickly burn out the contact. In order to increase the lifetime of the contact, the load must be suppressed.

In theory, a varistor or resistor/capacitor network (RC) across the contact is possible, but dangerous leakage currents may flow to the load when the contact is open. In practice, it is better to fit the suppressor across the load, where it is not only safer but is closer to the source of interference. Murrelektronik can supply many types of universal or made-to-measure suppressors. These suppressors dampen the high voltage transient and reduce the arc at the contacts. Contact life depends upon voltage, current and the nature of the load.

More details about suppression of inductive loads in chapter 3.2

Contact material	Typical properties	Typical applications	Voltage and current levels
Silver-nickel 0.15 gold flashed (AgNi 0.15 hv)	Widely used general purpose material.	General purpose. Suitable for inductive loads.	≥ 12 V ≥ 10 mA
Silver, gold plated (Ag htv)	Gold plating resists contamination but switching loads greater than 30 V/0.2 A removes the gold. Performance reverts to silver.	General purpose. For low to mid-range loads.	≥ 100 mV ≥ 1 mA
Palladium silver, Gold/Rhodium (PdAg-AuRh)	High resistance against oxidation; hard material; stable transfer resistance	Low level signals to mid-range loads.	1 mV...125 V 1 mA...1 A
Silver Tin oxide (AgSnO)	Resists welding and burn-out at high voltages. minimal material erosion	Switching circuits with high on off loading.	≥ 12 V ≥ 10 mA
Silver Tin oxide, gold plated (AgSnO htv)	Gold plating resists contamination but switching loads greater than 30 V/50 mA removes the gold. Performance reverts to AgSnO contacts	General purpose. Suitable for small and large loads.	≥ 100 mV ≥ 1 mA

Relay



MIRO

The modules are offered in two sizes:

6.2 mm module housing with integrated relay with 1 C/O contact and common bridge.

12.4 mm module housing with integrated relay with 2 C/O contact and common bridges.

Connection is via cage clamp terminals or screw terminal. The minus plug-in jumper saves space and wiring time.

Snaps on to DIN-rail to EN 60715.

from page 3.3.4



MIRO 6.2 pluggable

6.2 mm module housing with integrated relay with 1 C/O contact and common bridge.

Connection is via spring clamp terminals. The common bridges saves space and wiring time.

Snap on to DIN-rail EN 60715.

page 3.3.7



RMM, RMME

Width 12 mm. Attractive and functional design.

Separation between input and outputs is clearly defined. Each module can be individually labelled.

LED indicator. Snaps on to DIN-rail to EN 60715 (TH35) or (G32).

Versions with plug-in jumper on the input side simplify wiring, because no loop in of the A2 common is then necessary.

from page 3.3.10



RMMD/RMMDE/RMMDH

Compact design incorporating clever features. 1 relay with 1 C/O contact or 2 N/O contacts with a width of only 12 mm.

Switching current of up to 8 A possible.

Up to 50 modules can be linked using the plug-in jumper.

The RMMDH also has a switch with 3 settings "HAND-O-AUTO" which allows manual operation or simulations to be carried out.

Snaps on to DIN-rail to EN 60715 (TH35) or (G32).

from page 3.3.13



RM, RME

Width 22.5 mm. There are up to 4 relays in each housing. Each can be individually labelled.

The modules are offered with screw terminal or plug in screw terminals. This allows them to be replaced in maintenance very quickly. Positive guided contacts are also on offer.

Snaps on to DIN-rail to EN 60715 (TH35) or (G32).

from page 3.3.17

Relay socket



MKS-K

For cradle relays with wiring method via screw terminals.

Integrated LED and suppression.

Snaps onto DIN-rail to EN 60715 (TH35).

page 3.3.21



MKS-J

For industrial relays with wiring method via screw terminals.

Integrated LED and suppression.

Snaps onto DIN-rail to EN 60715 (TH35).

page 3.3.22

Relay socket



IR 4

For industrial relays with wiring method via screw terminals.
Snaps onto DIN-rail to EN 60715 (TH35).
Versions in protection IP40 and IP20.

page 3.3.23



RM

For plug in relays with 2, 4 or 8 plugged SNR-relays. Optionally with semiconductor relays.
Snaps onto DIN-rail to EN 60715 (TH35).

page 3.3.24



MRB

For plug-in relays with 1 or 2 C/O.
Snaps onto DIN-rail to EN 60715 (TH35).
Suitable for all plug-in relays and can be fitted with a suppressor.

page 3.3.25

Plug-in relays



Cardle relays

Plug-in cradle relay for base socket with 2 or 4 C/O contacts.

page 3.3.26



Industrial relay

Plug-in industrial relay for base socket with 4 C/O contacts.

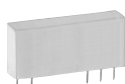
page 3.3.26



Plug-in relay

Plug-in relay available in 1 or 2 contacts.
For use with MRB relay.

page 3.3.27



Plug-in relay

5 mm small, pluggable SNR-relay modules for MIRO 6.2 pluggable and RM base socket.

page 3.3.27

Terminal relays

Manual switch VDI 3814

with enhanced features

MIRO 6.2

Output relay
1 C/O contact



MIRO 6.2

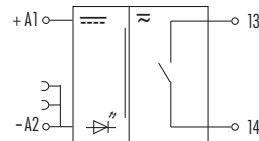
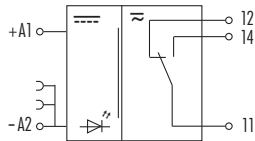
Output relay
1 N/O contact



Circuit diagram

Common connection up to max. 50 V AC/DC

At connection voltages of 110 and 230 V, A2 does not feature potential sockets



Ordering data	Art.-No.	Art.-No.
Input voltage	spring clamp/screw terminals	spring clamp/screw terminals
12 V DC	cUL	6652050
24 V DC	UL + CSA	6652000
24 V AC/DC	UL + CSA	6652001
48 V DC	UL + CSA	6652020
110 V AC/DC	UL + CSA	6652030
230 V AC/DC	UL + CSA	6652040

Input		
Input voltage/-current	12 V DC	10 ... 15 V DC / approx. 20 mA
	24 V DC	19.2 ... 30 V DC / approx. 14 mA
	24 V AC/DC	19.2 ... 30 V AC/DC / approx. 17 mA
	48 V DC	40 ... 53 V DC / approx. 12 mA
	110 V AC/DC	95 ... 121 V AC/DC / approx. 4 mA
	230 V AC/DC	195 ... 253 V AC/DC / approx. 3 mA

Status indicator	green LED
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Output	
Max. switched voltage	250 V AC/DC
Max. switched current	6 A (see table, switching capabilities to EN 60947-5-1)
Min. load current	10 mA/12 V DC
Max. power rating (voltage dependent)	1500 VA/120 W
Contact material	Ag Sn O ₂
Energize/release/contact bounce time	10/15/1.5 ms

General data	
Mech./elect. life	2 x 10 ⁷ /load dependent (for inductive loads we recommend interference suppression components connected parallel to the coil)
Max. switching frequency	10 Hz
Test isolation voltage	4 kV/AC; safe separation to EN 60947-1
Air and creepage distance	6/8 mm
Temperature range	-20...+55 °C
Mounting method	DIN-rail mounting to EN 60715 (TH35)
Dimension H x B x T	90 x 6.2 x 65 mm

Accessories	Art.-No.	Dimension drawing	Load limit curve	De-rating curve	Switching capabilities to EN 60947			
Bridging link max. 2 A	90961							
Bridging comb 10-pole, red	90976				AC 1	AC 15	DC 13	
End caps, 1 pair, red	90982				24 V	6 A	3 A	1 A
Bridging comb 10-pole, blue	90975				110 V	6 A	3 A	0.2 A
End caps, 1 pair, blue	90980				230 V	6 A	3 A	0.1 A
Wire chain 16-pole	90977							
Label plate	90901							

