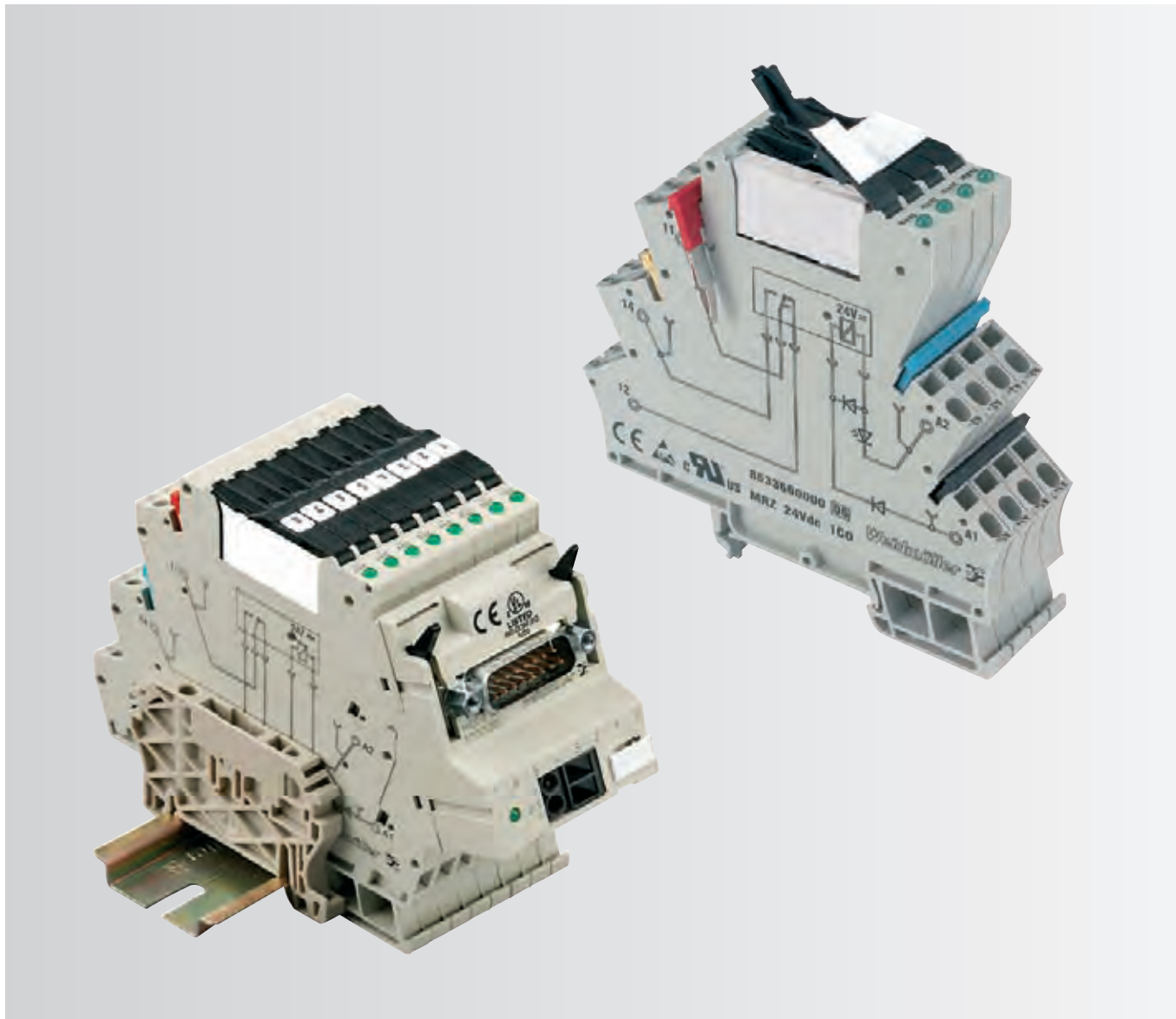


All-purpose, pluggable relay modules and opto modules

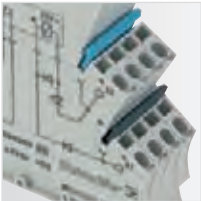
A

MICROSERIES is the perfect method for isolating potentials and for amplifying signals. Pluggable relays and optocouplers are available in a variety of power classes. Depending on the version, they can switch currents from 1 mA...6 A and voltages from 1 V to 250 V AC/DC. No complex re-wiring is required for adaptation; instead only the relay or opto module is adapted to fit the application. The ZQV 4N pluggable cross-connections can also be used in other terminals (for example, the WDU 4). This potential for multiple usages can help to reduce your

inventory. They are arranged on the product so that they are easily visible even when plugged and so they cannot be covered by connected wiring. The relays can be labelled with WS12/6 MultiCard markers and the PrintJet PRO. Screw and tension clamp connections are both available. The SPS System interface (described in a separate catalogue) can be used for quick and simple wiring to the appropriate MICROINTERFACE adapter.



Weidmüller 



Time-saving

Pluggable cross-connections in input and output on four connection levels.



Practical

Pluggable relay modules and opto modules can be easily swapped because they are pin compatible.



Simple

The system cabling with the interface adapter makes it easier to connect to the controller.



Wemid

Proven

The Wemid material in the base contains no halogens and has a flammability class of V0 according to UL94.

The MICROSERIES product line



MICROSERIES

Relay module with 1 CO contact, with Cl.I div.2 approval



MICROSERIES

Relay module with 1 gold-plated CO contact



MICROSERIES

Opto module with 5...48 V DC / 0.1 A switching capacity



MICROSERIES

Opto module with 5...48 V DC / 2 A switching capacity



MICROSERIES

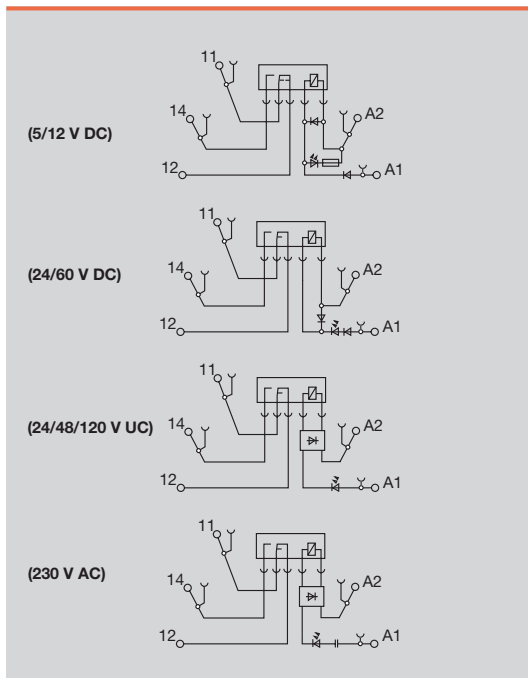
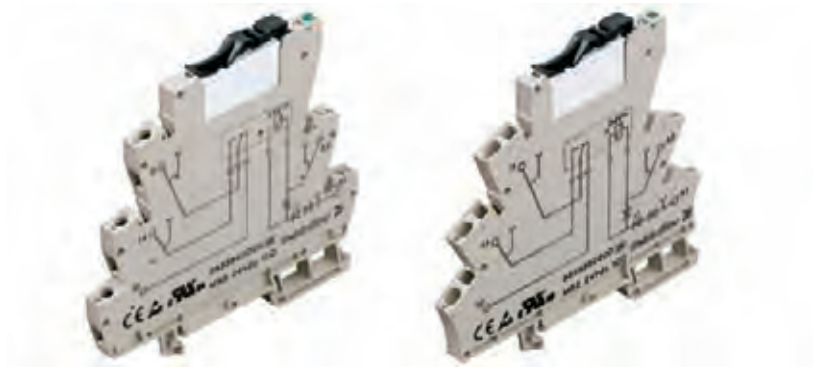
Opto module with 24...230 V DC / 1 A switching capacity

MICROSERIES - Relay modules

1 CO contact AC/DC/UC coil

Module can be used as an universal interface between the controller and the actuator to switch small and medium-sized loads.