Notes	For screw-type terminal connection, the item number changes from 6652... to 52... (i.e. the prefix 66 is dropped). 1) When the listed values are exceeded the gold plating is destroyed. The relay will then take on the properties of an output type.
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Terminal relays

Input relays

with enhanced features

MIRO 6.2

Input relays
1 C/O contact



MIRO 6.2

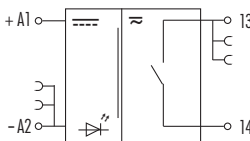
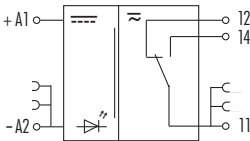
Input relays
1 N/O contact



Circuit diagram

Common connection up to max. 50 V AC/DC

At connection voltages of 110 and 230 V,
A2 does not feature potential sockets



Ordering data

	Art.-No.	Art.-No.
Input voltage	spring clamp/screw terminals	spring clamp/screw terminals
12 V DC		
24 V DC	UL + CSA	6652005
24 V AC/DC	UL + CSA	6652003
48 V DC	UL + CSA	6652021
110 V AC/DC	UL + CSA	6652031
230 V AC/DC	UL + CSA	6652041

Input		
Input voltage/-current	12 V DC	10 ... 15 V DC / approx. 20 mA
	24 V DC	19.2 ... 30 V DC / approx. 14 mA
	24 V AC/DC	19.2 ... 30 V AC/DC / approx. 17 mA
	48 V DC	40 ... 53 V DC / approx. 12 mA
	110 V AC/DC	95 ... 121 V AC/DC / approx. 4 mA
	230 V AC/DC	195 ... 253 V AC/DC / approx. 3 mA

Status indicator	yellow LED
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Output	
Max. switched voltage	30 V AC/36 V DC ¹⁾
Max. switched current	50 mA ¹⁾
Min. load current	1 mA/12 V DC
Max. power rating (voltage dependent)	1500 VA/120 W
Contact material	Ag Sn O ₂ gold plated
Energize/release/contact bounce time	10/15/1.5 ms

General data	
Mech./elect. life	2 x 10 ⁷ /load dependent (for inductive loads we recommend interference suppression components connected parallel to the coil)
Max. switching frequency	10 Hz
Test isolation voltage	4 kV/AC; safe separation to EN 60947-1
Air and creepage distance	6/8 mm
Temperature range	-20 ... +55 °C
Mounting method	DIN-rail mounting to EN 60715 (TH35)
Dimension H x B x T	90 x 6.2 x 65 mm

Accessories	Art.-No.	Dimension drawing	Load limit curve	De-rating curve	Switching capabilities to EN 60947																
Bridging link max. 2 A	90961				<table><tr><th></th><th>AC 1</th><th>AC 15</th><th>DC 13</th></tr><tr><td>24 V</td><td>6 A</td><td>3 A</td><td>1 A</td></tr><tr><td>110 V</td><td>6 A</td><td>3 A</td><td>0.2 A</td></tr><tr><td>230 V</td><td>6 A</td><td>3 A</td><td>0.1 A</td></tr></table>		AC 1	AC 15	DC 13	24 V	6 A	3 A	1 A	110 V	6 A	3 A	0.2 A	230 V	6 A	3 A	0.1 A
	AC 1					AC 15	DC 13														
24 V	6 A					3 A	1 A														
110 V	6 A					3 A	0.2 A														
230 V	6 A					3 A	0.1 A														
Bridging comb 10-pole, red	90976																				
End caps, 1 pair, red	90982																				
Bridging comb 10-pole, blue	90975																				
End caps, 1 pair, blue	90980																				
Wire chain 16-pole	90977																				
Label plate	90901																				

Notes	
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For screw-type terminal connection, the item number changes from 6652... to 52... (i.e. the prefix 66 is dropped).

¹⁾ When the listed values are exceeded the gold plating is destroyed. The relay will then take on the properties of an output type

Terminal relays
with enhanced features

MIRO 6.2
Output relay
1 N/O contact
with protected H-O-A switch



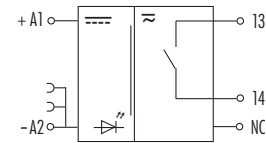
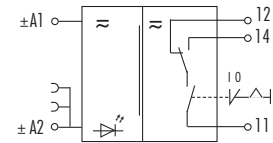
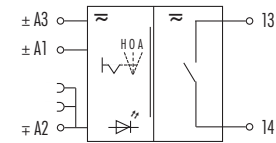
MIRO 6.2
Output relay
1 C/O contact
with isolation function

MIRO 6.2
Output relay
1 N/O contact
with soldering terminal

Circuit diagram

Common connection up to
max. 50 V AC/DC

At connection voltages of 110 and 230 V,
A2 does not feature potential sockets



common return for NC

Ordering data	Art.-No.	Art.-No.	Art.-No.
Input voltage	spring clamp/screw terminals	spring clamp/screw terminals	spring clamp/screw terminals
24 V DC			UL + CSA
24 V AC/DC	UL + CSA	UL + CSA	6652006
48 V DC			
110 V AC/DC			
230 V AC/DC			

Input	
Input voltage/-current	24 V DC 19.2 ... 30 V DC / approx. 14 mA
	24 V AC/DC 19.2 ... 30 V AC/DC / approx. 17 mA
	48 V DC
	110 V AC/DC
	230 V AC/DC

Status indicator green LED

Output	
Max. switched voltage	250 V AC/DC
Max. switched current	6 A (see table)
Min. load current	10 mA/12 V DC
Max. power rating (voltage dependent)	1500 VA/120 W
Contact material	Ag Sn O ₂
Energize/release/contact bounce time	10/15/1.5 ms

General data	
Mech./elect. life	2 x 10 ⁷ /load dependent (for inductive loads we recommend interference suppression components connected parallel to the coil)
Max. switching frequency	10 Hz
Test isolation voltage	4 kV/AC; safe separation to EN 60947-1
Air and creepage distance	6/8 mm
Temperature range	-20...+55 °C
Mounting method	DIN-rail mounting to EN 60715 (TH35)
Dimension H x B x T	90 x 12.4 x 65 mm

Accessories	Art.-No.	Dimension drawing	Load limit curve	De-rating curve	Switching capabilities to EN 60947																
Bridging link max. 2 A	90961				<table><tr><td></td><td>AC 1</td><td>AC 15</td><td>DC 13</td></tr><tr><td>24 V</td><td>6 A</td><td>3 A</td><td>1 A</td></tr><tr><td>110 V</td><td>6 A</td><td>3 A</td><td>0.2 A</td></tr><tr><td>230 V</td><td>6 A</td><td>3 A</td><td>0.1 A</td></tr></table>		AC 1	AC 15	DC 13	24 V	6 A	3 A	1 A	110 V	6 A	3 A	0.2 A	230 V	6 A	3 A	0.1 A
	AC 1				AC 15	DC 13															
24 V	6 A				3 A	1 A															
110 V	6 A				3 A	0.2 A															
230 V	6 A				3 A	0.1 A															
Bridging comb 10-pole, red	90976																				
End caps, 1 pair, red	90982																				
Bridging comb 10-pole, blue	90975																				
End caps, 1 pair, blue	90980																				
Wire chain 16-pole	90977																				
Label plate	90901																				

Notes

For screw-type terminal connection, the item number changes from 6652... to 52... (i.e. the prefix 66 is dropped).

1) When the listed values are exceeded the gold plating is destroyed. The relay will then take on the properties of an output type

Terminal relays

with enhanced features

MIRO 6.2

Output relay
1 N/O contact
with H-O-A switch



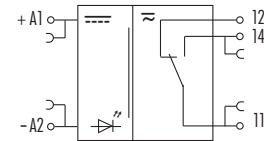
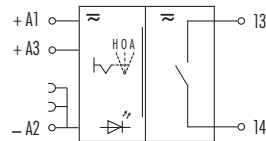
MIRO 6.2 pluggable

Output relay
1 C/O contact



Circuit diagram

Common connection up to
max. 50 V AC/DC

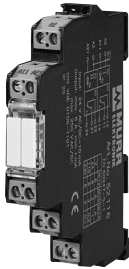


Ordering data		Art.-No.	Art.-No.
Input voltage		screw terminals	spring clamp terminals
24 V DC			UL + CSA ¹⁾ 3000-16013-2100010
24 V AC/DC		UL + CSA 526010	UL + CSA ¹⁾ 3000-16013-3100020
48 V DC			
110 V AC/DC			
230 V AC/DC			UL + CSA ²⁾ 3000-16013-3100030
Input			
Input voltage/-current	24 V DC		19.2 ... 26.8 V AC/DC/approx. 10 mA
	24 V AC/DC	19.2 ... 28 V AC/DC /approx. 7 mA	19.2 ... 28.8 V AC/DC/approx. 12 mA
	48 V DC		
	110 V AC/DC		
	230 V AC/DC		184 ... 264 V AC/DC/approx. 4 mA
Status indicator		green LED for relay activation red LED for manual made	green LED
Output			
Max. switched voltage		250 V AC/DC	
Max. switched current		6 A (see table)	
Min. load current		10 mA/12 V DC	
Max. power rating (voltage dependent)		1500 VA/120 W	
Contact material		Ag Sn O ₂	
Energize/release/contact bounce time		8/20/2 ms	
General data			
Mech./elect. life		2 x 10 ⁷ /load dependent (for inductive loads we recommend interference suppression components connected parallel to the coil)	
Max. switching frequency		10 Hz	
Test isolation voltage		4 kV/AC; safe separation to EN 60947-1	
Air and creepage distance		6/8 mm	
Temperature range		-20 ... +55 °C	
Mounting method		DIN-rail mounting to EN 60715 (TH35)	
Dimension H x B x T		90 x 6.2 x 65 mm	93 x 6.2 x 75.6 mm
Accessories		Art.-No.	Art.-No.
Bridging link max. 2 A		90961	Bridging link, blue 3000-90000-0300010
Bridging comb 10-pole, red		90976	Bridging link, black 3000-90000-0300020
End caps, 1 pair, red		90982	Removable relay ¹⁾ 3000-16023-2100010
Bridging comb 10-pole, blue		90975	²⁾ 3000-16023-2100020
End caps, 1 pair, blue		90980	Isolation plate 3000-90000-0300030
Wire chain 6-pole		90977	
Label plate		90901	
Notes		For screw-type terminal connection, the item number changes from 6652... to 52... (i.e. the prefix 66 is dropped). Load limit curve, de-rating curve and switching capabilities see page 3.3.6	

Terminal relays

MIRO 12.4

Output relay
2 C/O contact
with enhanced features



MIRO 12.4

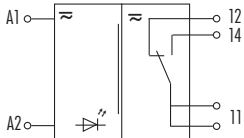
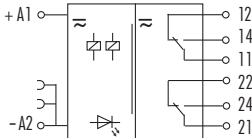
Input relays
2 C/O contact
with enhanced features

MIRO 12.4

Input relays
1 C/O contact
Multi-voltage input

Circuit diagram

At connection voltages of 110 and 230 V, A2 does not feature potential sockets



Ordering data	Art.-No.	Art.-No.	Art.-No.
Input voltage	spring clamp/screw terminals	spring clamp/screw terminals	screw terminals
24 V DC	cUL 6652102	cUL 6652110	52160
24 V AC/DC	cUL 6652103	cUL 6652111	52160
48 V DC	cUL 6652120	cUL 6652126	52160
110 V AC/DC	cUL 6652130	cUL 6652136	52160
230 V AC/DC	cUL 6652140	cUL 6652146	52160

Input			
Input voltage/-current	24 V DC	19.2 ... 30 V DC / approx. 18 mA	
	24 V AC/DC	19.2 ... 30 V AC/DC / approx. 20 mA	min. 21.6 V AC/DC/appr. 6 mA max. 12 mA for 1 s)
	48 V DC	40 ... 53 V DC / approx. 14 mA	approx. 27 mA (max. 60 mA for 180 s)
	110 V AC/DC	95 ... 121 V AC/DC / approx. 7 mA	approx. 10 mA (max. 300 mA for 60 s)
	230 V AC/DC	195 ... 253 V AC/DC / approx. 5 mA	max. 253 V AC/DC/appr. 6 mA (max. 900 mA for 15 ms)

Status indicator	green LED	
Output		
Max. switched voltage	250 V AC/DC	30 V AC/36 V DC ¹⁾
Max. switched current	6 A (see table)	50 mA ¹⁾
Min. load current	10 mA/12 V DC	1 mA/12 V DC
Max. power rating (voltage dependent)	1500 VA/120 W	
Contact material	Ag Sn O ₂	Ag Sn O ₂ gold plated
Energize/release/contact bounce time	10/15/1.5 ms	

General data	
Mech./elect. life	2 x 10 ⁷ /load dependent (for inductive loads we recommend interference suppression components connected parallel to the coil)
Max. switching frequency	10 Hz
Test isolation voltage	4 kV/AC; safe separation to EN 60947-1
Air and creepage distance	6/8 mm
Temperature range	-20...+55 °C
Mounting method	DIN-rail mounting to EN 60715 (TH35)
Dimension H x B x T	90 x 12.4 x 65 mm

Accessories	Art.-No.	Dimension drawing	Load limit curve	De-rating curve	Switching capabilities to EN 60947																
Bridging link max. 2 A	90961				<table><tr><td></td><td>AC 1</td><td>AC 15</td><td>DC 13</td></tr><tr><td>24 V</td><td>6 A</td><td>3 A</td><td>1 A</td></tr><tr><td>110 V</td><td>6 A</td><td>3 A</td><td>0.2 A</td></tr><tr><td>230 V</td><td>6 A</td><td>3 A</td><td>0.1 A</td></tr></table>		AC 1	AC 15	DC 13	24 V	6 A	3 A	1 A	110 V	6 A	3 A	0.2 A	230 V	6 A	3 A	0.1 A
	AC 1					AC 15	DC 13														
24 V	6 A					3 A	1 A														
110 V	6 A	3 A	0.2 A																		
230 V	6 A	3 A	0.1 A																		
Wire chain 16-pole	90977																				
Label plate	90901																				

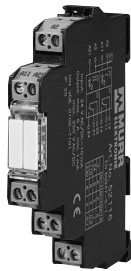
Notes	
	For screw-type terminal connection, the item number changes from 6652... to 52... (i.e. the prefix 66 is dropped).
	¹⁾ When the listed values are exceeded the gold plating is destroyed. The relay will then take on the properties of an output type.