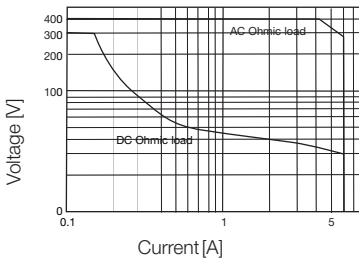
- Relay modul interchangeable, also for an opto modul
- 6.1 mm width
- Pluggable cross-connection at input and output minimizes the wiring workload.



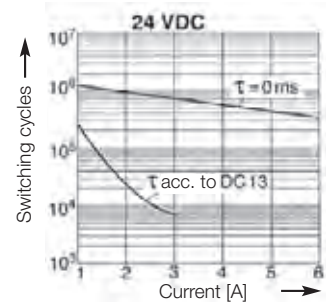
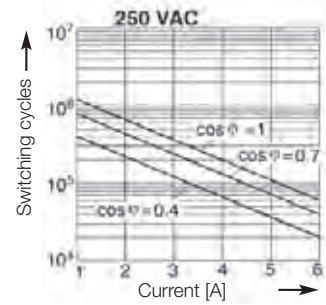
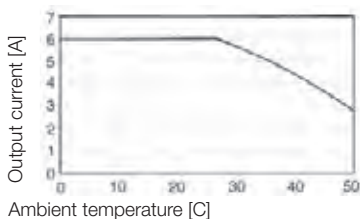
Output		
Switching voltage AC, max. / Continuous current	250 V / 6 A	
min. switching capacity	12 V / 100 mA	
Switch-on delay / Switch-off delay	9.3 ms / 7.5 ms	
Contact material	AgSnO	
Mechanical service life	20*10 ⁶ switching cycles	
Max. switching frequency at rated load	0.1 Hz	
Rated data		
Status indicator / Free-wheel diode	Green LED / Yes	
Reverse polarity protection	Available	
Ambient temperature (operational)	-25 °C...+50 °C	
Storage temperature	-40 °C...+60 °C	
Humidity	40°C / 93% rel. humidity, no condensation	
Insulation coordination (EN 50 178)		
Standards	EN 50178	
Rated voltage	300 V	
Impulse withstand voltage	6 kV (1.2/50 µs)	
Clearance and creepage distances for control/load side	≥ 5.5 mm	
Overvoltage category	III	
Pollution severity	2	
Protective separation acc. to VDE 0106 part 101	Yes	
Dimensions		
Clamping range (nominal / min. / max.)	mm ²	2.5 / 0.5 / 4
	mm	93 / 6.1 / 92
Length x width x height	mm	94 / 6.1 / 91
	mm	94 / 6.1 / 91
Note		
Cross-connectors and markers - refer to MICROSERIES accessories		

Applications

Limit curve



Current-Temperature rise curve



**1 CO contact
AC/DC/UC coil**

Ordering data

	5 V DC 1CO	12 V DC 1CO	24 V DC 1CO	24 V UC 1CO
Input				
Rated control voltage	5 V DC ±20 %	12 V DC ±20 %	24 V DC ±20 %	24 V UC ±10 %
Rated current AC				11 mA
Rated current DC	38.5 mA	17 mA	6.6 mA	6.4 mA
Power rating	193 mW	210 mW	160 mW	154 mW
AC Response/dropout Volt				15.8 V / 7 V
DC Response/dropout Volt	3.2 V / 1.6 V	6.4 V / 2.5 V	15.4 V / 6.5 V	15.8 V / 7 V
AC pickup/dropout current				3.6 mA / 1.3 mA
DC pickup/dropout current	21,6 mA / 8 mA	8.4mA/2.4mA	4mA/1.2mA	3.6mA/1.3mA
Approvals	CSA; cULus; cURus; GOSTME25; CE	CSA; cULus; cURus; GOSTME25; CE	CSA; cULus; cURus; GOSTME25; CE	CSA; cULus; cURus; GOSTME25; CE

Ordering data				
Relay module with socket				
Screw connection	Type	MRS 5Vdc 1CO	MRS 12Vdc 1CO	MRS 24Vdc 1CO
	Order No.	8556080000	8556070000	8556050000
Tension clamp connection	Type	MRZ 5Vdc 1CO	MRZ 12Vdc 1CO	MRZ 24Vdc 1CO
	Order No.	8556150000	8556140000	8556120000

Ordering data				
Spare relay module (pluggable)				
	Type	RSS113005 05Vdc-Rel1U	RSS113012 12Vdc-Rel1U	RSS113024 24Vdc-Rel1U
	Order No.	4061580000	4061610000	4060120000

Note				

Ordering data

	48 V UC 1CO	60 V DC 1CO	120 V UC 1CO	230 V AC 1CO
Input				
Rated control voltage	48 V UC ±10 %	60 V DC ±20 %	120 V UC +10 % / -15 %	230 V AC ±10 %
Rated current AC	5 mA		3.5 mA	7.6 mA
Rated current DC	4 mA	3,3 mA	3.5 mA	
Power rating	190 mW	200 mW	0,42 VA	1,75 VA
AC Response/dropout Volt	29 V / 11 V		71 V / 22 V	103 V / 49 V
DC Response/dropout Volt	29 V / 11 V	35 V / 11 V	71 V / 22 V	
AC pickup/dropout current	2.2 mA / 1.3 mA		1.8 mA / 0.5 mA	5 mA / 2.5mA
DC pickup/dropout current	2,2 mA / 1,3 mA	1,6 mA / 0,6 mA	1,8 mA / 0,5 mA	
Approvals	CSA; cULus; cURus; GOSTME25; CE	CSA; cULus; cURus; GOSTME25; CE	CSA; cULus; cURus; GOSTME25; CE	CSA; cULus; cURus; GOSTME25; CE

Ordering data				
Relay module with socket				
Screw connection	Type	MRS 48Vuc 1CO	MRS 60Vdc 1CO	MRS 120Vuc 1CO
	Order No.	8556040000	8556060000	8556030000
Tension clamp connection	Type	MRZ 48Vuc 1CO	MRZ 60Vdc 1CO	MRZ 120Vuc 1CO
	Order No.	8556110000	8556130000	8556100000

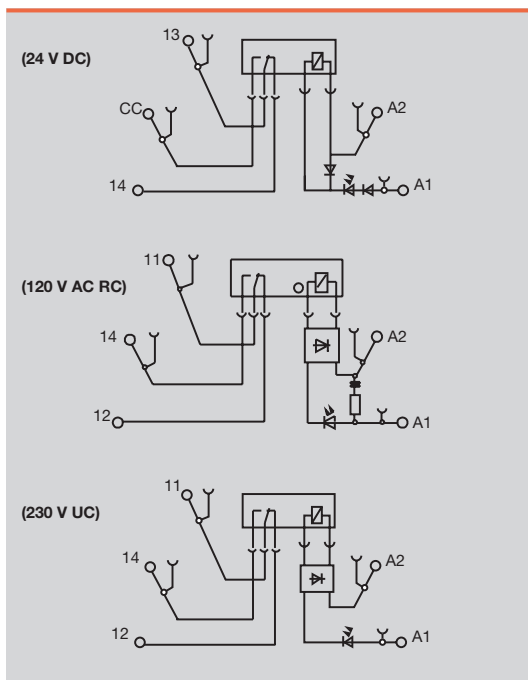
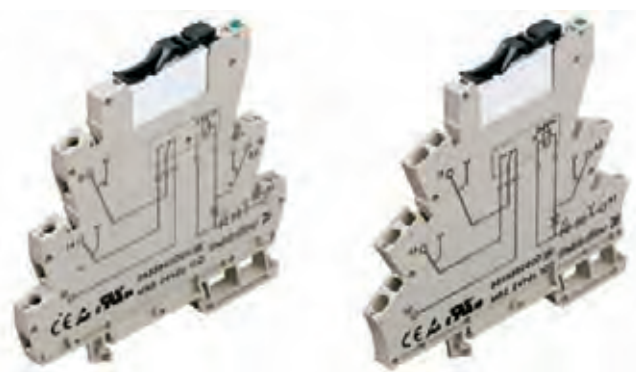
Ordering data				
Spare relay module (pluggable)				
	Type	RSS113048 48Vdc-Rel1U	RSS113060 60Vdc-Rel1U	RSS113060 60Vdc-Rel1U
	Order No.	4061620000	4061630000	4061630000

Note				

MICROSERIES - Relay modules

1 NO contact special versions

- 24 V DC actuator version:
Bridgeable, potential-free connection for direct connection of actuators at the output
- 120 V AC RC version:
RC circuit at the input guarantees safe switching thresholds, e.g. for leakage currents on the control side
- 230 V UC version:
Can also be interconnected at input with DC signals



Output		
Switching voltage AC, max. / Continuous current	250 V / 6 A	
min. switching capacity	12 V / 100 mA	
Switch-on delay / Switch-off delay	9.3 ms / 7.5 ms	
Contact material	AgSnO	
Mechanical service life	20*10 ⁶ switching cycles	
Max. switching frequency at rated load	0.1 Hz	
Rated data		
Status indicator / Free-wheel diode	Green LED / Yes	
Reverse polarity protection	Available	
Ambient temperature (operational)	-25 °C...+55 °C	
Storage temperature	-40 °C...+60 °C	
Humidity	40°C / 93% rel. humidity, no condensation	
Insulation coordination (EN 50 178)		
Standards	EN 50178	
Rated voltage	300 V	
Impulse withstand voltage	6 kV (1.2/50 µs)	
Clearance and creepage distances for control/load side	≥ 5.5 mm	
Overvoltage category	III	
Pollution severity	2	
Protective separation acc. to VDE 0106 part 101	Yes	
Dimensions		
Clamping range (nominal / min. / max.)	Screw connection	2.5 / 0.5 / 4
	Tension clamp connection	1.5 / 0.5 / 2.5
Length x width x height	Screw connection	93 / 6.1 / 92
	Tension clamp connection	94 / 6.1 / 91
Note Cross-connectors and markers - refer to MICROSERIES accessories		

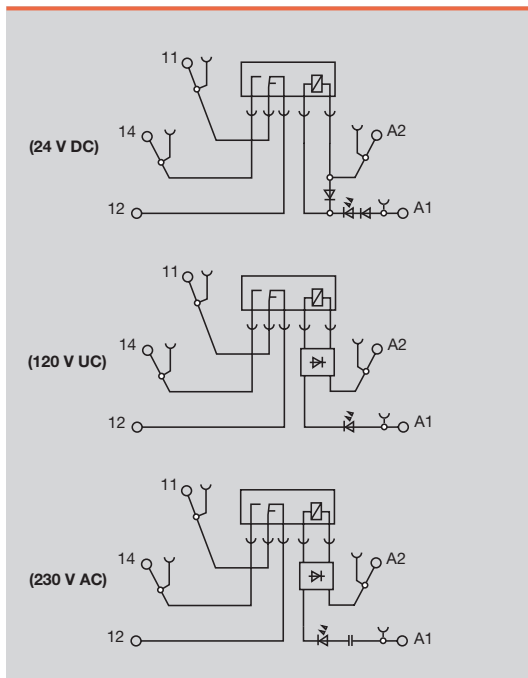
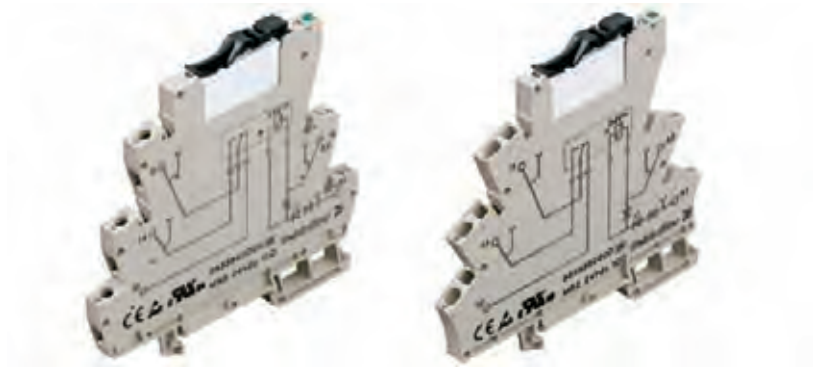
Ordering data	24 V DC ACT	120 V AC 1CO RC	230 V UC 1CO
Input			
Rated control voltage	24 V DC ±20 %	120 V AC + 10 % / - 15 %	230 V UC +10 % / - 15 %
Rated current AC		7 mA	3.5 mA
Rated current DC	6.6 mA		2.9 mA
Power rating	160 mW	0.84 VA	0.8 VA / 660 mW
AC Response/dropout Volt		79 V / 65 V	146 V / 124 V
DC Response/dropout Volt	15.4 V / 6.5 V		155 V / 115 V
AC pickup/dropout current		4.5 mA / 3.7 mA	1.9 mA / 1.5 mA
DC pickup/dropout current	4 mA / 1.2 mA		1.9 mA / 1.0 mA
Approvals	cULus; CE	cULus; CE	CSA; cULus; cURus; GOSTME25; CE
Ordering data			
Relay module with socket			
Screw connection Type	MRS 24Vdc ACT	MRS 120VUC 1CO RC	MRS 230VUC 1CO
Order No.	8660920000	8825970000	8825990000
Tension clamp connection Type	MRZ 24VDC ACT	MRZ 120VUC 1CO RC	MRZ 230VUC 1CO
Order No.	8660910000	8825960000	8825980000
Ordering data			
Spare relay module (pluggable)			
Type	RSS113024 24Vdc-Rel1U	RSS113060 60Vdc-Rel1U	RSS113060 60Vdc-Rel1U
Order No.	4060120000	4061630000	4061630000
Note			



**1 CO contact with hard gold-plated contacts
AC / DC / UC coil**

Module can be used as a universal interface between the controller and the actuator to switch small and medium-sized loads.