Terminal relays
with enhanced features

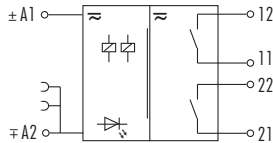
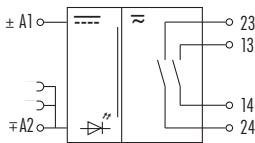
MIRO 12.4
Output relay
2 N/O contact/with enhanced features
for use in control cabinets in building installations



MIRO 12.4
Output relay
2 N/O contacts



Circuit diagram



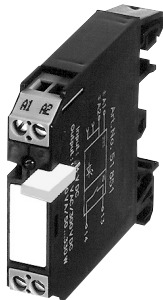
Ordering data		Art.-No.	Art.-No.																
Input voltage		spring clamp/screw terminals	spring clamp/screw terminals																
24 V DC																			
24 V AC/DC		6652106	6652104																
48 V DC																			
110 V AC/DC																			
230 V AC/DC																			
Input																			
Input voltage/-current	24 V DC																		
	24 V AC/DC	19.2 ... 30 V AC/DC /approx. 17 mA																	
	48 V DC																		
	110 V AC/DC																		
	230 V AC/DC	195 ... 253 V AC/DC /approx. 3 mA (hold voltage ≥ 70 V/hold current ≥ 0.3 mA)																	
Status indicator		green LED																	
Output																			
Max. switched voltage		250 V AC/DC																	
Max. switched current		6 A (see table)																	
Min. load current		10 mA/12 V DC																	
Max. power rating (voltage dependent)		1500 VA/120 W																	
Contact material		Ag Sn O ₂																	
Energize/release/contact bounce time		10/15/1.5 ms																	
General data																			
Mech./elect. life		2 x 10 ⁷ /load dependent (for inductive loads we recommend interference suppression components connected parallel to the coil)																	
Max. switching frequency		10 Hz																	
Test isolation voltage		4 kV/AC; safe separation to EN 60947-1																	
Air and creepage distance		6/8 mm																	
Temperature range		-20...+55 °C																	
Mounting method		DIN-rail mounting to EN 60715 (TH35)																	
Dimension H x B x T		90 x 12.4 x 65 mm																	
Accessories	Art.-No.	Dimension drawing	Load limit curve																
Bridging link max. 2 A	90961																		
Wire chain 16-pole	90977																		
Label plate	90901																		
		De-rating curve	Switching capabilities to EN 60947																
			<table><tr><td></td><td>AC 1</td><td>AC 15</td><td>DC 13</td></tr><tr><td>24 V</td><td>6 A</td><td>3 A</td><td>1 A</td></tr><tr><td>110 V</td><td>6 A</td><td>3 A</td><td>0.2 A</td></tr><tr><td>230 V</td><td>6 A</td><td>3 A</td><td>0.1 A</td></tr></table>		AC 1	AC 15	DC 13	24 V	6 A	3 A	1 A	110 V	6 A	3 A	0.2 A	230 V	6 A	3 A	0.1 A
	AC 1	AC 15	DC 13																
24 V	6 A	3 A	1 A																
110 V	6 A	3 A	0.2 A																
230 V	6 A	3 A	0.1 A																

Notes

For screw-type terminal connection, the item number changes from 6652... to 52... (i.e. the prefix 66 is dropped).

Mini relay modules

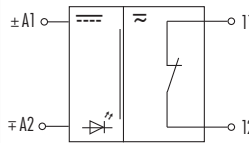
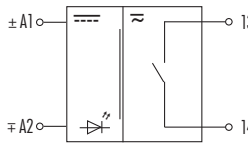
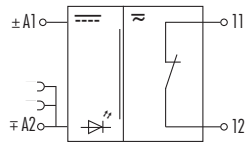
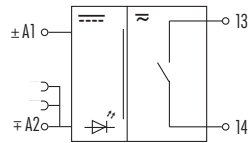
RMM
Output relay
with minus plug-in jumper



RMM
Output relay
without minus plug-in jumper



Circuit diagram

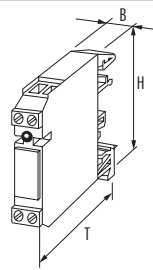
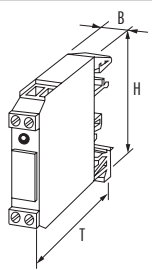


Ordering data	Art.-No.	Art.-No.	Art.-No.	Art.-No.
Input voltage	1 relay; 1 N/O contact	1 relay; 1 N/C contact	1 relay; 1 N/O contact	1 relay; 1 N/C contact
24 V DC	51851	51808	51551	51508
48 V DC	51850		51550	
110 V AC			51552	
230 V AC			51515	51562

Input	
Input voltage/-current	24 V AC/DC ±10 %/15 mA 48 V AC/DC ±10 %/10 mA 110 V AC +10 % -15 %/3.5 mA 230 V AC +10 % -15 %/3.5 mA
Plug-in jumper	Art.-No. 90960 (included with relay) —
Status indicator	red LED

Output	
Max. switched voltage	250 V AC/300 V DC
Max. switched current	5 A
Min. load current	100 mA
Max. power rating (voltage dependent)	1250 VA/240 W
Contact material	Ag Ni 0.15 hv; Ag hv
Energize/release/contact bounce time	10/15/1.5 ms

General data	
Mech./elect. life	2 x 10 ⁷ /load dependent
Max. switching frequency	10 Hz
Test isolation voltage	4 kV/AC
Temperature range	-20...+50 °C
Mounting method	DIN-rail mounting to EN 60715 (TH35) or (G32)
Dimension H x B x T	56 x 12 x 64 mm

Dimension drawing	 
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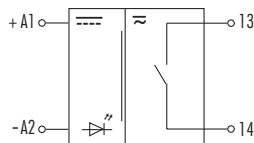
Notes	Accessories can be found in chapter 3.13
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Mini relay modules

RMM
Output relay



Circuit diagram



Ordering data

Art.-No.

Input voltage	1 relay; 1 N/O contact	
24 V DC		512764
48 V DC		
110 V AC		
230 V AC		

Input

Input voltage/-current	24 V DC $\pm$ 10 %/15 mA	

Status indicator	green LED
Connection	screw terminals

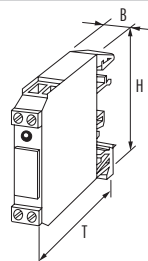
Output

Max. switched voltage	250 V AC/300 V DC
Max. switched current	5 A
Min. load current	100 mA
Max. power rating (voltage dependent)	1250 VA/240 W
Contact material	Ag Ni 0.15 hv; Ag hv
Energize/release/contact bounce time	10/15/1.5 ms
Connection	screw terminals

General data

Mech./elect. life	2 x 10 ⁷ /load dependent
Max. switching frequency	10 Hz
Test isolation voltage	4.0 kV AC
Temperature range	-20...+50 °C
Mounting method	DIN-rail mounting to EN 60715 (TH35) or (G32)
Dimension H x B x T	56 x 12 x 64 mm

Dimension drawing



Notes

Accessories can be found in chapter 3.13
VW Id.Nr.: 1 232252

Mini relay modules

RMME

Input relays
with minus plug-in jumper

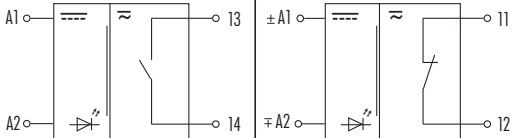
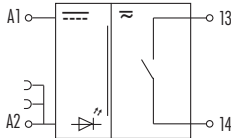


RMME

Input relays
without minus plug-in jumper



Circuit diagram



Ordering data

	Art.-No.	Art.-No.	Art.-No.
Input voltage	1 relay; 1 N/O contact	1 relay; 1 N/O contact	1 relay; 1 N/C contact
24 V AC/DC	51860	51560	51571
48 V AC/DC		51553	
110 V AC		51526	
230 V AC		51517	

Input

Input voltage/-current	24 V AC/DC $\pm 10\%$ / 7 mA
	48 V AC/DC $\pm 10\%$ / 7 mA
	110 V AC $+10\%$ - 15 % / 7 mA
	230 V AC $+10\%$ - 15 % / 7 mA
Plug-in jumper	Art.-No. 90960 (included with relay)
Status indicator	yellow LED

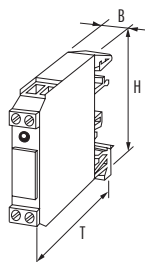
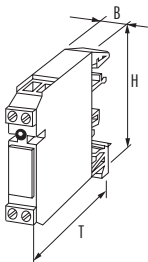
Output

Max. switched voltage	125 V AC/DC
Max. switched current	1 A
Min. load current	1 mA
Max. power rating (voltage dependent)	60 VA/30 W
Contact material	Pd Ni-Au Rh
Energize/release/contact bounce time	10/10/1 ms

General data

Mech./elect. life	1 x 10 ⁸ / load dependent
Max. switching frequency	15 Hz
Test isolation voltage	1.5 kV AC
Temperature range	-20...+60 °C
Mounting method	DIN-rail mounting to EN 60715 (TH35) or (G32)
Dimension H x B x T	56 x 12 x 64 mm

Dimension drawing



Notes

Accessories can be found in chapter 3.13

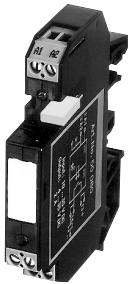
Relay modules with minus plug-in jumper

RMMD

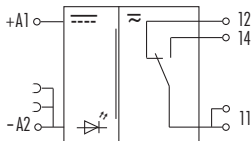
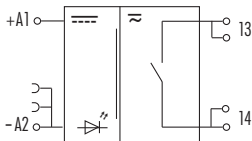
Output relay with minus plug-in jumper

RMMD

Output relay with minus plug-in jumper



Circuit diagram



Ordering data

Art.-No.