- Relay modul interchangeable, also for an opto modul
- 6.1 mm width
- Pluggable cross-connection at input and output minimizes the wiring workload.



Output		
Switching voltage AC, max. / Continuous current	250 V / 6 A	
min. switching capacity	1 V / 1 mA	
Switch-on delay / Switch-off delay	9.3 ms / 7.5 ms	
Contact material	AgSnO 5µm Au	
Mechanical service life	20*10 ⁶ switching cycles	
Max. switching frequency at rated load	0.1 Hz	
Rated data		
Status indicator / Free-wheel diode	Green LED / Yes	
Reverse polarity protection	Available	
Ambient temperature (operational)	-25 °C...+50 °C	
Storage temperature	-40 °C...+60 °C	
Humidity	40°C / 93% rel. humidity, no condensation	
Insulation coordination (EN 50 178)		
Standards	EN 50178	
Rated voltage	300 V	
Impulse withstand voltage	6 kV (1.2/50 µs)	
Clearance and creepage distances for control/load side	≥ 5.5 mm	
Overvoltage category	III	
Pollution severity	2	
Protective separation acc. to VDE 0106 part 101	Yes	
Dimensions		
Clamping range (nominal / min. / max.)	Screw connection	2.5 / 0.5 / 4
	Tension clamp connection	1.5 / 0.5 / 2.5
Length x width x height	Screw connection	93 / 6.1 / 92
	Tension clamp connection	94 / 6.1 / 91
Note	Cross-connectors and markers - refer to MICROSERIES accessories	

Ordering data

Input	24 V DC 1CO Au	120 V UC 1CO Au	230 V AC 1CO Au
Rated control voltage	24 V DC ±20 %	120 V UC +10 % / -15 %	230 V AC ±10 %
Rated current AC		3.5 mA ±15 %	7.6 mA
Rated current DC	6.6 mA	3.5 mA ±15 %	
Power rating	160 mW	0.42 VA ±15 %	1.75 VA
AC Response/dropout Volt		71 V / 22 V	103 V / 49 V
DC Response/dropout Volt	15.4 V / 6.5 V	71 V / 22 V	
AC pickup/dropout current		1.8 mA / 0.5 mA	5 mA / 2.5mA
DC pickup/dropout current	4 mA / 1.2 mA	1.8 mA / 0.5 mA	
Approvals	cULus; GOSTME25; CE	cULus; CE	cULus; GOSTME25; CE

Ordering data

Relay module with socket				
Screw connection	Type	MRS 24Vdc 1CO 5uAu	MRS 120Vuc 1CO 5uAu	MRS 230Vac 1CO 5uAu
	Order No.	8596060000	8652030000	8596050000
Tension clamp connection	Type	MRZ 24Vdc 1CO 5uAu	MRZ 120Vuc 1CO 5uAu	MRZ 230Vac 1CO 5uAu
	Order No.	8596080000	8652040000	8596070000

Ordering data

Spare relay module (pluggable)				
Type		RSS112024 24Vdc-Rel1U	RSS112060 60Vdc-Rel1U	RSS112024 24Vdc-Rel1U
	Order No.	4061590000	4061600000	4061590000

Note

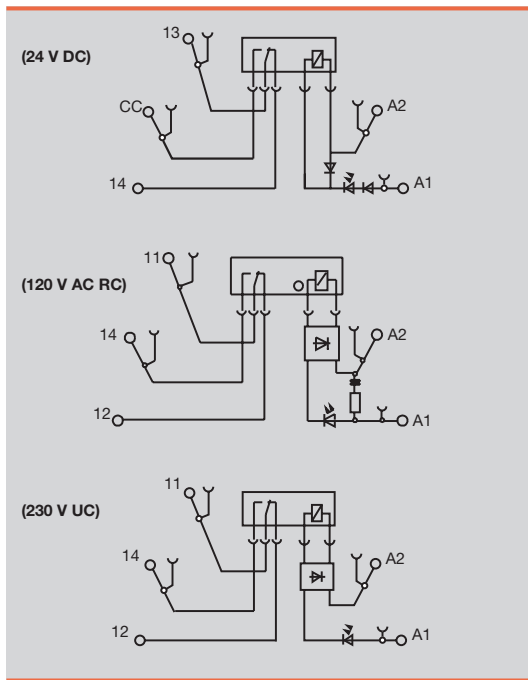
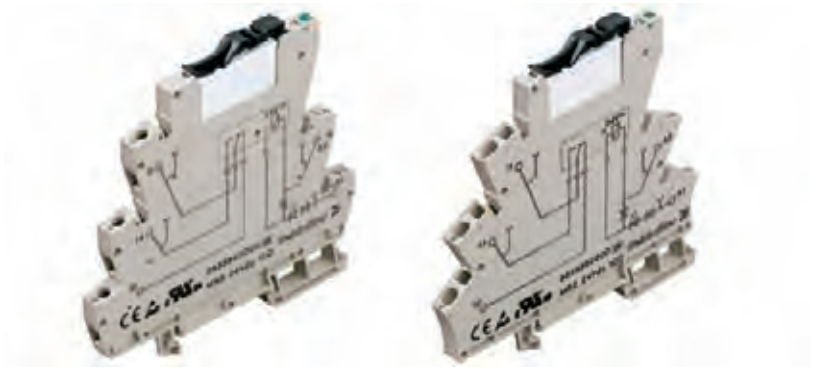
Can safely switch a load of:
1...60 V AC/DC, 1...300 mA.
If higher loads are switched
this can damage the gold plating.

MICROSERIES relay module Cl.I Div. 2

1 CO contact AC/DC/UC coil

Module can be used as a universal interface between the controller and the actuator to switch small and medium-sized loads.

- Relay modul interchangeable, also for an opto modul
- 6.1 mm width
- Pluggable cross-connection at input and output minimizes the wiring workload.



Output	
Switching voltage AC, max. / Continuous current	250 V / 6 A
min. switching capacity	12 V / 100 mA
Switch-on delay / Switch-off delay	9.3 ms / < 7 ms
Contact material	AgSnO
Mechanical service life	20*10 ⁶ switching cycles
Max. switching frequency at rated load	0.1 Hz
Rated data	
Status indicator / Free-wheel diode	Green LED / Yes
Reverse polarity protection	Available
Ambient temperature (operational)	-25 °C...+50 °C
Storage temperature	-40 °C...+60 °C
Humidity	40°C / 93% rel. humidity, no condensation
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Impulse withstand voltage	6 kV (1.2/50 µs)
Clearance and creepage distances for control/load side	≥ 5.5 mm
Overvoltage category	III
Pollution severity	2
Protective separation acc. to VDE 0106 part 101	Yes
Dimensions	
Clamping range (nominal / min. / max.)	mm ² 2.5 / 0.5 / 4
Length x width x height	mm 93 / 6.1 / 92
Screw connection	
Clamping range (nominal / min. / max.)	mm ² 2.5 / 0.5 / 4
Length x width x height	mm 93 / 6.1 / 92
Note	
Cross-connectors and markers - refer to MICROSERIES accessories	

Ordering data

Input	12 V DC 1CO	24 V DC 1CO	24 V UC 1CO
Rated control voltage	12 V DC ±20 %	24 V DC ±20 %	24 V UC ±10 %
Rated current AC			11 mA
Rated current DC	17 mA	6.6 mA	6.4 mA
Power rating	210 mW	160 mW	154 mW
AC Response/dropout Volt			15.8 V / 7 V
DC Response/dropout Volt	6.4 V / 2.5 V	15.4 V / 6.5 V	15.8 V / 7 V
AC pickup/dropout current			3.6 mA / 1.3 mA
DC pickup/dropout current	8.4mA/2.4mA	4 mA / 1.2 mA	3.6mA/1.3mA
Approvals	Cl. I Div. 2; CE	Cl. I Div. 2; CE	Cl. I Div. 2; CE

Ordering data

Relay module with socket				
Screw connection	Type	MRS 12Vdc 1CO C1D2	MRS 24Vdc 1CO C1D2	MRS 24Vuc 1CO C1D2
	Order No.	8967340000	8967350000	8967360000
	Type			
	Order No.			

Ordering data

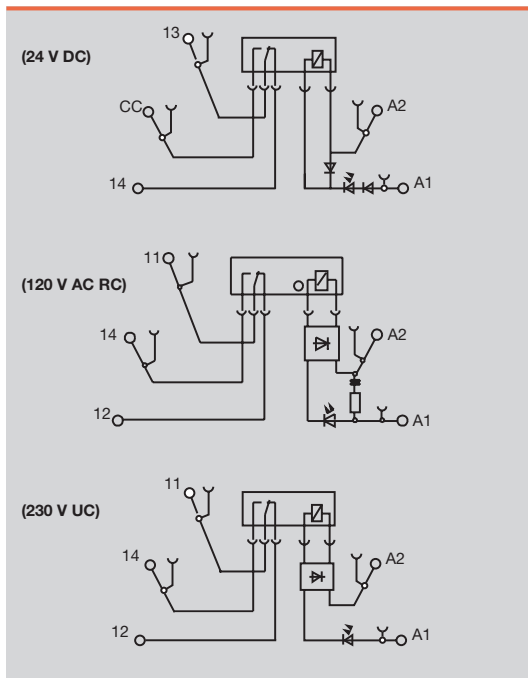
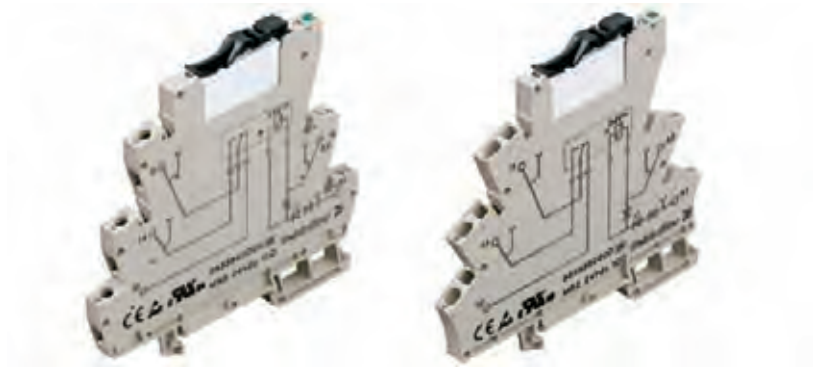
Spare relay module (pluggable)				
Type		RSS113012 12Vdc-Rel1U	RSS113024 24Vdc-Rel1U	RSS113024 24Vdc-Rel1U
Order No.		4061610000	4060120000	4060120000

Note

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1 CO contact
AC/DC/UC coil

- 24 V DC actuator version:
Bridgeable, potential-free connection for direct connection of actuators at the output
- 120 V AC RC version:
RC circuit at the input guarantees safe switching thresholds, e.g. for leakage currents on the control side
- 230 V UC version:
Can also be interconnected at input with DC signals



Output	
Switching voltage AC, max. / Continuous current	250 V / 6 A
min. switching capacity	12 V / 100 mA
Switch-on delay / Switch-off delay	9.3 ms / < 7 ms
Contact material	AgSnO
Mechanical service life	20*10 ⁶ switching cycles
Max. switching frequency at rated load	0.1 Hz
Rated data	
Status indicator / Free-wheel diode	Green LED / Yes
Reverse polarity protection	Available
Ambient temperature (operational)	-25 °C...+55 °C
Storage temperature	-40 °C...+60 °C
Humidity	40°C / 93% rel. humidity, no condensation
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Impulse withstand voltage	6 kV (1.2/50 µs)
Clearance and creepage distances for control/load side	≥ 5.5 mm
Overvoltage category	III
Pollution severity	2
Protective separation acc. to VDE 0106 part 101	Yes
Dimensions	
Clamping range (nominal / min. / max.)	mm ² 2.5 / 0.5 / 4
Length x width x height	mm 93 / 6.1 / 92
Screw connection	
Clamping range (nominal / min. / max.)	mm ² 2.5 / 0.5 / 4
Length x width x height	mm 93 / 6.1 / 92
Note	
Cross-connectors and markers - refer to MICROSERIES accessories	

Ordering data

Input	120 V AC 1CO	230 V UC 1CO
Rated control voltage	120 V AC + 10 % / -15 %	230 V UC +10 % / -15 %
Rated current AC	7 mA	3.5 mA
Rated current DC		2.9 mA
Power rating	0.84 VA	0.8 VA / 660 mW
AC Response/dropout Volt	79 V / 65 V	146 V / 124 V
DC Response/dropout Volt		155 V / 115 V
AC pickup/dropout current	4.5 mA / 3.7 mA	1.9 mA / 1.5 mA
DC pickup/dropout current		1.9 mA / 1.0 mA
Approvals	Cl. I Div. 2; CE	Cl. I Div. 2; CE

Ordering data

Relay module with socket			
Screw connection	Type	MRS 120VUC 1CO RC C1D2	MRS 230VUC 1CO C1D2
	Order No.	8967370000	8967380000
	Type		
	Order No.		

Ordering data

Spare relay module (pluggable)			
	Type	RSS113060 60Vdc-Rel1U	RSS113060 60Vdc-Rel1U
	Order No.	4061630000	4061630000

Note

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MICROSERIES – Relay modules

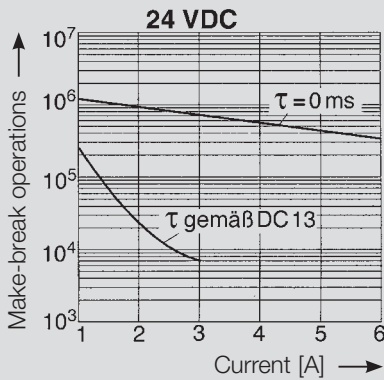
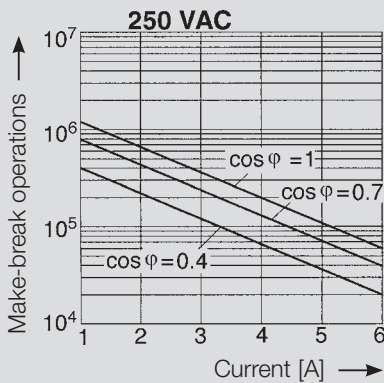
RSS Relay modules

1 change-over contact DC coil

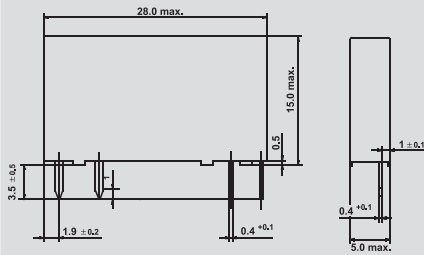


Plug-in cross-connection

Contact life expectancy, material AgSnO₂



Dimensions



Technical data

Number of contacts and type	1 change-over contact
Contact form	single
Switching current	6 A
Switching voltage / max. switching voltage	250 V AC / 400 V AC
Switching capacity	1500 VA
Contact material / recommended min. load	AgSnO ₂ 12 V, 10 mA AgSnO ₂ 5μ Au 1 V, 1 mA ¹⁾
Typical bounce time, NOC	1 ms
Typical bounce time, NCC	5 ms
Other data	
UL 94 flammability rating	V-0
Ambient temperature	-40 ... +85 °C
Max. switching frequency at nom. load / without load	6/1200 make-break operations per minute
Pick-up / drop-out time	5 / 2.5 ms
Bounce time, NOC / NCC	1.5 / 5 ms
Ingress protection class housing	IP 67

¹⁾ Recommended switching capacity: μW up to 0.25 W (depends on load characteristics), at 2.5 W the silver coating remains effective for about 20 000 make-break operations.