Art.-No.

Input voltage	1 relay; 1 N/O contact	1 relay; 1 N/C contact
24 V DC	¹⁾ 51100	¹⁾ 51120
48 V AC/DC		
110 V AC		
230 V AC	51108	

Input

Input voltage/-current	24 V DC $\pm 10\%$ /17 mA
	230 V AC $+10\%$ -15 %/5 mA (without Plug-in jumper)
Plug-in jumper	Art.-No. 90960 (included with relay) plug-in jumper not possible with 230 V version
Status indicator	red LED

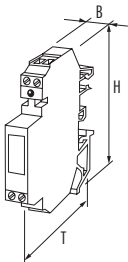
Output

Max. switched voltage	250 V AC/DC
Max. switched current	8 A (6 A at 230 V-type)
Min. load current	100 mA
Max. power rating (voltage dependent)	2000 VA/240 W
Contact material	Ag Ni 0.15 hv; Ag hv
Energize/release/contact bounce time	10/15/2 ms

General data

Mech./elect. life	2 x 10 ⁷ /load dependent
Max. switching frequency	10 Hz
Test isolation voltage	5 kV AC; at Art.-No. 51108: 4.0 kV AC
Temperature range	-20...+50 °C
Mounting method	DIN-rail mounting to EN 60715 (TH35) or (G32)
Dimension H x B x T	82 x 12 x 68 mm

Dimension drawing



Notes

Accessories can be found in chapter 3.13
¹⁾Units with safe separation to VDE 0106, part 101/VDE 0160

Minus plug-in jumper

RMMD

Output relay
with low connection current

RMMDE

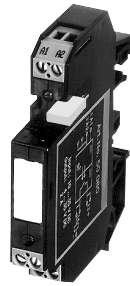
Input relays
with enhanced features

RMMDE

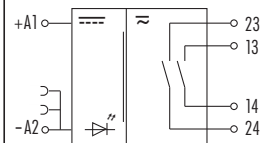
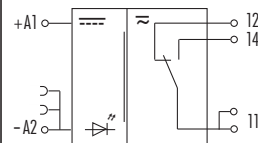
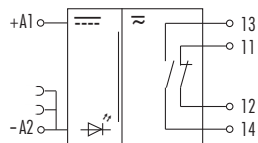
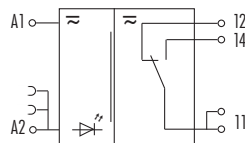
Input relays
with enhanced features

RMMDE

Input relays
with enhanced features



Circuit diagram



Ordering data

Art.-No.

Art.-No.

Art.-No.

Art.-No.

Input voltage	1 relay; 1 C/O contact	1 relay; 1 N/O contact/1 N/C contact	1 relay; 1 C/O contact	1 relay; 2 N/O contacts
24 V AC/DC	¹⁾ 51125			
24 V DC		516014	51130	51140
110 V AC				
230 V AC			51138	

Input

Input voltage/-current	24 V AC/DC $\pm 10\%$ /max. 10 mA	24 V DC $\pm 10\%$ /max. 20 mA	24 V DC $\pm 10\%$ /max. 15 mA	24 V DC $\pm 10\%$ /max. 15 mA
			230 V AC $\pm 10\%$ -15 %/5 mA	

Plug-in jumper Art.-No. 90960 (included with relay) plug-in jumper not possible with 230 V version

Status indicator red LED yellow LED

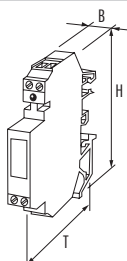
Output

Max. switched voltage	250 V AC/DC	250 V AC/DC	250 V AC/DC	250 V AC/DC
Max. switched current	8 A	3 A	5 A	2 A
Min. load current	100 mA	1 mA	1 mA	5 mA
Max. power rating (voltage dependent)	2000 VA/240 W	90 W/VA	60 VA/30 W	250 VA/150 W
Contact material	Ag Ni 0.15 hv; Ag hv	Ag-hv	Ag Ni 0.15 hv; Ag hv	Ag Au
Energize/release/contact bounce time	10/15/2 ms	6/3/2 ms	10/10/1 ms	10/10/1 ms

General data

Mech./elect. life	2×10^7 /load dependent	2×10^7 /load dependent	1×10^8 /load dependent	2×10^7 /load dependent
Max. switching frequency	10 Hz	10 Hz	15 Hz	15 Hz
Test isolation voltage	5 kV AC	2.5 kV AC	4 kV AC	1.5 kV AC
Temperature range	-20...+50 °C	-20...+60 °C	-20...+60 °C	-20...+50 °C
Mounting method	DIN-rail mounting to EN 60715 (TH35) or (G32)			
Dimension H x B x T	82 x 12 x 68 mm			

Dimension drawing

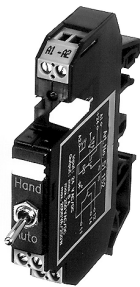


Notes

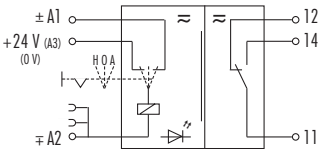
Accessories can be found in chapter 3.13
¹⁾Units with safe separation to VDE 0106, part 101/VDE 0160

for use in Building Management Systems

RMMDH
Output relay with negative plug-in jumper and toggle switch for HAND-O-AUTO control



Circuit diagram



Ordering data

Art.-No.

Input voltage	1 relay; 1 C/O contact
24 V DC	
24 V AC/DC	51152
110 V AC	
230 V AC	

Input

Input voltage/-current	24 V AC/DC $\pm 10\%$ / 16 mA
------------------------	-------------------------------

Plug-in jumper	Art.-No. 90960 (included with relay)
Status indicator	red LED

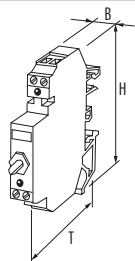
Output

Max. switched voltage	250 V AC/DC
Max. switched current	8 A
Min. load current	100 mA
Max. power rating (voltage dependent)	2000 VA/240 W
Contact material relay (switch)	Ag Ni 0.15 μ m
Energize/release/contact bounce time	10/10/2 ms

General data

Mech./elect. life	3×10^7 / load dependent
Max. switching frequency	15 Hz
Test isolation voltage	3 kV AC
Temperature range	-20...+50 °C
Mounting method	DIN-rail mounting to EN 60715 (TH35) or (G32)
Dimension H x B x T	82 x 12 x 82 mm

Dimension drawing/description

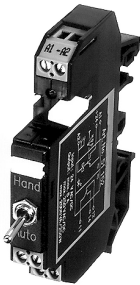


Notes

Accessories can be found in chapter 3.13

with HAND-O-AUTO

RMMDH
Output relay with negative plug-in and toggle switch for HAND-O-AUTO control has auxiliary alarm contact when in "HAND" position



RMMDH
Output relay with negative plug-in jumper and toggle switch to bridge working contact.