Ordering data

	Type	Qty.	Order No.
Coil voltage 5 V, 1 change-over contact	RSS 113005	20	4061580000
Coil voltage 12 V, 1 change-over contact	RSS 113012	20	4061610000
Coil voltage 24 V, 1 change-over contact	RSS 113024	20	4060120000
Coil voltage 48 V, 1 change-over contact	RSS 113048	20	4061620000
Coil voltage 60 V, 1 change-over contact	RSS 113060	20	4061630000
Coil voltage 24 V, 1 change-over contact, 5μ Au ¹⁾	RSS 112024	20	4061590000
Coil voltage 60 V, 1 change-over contact, 5μ Au ¹⁾	RSS 112060	20	4061600000

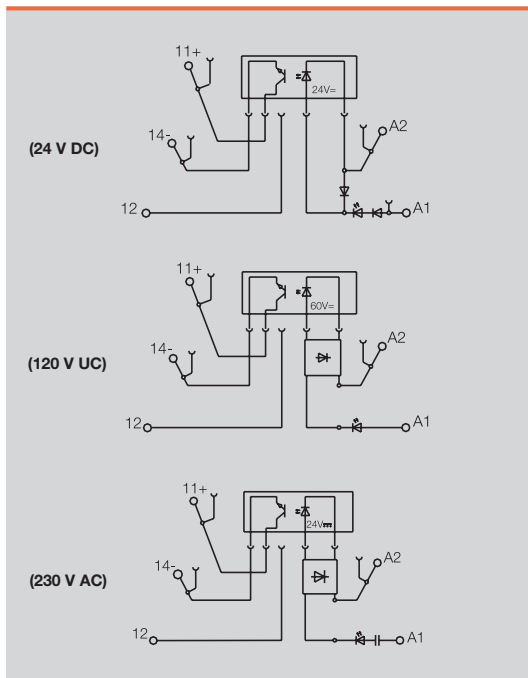
Type code for RSS relay modules

Type code	RSS				
Type	RIDER	Signal	Slim		
Model	1 Printing, vertical, washable				
Type of contact	1 1 Changeover contact				
Contact material	2 AgSnO ₂ htv 3 AgSnO ₂				
Coil	005	5 V DC			
	012	12 V DC			
	024	24 V DC			
	048	48 V DC			
	060	60 V DC			

MOS / MOZ 3...48 V DC / 0,1 A

Universal interface between control and sensor/actuator

- Plug-in cross-connection ZQV 4N
- Interchangeable solid-state relay
- 6.1 mm width
- Screw or tension clamp connection
- For mounting on TS 35



Load side	
Rated switching voltage	3...48 V DC
Rated switching current	0.1 A
Voltage drop at max. load	≤ 1 V
Leakage current	≤ 1 mA
Short-circuit-proof / Protective circuit	No / Integrated free-wheel diode

Rated data	
Ambient temperature (operational)	-25 °C...+50 °C
Storage temperature	-40 °C...+60 °C
Humidity	40 °C / 93 % rel. humidity, no condensation

Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	2.5 kV
Clearance and creepage distances for control/load side	≥ 5.5 mm
Overvoltage category	III
Pollution severity	2

Dimensions	Screw connection	Tension clamp connection
	Clamping range (nominal / min. / max.)	mm² 2.5 / 0.5 / 4
Length x width x height	mm 93 / 6.1 / 92	94 / 6.1 / 91

Note Cross-connectors and markers - refer to MICROSERIES accessories

Ordering data

Control side	5 V DC / 24 V DC 0,1 A	24 V DC / 24 V DC 0,1 A	120 V UC / 24 V DC 0,1 A	230 V AC / 24 V DC 0,1 A
Rated control voltage	5 V DC ±20 %	24 V DC ±20 %	120 V UC +10 % / -15 %	230 V AC ±10 %
Power rating	55 mW ±10 %	140 mW	340 mW / 0.4 VA	1.7 VA
Input frequency	max. 10 Hz	300 Hz	DC: 10 Hz / AC: 3 Hz	3 Hz
Switch-on delay	< 6.5 ms	35 µs	< 6.5 ms	< 6.5 ms
Switch-off delay	= 10 ms	355 µs	< 10 ms	< 10 ms
Approvals	cULus; GOSTME25; CE	cULus; GOSTME25; CE	cULus; GOSTME25; CE	cULus; GOSTME25; CE

Ordering data		5 V DC / 24 V DC 0,1 A		24 V DC / 24 V DC 0,1 A		120 V UC / 24 V DC 0,1 A		230 V AC / 24 V DC 0,1 A	
Relay module with socket									
Screw connection	Type	MOS 5Vdc / 24Vdc 0,1A		MOS 24Vdc / 24Vdc 0,1A		MOS 120Vuc / 24Vdc 0,1A		MOS 230Vac / 24Vdc 0,1A	
	Order No.	8633020000		8607340000		8607690000		8607710000	
Tension clamp connection	Type	MOZ 5Vdc / 24Vdc 0,1A		MOZ 24Vdc / 24Vdc 0,1A		MOZ 120Vuc / 24Vdc 0,1A		MOZ 230Vac / 24Vdc 0,1A	
	Order No.	8633010000		8607360000		8607730000		8607750000	
Spare relay module (pluggable)									
	Type	SSS Relais 5V/24V 0,1ADC		SSS Relais 24V/24V 0,1Aadc		SSS Relais 60V/24V 0,1Aadc		SSS Relais 24V/24V 0,1Aadc	
	Order No.	4064320000		4061180000		4061230000		4061180000	

Note

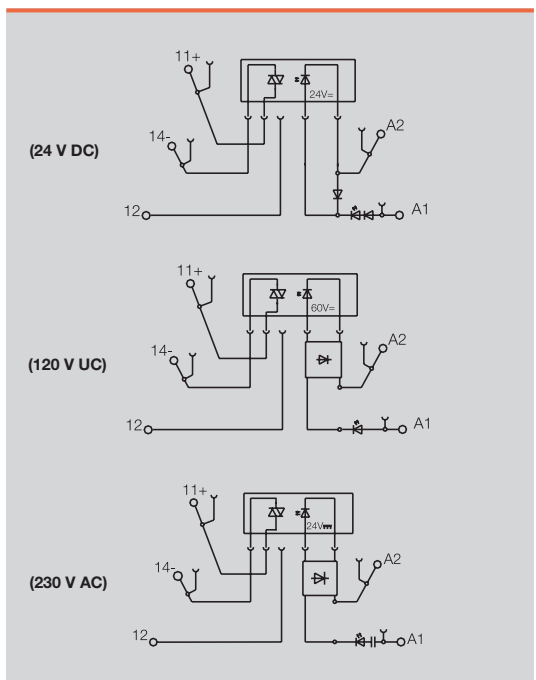


MICROSERIES - Opto modules

MOS / MOZ 24...240 V AC / 1 A

Universal interface between controller and sensor/actuator

- Plug-in cross-connection ZQV 4N
- Interchangeable solid-state relay
- 6.1 mm width
- Screw or tension clamp connection
- For mounting on TS 35



Load side		
Rated switching voltage	24...240 V AC	
Rated switching current	1 A	
Voltage drop at max. load	approx. 1.6 V	
Leakage current	≤ 20 µA	
Short-circuit-proof / Protective circuit	No / Integrated free-wheel diode	
Rated data		
Ambient temperature (operational)	-25 °C...+50 °C	
Storage temperature	-40 °C...+60 °C	
Humidity	40°C / 93% rel. humidity, no condensation	
Insulation coordination (EN 50 178)		
Standards	EN 50178	
Rated voltage	300 V	
Rated impulse withstand voltage	2.5 kV	
Clearance and creepage distances for control/load side	≥ 5.5 mm	
Overvoltage category	III	
Pollution severity	2	
Dimensions		
	Screw connection	Tension clamp connection
Clamping range (nominal / min. / max.)	mm² 2.5 / 0.5 / 4	1.5 / 0.5 / 2.5
Length x width x height	mm 93 / 6.1 / 92	94 / 6.1 / 91
Note	Cross-connectors and markers - refer to MICROSERIES accessories	

Ordering data

Control side	24 V DC / 230 V AC 1 A	120 V UC / 230 V AC 1 A	230 V AC / 230 V AC 1 A
Rated control voltage	24 V DC ±20 %	120 V UC +10 % / -15 %	230 V UC ±10 %
Power rating	250 mW ± 15 %	0.4 VA ±15 %	1.7 VA ± 20 %
Input frequency	3 Hz	3 Hz	3 Hz
Switch-on delay	< 11 ms	< 11 ms	< 20 ms
Switch-off delay	< 11 ms	< 11 ms	< 20 ms
Approvals	cULus; CE	cULus; CE	cULus; CE

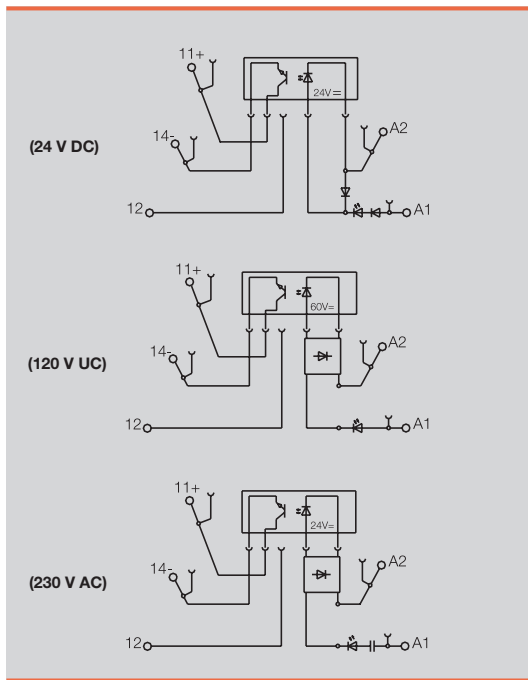
Ordering data			
Relay module with socket			
Screw connection Type	MOS 24Vdc/ 230VAC 1A	MOS 120Vuc / 230VAC 1A	MOS 230Vuc/ 230VAc 1A
Order No.	8652010000	8651930000	8651990000
Tension clamp connection Type	MOZ 24Vdc/ 230VAC 1A	MOZ 120Vuc / 230VAC 1A	MOZ 230Vuc/ 230VAC 1A
Order No.	8652020000	8651950000	8651970000
Spare relay module (pluggable)			
Type	SSS Relais 24V/230V 1Aac	SSS Relais 60V/230V 1Aac	SSS Relais 24V/230V 1Aac
Order No.	4061210000	4061220000	4061210000
Note			



MOS / MOZ 3...33 V DC / 2 A

Universal interface between control and sensor/actuator

- Plug-in cross-connection ZQV 4N
- Interchangeable solid-state relay
- 6.1 mm width
- Screw or tension clamp connection
- For mounting on TS 35



Load side	
Rated switching voltage	3...33 V DC
Rated switching current	2 A
Voltage drop at max. load	≤ 120 mV
Leakage current	≤ 1 mA
Short-circuit-proof / Protective circuit	No / Integrated free-wheel diode

Rated data	
Ambient temperature (operational)	-25 °C...+50 °C
Storage temperature	-40 °C...+60 °C
Humidity	40°C / 93% rel. humidity, no condensation

Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	2.5 kV
Clearance and creepage distances for control/load side	≥ 5.5 mm
Overvoltage category	III
Pollution severity	2

Dimensions	Screw connection	Tension clamp connection
	Clamping range (nominal / min. / max.)	mm ² 2.5 / 0.5 / 4
Length x width x height	mm 93 / 6.1 / 92	94 / 6.1 / 91

Note Cross-connectors and markers - refer to MICROSERIES accessories

Ordering data

Control side	5 V DC / 24 V DC 2 A	24 V DC / 24 V DC 2 A	120 V UC / 24 V DC 2 A	230 V AC / 24 V DC 2 A
Rated control voltage	5 V DC ±20 %	24 V DC ±20 %	120 V UC +10 % / -15 %	230 V AC ±10 %
Power rating	55 mW ±10 %	140 mW	340 mW / 0.4 VA	1.7 VA
Input frequency	300 Hz	300 Hz	DC: 10 Hz / AC: 3 Hz	3 Hz
Switch-on delay	< 55 µs	< 55 µs	< 6.5 ms	< 6.5 ms
Switch-off delay	< 1 ms	< 1,2 ms	< 10 ms	< 10 ms
Approvals	cULus; CE	cULus; GOSTME25; CE	cULus; GOSTME25; CE	cULus; GOSTME25; CE

Ordering data	5 V DC / 24 V DC 2 A	24 V DC / 24 V DC 2 A	120 V UC / 24 V DC 2 A	230 V AC / 24 V DC 2 A
Relay module with socket				
Screw connection Type	MOS 5Vdc / 24Vdc 2A	MOS 24Vdc / 24Vdc 2A	MOS 120Vuc / 24Vdc 2A	MOS 230Vac / 24Vdc 2A
Order No.	8633000000	8607350000	8607700000	8607720000
Tension clamp connection Type	MOZ 5Vdc / 24Vdc 2A	MOZ 24Vdc / 24Vdc 2A	MOZ 120Vuc / 24Vdc 2A	MOZ 230Vac / 24Vdc 2A
Order No.	8632990000	8607370000	8607740000	8607760000
Spare relay module (pluggable)				
Type	SSS Relais 5V/24V 2Adc	SSS Relais 24V/24V 2Adc	SSS Relais 60V/24V 2Adc	SSS Relais 24V/24V 2Adc
Order No.	4064310000	4061190000	4061200000	4061190000