Circuit diagram		
Ordering data	Art.-No.	Art.-No.
Input voltage	1 relay; 1 C/O contact	1 relay; 1 C/O contact
24 V DC	51153	51101
48 V DC		
110 V AC		
230 V AC		
Input		
Input voltage/-current	24 V DC ±10 %/16 mA	24 V DC ±10 %/10 mA
Plug-in jumper	Art.-No. 90960 (included with relay)	
Status indicator	red LED	
Output		
Max. switched voltage	250 V AC/DC; CTL-alarm signal 24 V DC	250 V AC/30 V DC
Max. switched current	8 A; CTL-alarm signal 10 mA	6 A
Min. load current	100 mA	100 mA
Max. power rating (voltage dependent)	2000 VA/240 W	750 VA/90 W
Contact material relay (switch)	Ag Ni 0.15 hv	Ag Cd O (Ag)
Energize/release/contact bounce time	10/10/2 ms	
General data		
Mech./elect. life	3 x 10 ⁷ /load dependent	
Max. switching frequency	15 Hz	
Test isolation voltage	4 kV AC	3 kV AC
Temperature range	-20...+50 °C	
Mounting method	DIN-rail mounting to EN 60715 (TH35) or (G32)	
Dimension H x B x T	82 x 12 x 82 mm	
Dimension drawing		
Notes	Accessories can be found in chapter 3.13	

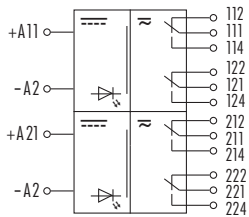
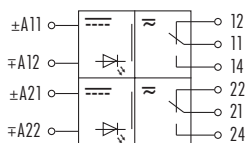
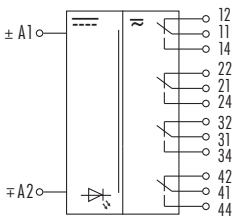
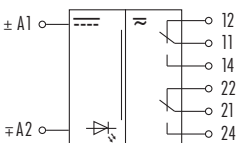
This relay enables the load to be controlled by a PLC with the added facility to manually switch the load on or off using the toggle switch. Art.-No. 51101 differs in that the relay contact is bridged by the hand operated switch.

MCVO Relays

RM
Output relay

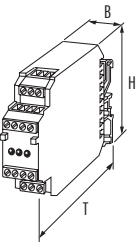


Circuit diagram



Terminal layout different for
Art.-No. 510676

Ordering data	Art.-No.	Art.-No.	Art.-No.	Art.-No.
Input voltage	1 relay; 2 C/O contacts	1 relay; 4 C/O contacts	2 relays; each 1 C/O contact	2 relays; each 2 C/O contacts
24 V DC	51540	51410	51485	51465
48 V DC				
110 V AC				
230 V AC		51413	51412	
Input				
Input voltage/-current	24 V DC $\pm 10\%$ /28 mA	24 V DC $\pm 10\%$ /10 mA	24 V DC $\pm 10\%$ /14 mA	
	230 V AC $\pm 10\%$ -15 %/15 mA	230 V AC $\pm 10\%$ -15 %/10 mA		
Status indicator	red LED			
Output				
Max. switched voltage	250 V AC/DC	250 V AC/DC	250 V AC/DC	250 V AC/DC
Max. switched current	5 A	2 A	5 A	5 A
Min. load current	100 mA			
Max. power rating (voltage dependent)	1250 VA/240 W	125 VA/60 W	1250 VA/240 W	
Contact material	Ag Ni 0.15	Ag hv	Ag Ni 0.15 hv; Ag hv	Ag Ni 0.15
Energize/release/contact bounce time	10/10/2 ms	10/20/2 ms	10/10/2 ms	
General data				
Mech./elect. life	5 x 10 ⁷ /load dependent	5 x 10 ⁷ /load dependent	2 x 10 ⁷ /load dependent	
Max. switching frequency	10 Hz	10 Hz	10 Hz	
Test isolation voltage	4 kV AC	1.0 kV AC	4 kV AC	
Temperature range	-20...+50 °C			
Mounting method	DIN-rail mounting to EN 60715 (TH 35) or (G 32)			
Dimensions H x B x T	75 x 22.5 x 102 mm			
Dimension drawing				



Notes

Accessories can be found in chapter 3.13

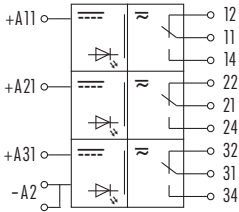
MCVO Relays

RM
Output relay

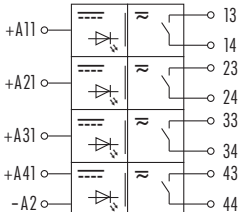
RM
Output relay



Circuit diagram

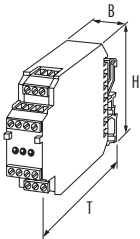


Common minus potential for all inputs = - A2



Common minus potential for all inputs = - A2

Ordering data	Art.-No.	Art.-No.
Input voltage	3 relays; each 1 C/O contact	4 relays; each 1 N/O contact
24 V DC	51403	512498
48 V DC		
110 V AC		
230 V AC		
Input		
Input voltage/-current	24 V DC ± 10 %/16 mA	
Status indicator	red LED	
Output		
Max. switched voltage	250 V AC/DC	
Max. switched current	5 A	
Min. load current	100 mA	
Max. power rating (voltage dependent)	1250 VA/240 W	
Contact material	Ag Ni 0.15 hv; Ag hv	
Energize/release/contact bounce time	10/10/2 ms	
General data		
Mech./elect. life	2 x 10 ⁷ /load dependent	5 x 10 ⁷ /load dependent
Max. switching frequency	10 Hz	
Test isolation voltage	4 kV AC	
Temperature range	-20...+50 °C	
Mounting method	DIN-rail mounting to EN 60715 (TH 35) or (G 32)	
Dimensions H x B x T	75 x 22.5 x 102 mm	
Dimension drawing		



Notes
Accessories can be found in chapter 3.13

MCVO Relays

RME

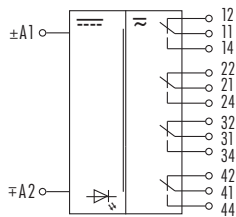
Input relay

RME

Input relay



Circuit diagram



Ordering data

Art.-No.

Input voltage	1 relays; 4 C/O contacts	
24 V DC		516001
48 V DC		
110 V AC		
230 V AC		

Input

Input voltage/-current	24 V DC $\pm$ 10 %/20 mA	
Status indicator	yellow LED	

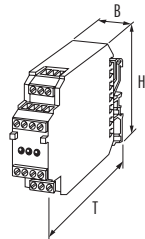
Output

Max. switched voltage	250 V AC/DC
Max. switched current	2 A
Min. load current	1 mA
Max. power rating (voltage dependent)	125 VA/60 W
Contact material	Ag hv
Energize/release/contact bounce time	10/10/1 ms

General data

Mech./elect. life	1 x 10 ⁸ /load dependent
Max. switching frequency	15 Hz
Test isolation voltage	1.5 kV AC
Temperature range	-20...+50 °C
Mounting method	DIN-rail mounting to EN 60715 (TH 35) or (G 32)
Dimensions H x B x T	75 x 22.5 x 102 mm

Dimension drawing



Notes

Accessories can be found in chapter 3.13

MCVO Relays

with positive displacement contact

RM

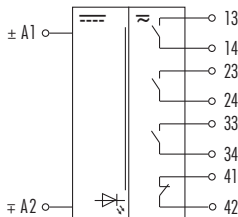
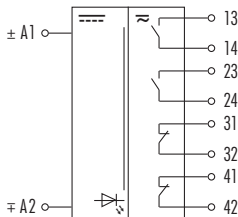
Output relay
with positive displacement contact

RM

Output relay
with positive displacement contact



Circuit diagram



Ordering data

	Art.-No.	Art.-No.
Input voltage	1 relay; 2 N/O contacts/2 N/C contacts	1 relay; 3 N/O contacts/1 N/C contact
24 V DC	51300	51301
48 V DC		
110 V AC		
230 V AC		

Input

Input voltage/-current	24 V DC $\pm 10\%$ / 17 mA
Status indicator	red LED

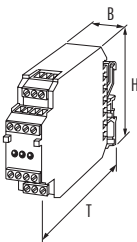
Output

Max. switched voltage	250 V AC/DC
Max. switched current	5 A
Min. load current	300 mA
Max. power rating (voltage dependent)	1000 VA/50 W
Contact material	Ag hv; Ag Sn O ₂
Energize/release/contact bounce time	15/15/2 ms

General data

Mech./elect. life	1 x 10 ⁶ / load dependent
Max. switching frequency	1 Hz
Test isolation voltage	2.5 kV AC
Temperature range	-20...+50 °C
Mounting method	DIN-rail mounting to EN 60715 (TH35) or (G32)
Dimensions H x B x T	75 x 22.5 x 102 mm

Dimension drawing

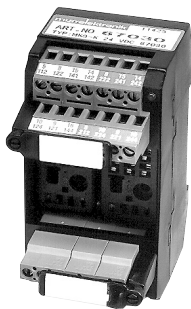


Notes

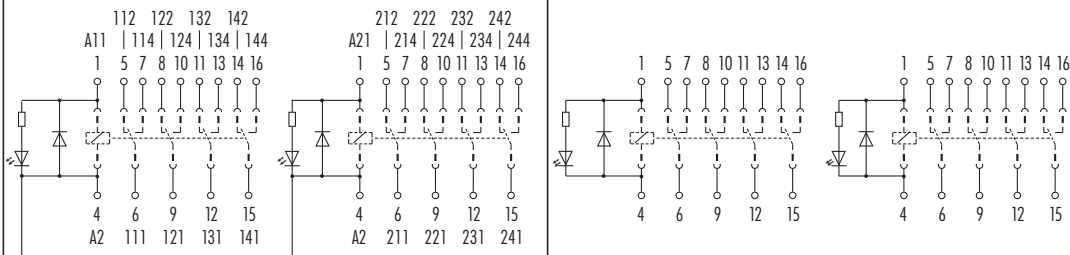
Accessories can be found in chapter 3.13

Sockets
for cradle relays

MKS-K
4 C/O contacts



Circuit diagram

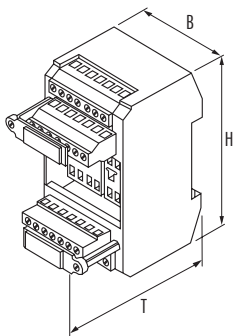


Ordering data		Art.-No.	Art.-No.
Coil voltage	Suppression		
24 V DC	LED + Diode	67030	67000

Technical data

Relay socket	for cradle relays
Max. switched voltage	125 V AC/150 V DC
Max. switched current	2 A
Wiring method	screw terminals max. 4 mm ²
Test isolation voltage	2.5 kV AC
Mounting method	DIN-rail mounting to EN 60715
Dimensions H x B x T	85 x 45 x 64 mm

Dimension drawing



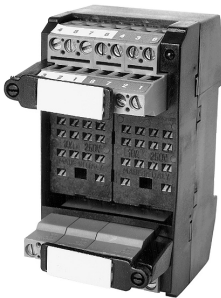
Accessories		Art.-No.
Plug-in relays	24 V DC	61422
Holding clip	24 V	61428

Notes

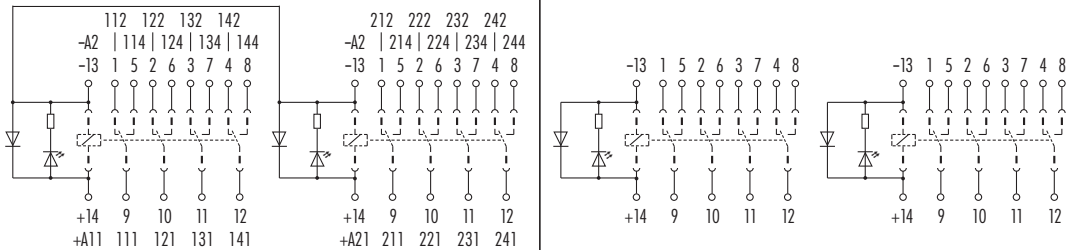
Accessories can be found in chapter 3.13

Sockets for industrial relays

MKS-J
4 C/O contacts



Circuit diagram



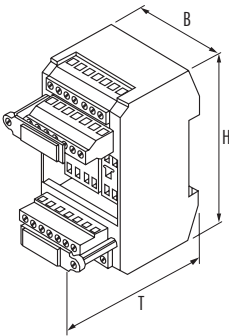
Ordering data

		Art.-No.	Art.-No.
Coil voltage	Suppression		
24 V DC	LED + Diode	67035	67010
110 ... 230 V AC	LED + RC		67011

Technical data

Relay socket	for industrial relays
Max. switched current	250 V AC/110 V DC
Max. current	3 A
Wiring method	screw terminals max. 4 mm ²
Test isolation voltage	2.5 kV AC
Mounting method	DIN-rail mounting to EN 60715
Dimensions H x B x T	85 x 45 x 64 mm

Dimension drawing



Accessories

		Art.-No.
Plug-in relays	24 V DC	61402
Plug-in relays	230 V AC	61401
Holding clip	24 V	61406
Holding clip	230 V	61406

Notes

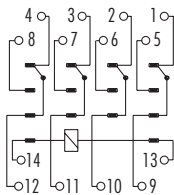
Accessories can be found in chapter 3.13

Sockets
for industrial relays
with 4 C/O contacts

IR 4



Circuit diagram



Ordering data

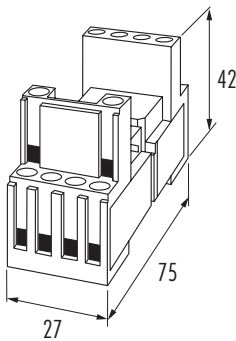
Art.-No.

Input voltage	Suppression	
...230 V AC/DC	No suppression	61300

Technical data

Relay socket	for industrial relays suppressor + LED + label plate
Max. switched current	250 V AC/110 V DC
Max. current	5 A
Wiring method	screw terminals
Mounting method	DIN-rail mounting to EN 60715
Proofing	IP40

Dimension drawing



Accessories

Art.-No.

Plug-in relays	24 V DC	61402
Plug-in relays	230 V AC	61401
Holding clip		61301
Label plate		61302
Suppressor module + LED (green)	6 ... 24 V AC/DC	61303
	110 ... 230 V AC/DC	61304

Notes

Accessories can be found in chapter 3.13

Sockets
with plug-in relays

Compact size

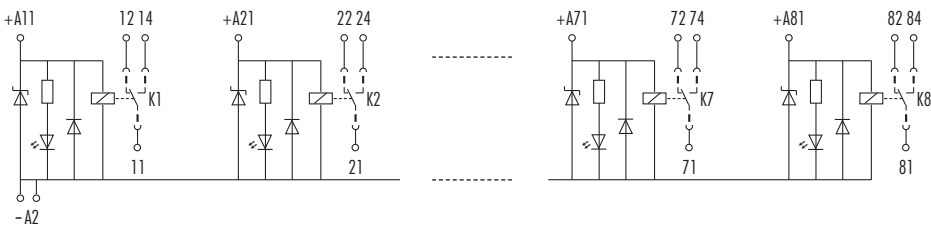
RM
sockets
with 2 plugged relays

RM
sockets
with 4 plugged relays

RM
sockets
with 8 plugged relays



Circuit diagram

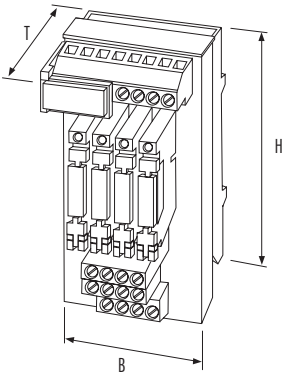


Art.-No. 53025 (schematic) ¹⁾

Ordering data		Art.-No.	Art.-No.	Art.-No.
Input voltage	Suppression	2 relays, each 1 C/O contact	4 relays, each 1 C/O contact	8 relays, each 1 C/O contact
24 V DC	LED + Diode	53019	53020	53025

Technical data	
Max. switched current / min. switched voltage	250 / 12 V AC/DC
Max. current / min. load current	6 A / 10 mA
Wiring method	screw terminals, max. 4 mm ²
Test isolation voltage	4.0 kV AC
Mounting method	DIN-rail mounting to EN 60715
Dimensions H x B x T	86 x 22.5 x 75 mm

Dimension drawing



Switching capabilities
to EN 60947

	AC 1	AC 15	DC 13
24 V	6 A	3 A	1 A
110 V	6 A	3 A	0.2 A
230 V	6 A	3 A	0.1 A

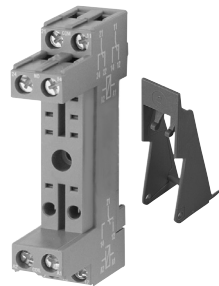
Accessories		Art.-No.
Relays (SNR)	24 V DC	max. switched current 6 A (included in the above listed part numbers)
Electronic load relay (ELR)	24 V DC	max. 2 A at 24 V DC for non mechanical switching

Notes

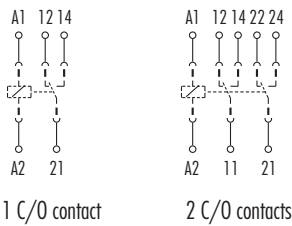
¹⁾ Art.-No. 53019 and 53020 with individually - A2 connections

Sockets with plug-in relays

MRB
1 or 2 C/O contacts



Circuit diagram



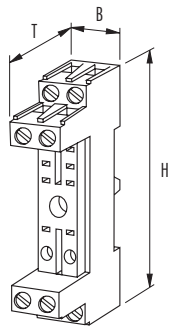
Ordering data

Input voltage	Suppression	Art.-No.
...230 V AC		51353

Technical data

Relay socket	for plug-in relays MRS see page 3.3.27
Max. switched voltage	plug-in suppressor MRE
Max. switched current	250 V AC
Max. current	16 A
Wiring method	screw terminals, max. 4 mm ²
Guidelines	touch protected to VBG 4 and VDE 0106 part 100 and 101
Test isolation voltage	5 kV AC
Mounting method	DIN-rail mounting to EN 60715
Dimensions H x B x T	75 x 15.5 x 42.5 mm

Dimension drawing



Accessories

	Art.-No.	Art.-No.	Art.-No.
	plug-in relays with 1 C/O contact	plug-in relays with 2 C/O contacts	suppressor
Coil voltage 24 V DC	61352	61353	61340
24 V AC	61354	61355	61343
110 V AC	61356	61357	61341, 61342
230 V AC	61358	61359	61341, 61342
Holding clip for plug-in relays (switching module)	supplied		

Notes

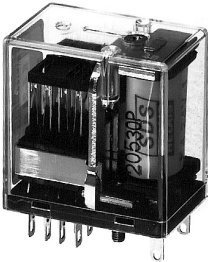
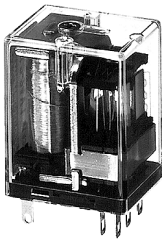
Accessories suppressor see chapter 3.13

Plug-in relays
for sockets

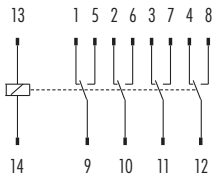
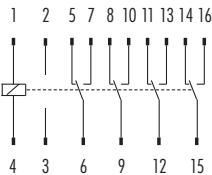
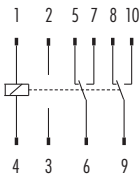
Cradle relay
with 2 C/O contacts

Cradle relay
with 4 C/O contacts

Industrial relay
with 4 C/O contacts



Circuit diagram



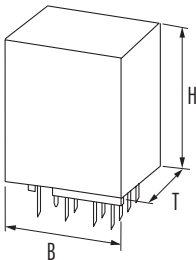
Ordering data

Input voltage	Art.-No.	Art.-No.	Art.-No.
24 V DC	61436	61422	61402
24 V DC			61413
24 V AC			61400
230 V AC			61401

Technical data

Contact	Ag Ni 0.15 hv; Ag hv	Ag Ni 0.15 hv; Ag hv	Ag Ni; Ag hv
Max. voltage range	125 V AC/150 V DC	125 V AC/150 V DC	250 V AC/110 V DC
Max. switched current	2 A	2 A	5 A
Max. power rating (voltage dependent)	50 VA/35 W	50 VA/35 W	1250 VA/100 W
Coil hold-on rating	2.2 VA/0.7 W	2.2 VA/0.9 W	1.4 VA/0.9 W
Switch-on time	6 ms	7.5 ms	18 ms
Dimensions H x B x T	30 x 24 x 19 mm	30 x 30 x 19 mm	36 x 28 x 21 mm

Dimension drawing



Accessories

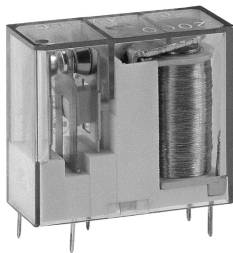
Art.-No.	Art.-No.	Art.-No.
Holding clip 24 V	61427	61428
Holding clip 230 V		

Notes

Relays in other voltage on request.

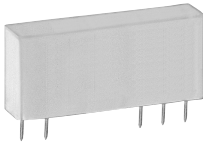
Plug-in relays for sockets

MRS
with 1 C/O contact

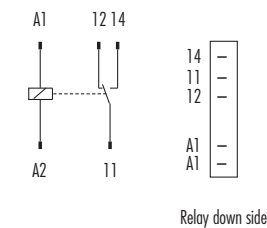
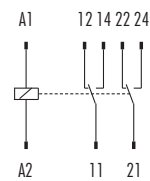
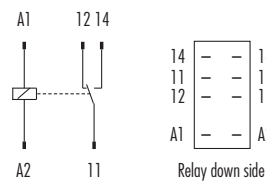


MRS
with 2 C/O contacts

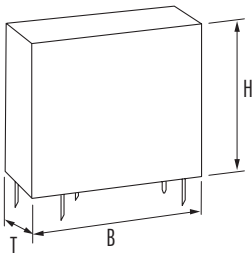
SNR
with 1 C/O contact
for MIRO 6.2 pluggable



Circuit diagram



Ordering data	Art.-No.	Art.-No.	Art.-No.
Input voltage	1 C/O contact	2 C/O contacts	
24 V DC	61352	61353	3000-16023-2100010
60 V DC			3000-16023-2100020
110 V AC	61356	61357	
230 V AC	61358	61359	
Technical data			
Contact	Ag Sn O ₂	Ag Ni	Ag Sn O ₂
Max. voltage range	250 V AC/DC		
Min. load current	12 V DC/100 mA		12 V DC/10 mA
Max. switched current	16 A	5 A	6 A
Max. power rating (voltage dependent)	4000 VA/300 W	1250 VA/110 W	1500 VA/120 W
Suppression	see accessories		
Coil hold-on rating	1.6 VA/0.65 W		
Switch-on time	15/20 ms		10/15 ms
Dimensions H x B x T	25 x 29 x 12.4 mm		15 x 28 x 5 mm
Dimension drawing			



Notes

Accessories can be found in chapter 3.13