Note

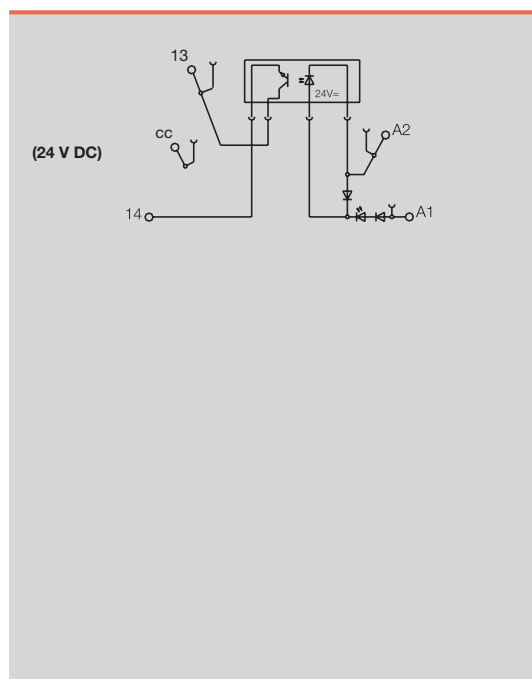
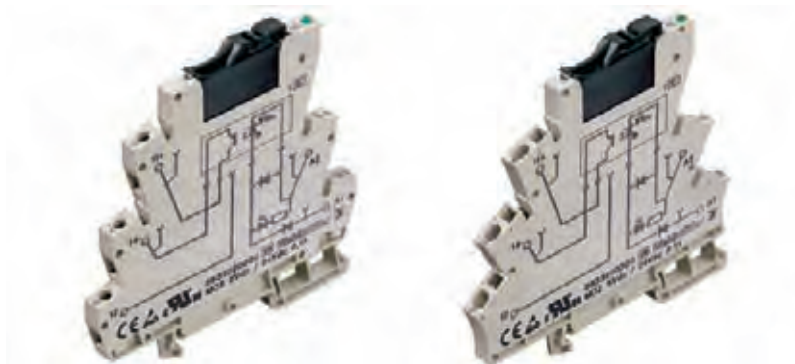


MICROSERIES - Opto modules

MOS / MOZ actuator variant 3...33 V DC / 2 A

Universal interface between controller and sensor/actuator

- Plug-in cross-connection ZQV 4N
- Interchangeable solid-state relay
- 6.1 mm width
- Screw or tension clamp connection
- For mounting on TS 35
- 24 V DC actuator version: bridgeable, potential-free connection for direct connection of actuators at the output



Load side	
Rated switching voltage	3...33 V DC
Rated switching current	2 A
Voltage drop at max. load	≤ 120 mV
Short-circuit-proof / Protective circuit	No / Integrated free-wheel diode
Rated data	
Ambient temperature (operational)	-25 °C...+50 °C
Storage temperature	-40 °C...+60 °C
Humidity	40°C / 93% rel. humidity, no condensation
Approvals	cULus; CE
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	2.5 kV
Clearance and creepage distances for control/load side	≥ 5.5 mm
Overvoltage category	III
Pollution severity	2

Dimensions	Screw connection	Tension clamp connection
Clamping range (nominal / min. / max.)	mm² 2.5 / 0.5 / 4	1.5 / 0.5 / 2.5
Length x width x height	mm 93 / 6.1 / 92	94 / 6.1 / 91

Note Cross-connectors and markers - refer to MICROSERIES accessories

Ordering data

Control side		24 V DC ACT
Rated control voltage		24 V DC ±20 %
Power rating		140 mW ±10 %
Input frequency		
Switch-on delay		< 55 µs
Switch-off delay		< 12 ms

Ordering data		Relay module with socket
Screw connection	Type	MOS 24Vdc / 24Vdc ACT
	Order No.	8676250000
Tension clamp connection	Type	MOZ 24Vdc / 24Vdc ACT
	Order No.	8676230000

Ordering data		Spare relay module (pluggable)
	Type	SSS Relais 24V/24V 2Adc
	Order No.	4061190000

Note	

**Plug-in
solid-state relay**

SSS Relay module
Switching current 100 mA

SSS Relay module
Switching current 2 A

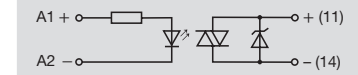
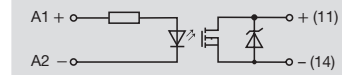
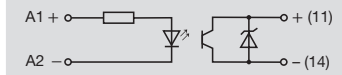
SSS Relay module
Switching current 1 A



Technical data

Input	Nominal control voltage			5 V DC			24 V DC			60 V DC		
	Nominal control voltage	5 V DC	24 V DC	60 V DC	5 V DC	24 V DC	60 V DC	5 V DC	24 V DC	60 V DC	24 V DC	60 V DC
Control voltage min / max	0.8 V DC/6 V DC	16 V DC/30 V DC	52 V DC/72 V DC	2.5 V DC/6 V DC	18 V DC / 30 V DC	35 V DC / 72 V DC	18 ... 30 V DC	35 ... 72 V DC				
Control current at UIN = 24 V	4.1 mA	7 mA ± 10 %	2.8 mA ± 10 %	9 mA	7 mA ± 10 %	3.0 mA ± 10 %	3.1 mA ± 10 %	3.1 mA ± 10 %				
Drop-out voltage	2.5 V DC	10 V DC	40 V DC	0.8 V DC	10 V DC	20 V DC	20 V DC	20 V DC				
Control circuit resistance	-	approx. 4 kΩ	approx. 20 kΩ	approx. 5 kΩ	approx. 3.2 kΩ	approx. 16 kΩ	20 kΩ	20 kΩ				
Output												
Switching voltage	Bipolar transistor			MOS-FET			TRIAC					
Switching/continuous current at UA > 5 V DC	3 ... 48 V DC			3 ... 33 V DC			24 ... 240 V AC					
Conducting-state voltage	100 mA DC			2 A DC			1 A AC					
	< 1 V DC			< 120 mV DC			< 1 V AC					
Insulation												
Test voltage between control/switching circuit	2.5 kV			2.5 kV			2.5 kV					
Other data												
Operating temperature range	-20 °C ... +60 °C			-20 °C ... +60 °C			-20 °C ... +60 °C					
Storage temperature range	-40 °C ... +70 °C			-40 °C ... +70 °C			-40 °C ... +70 °C					
Weight	3.65 g			3.65 g			3.65 g					
Humidity	40 °C/93 % rel. humidity, no condensation			40 °C/93 % rel. humidity, no condensation			40 °C/93 % rel. humidity, no condensation					
Approvals	UL			UL			UL					
*TU 20 °C												

Wiring diagram



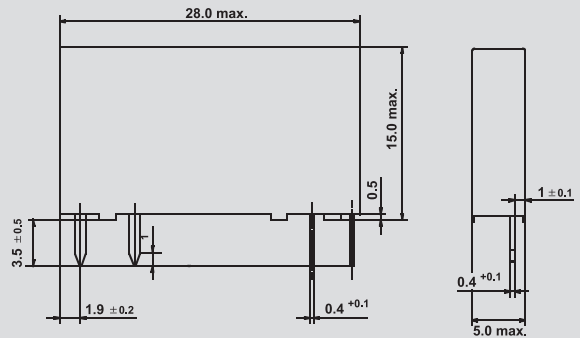
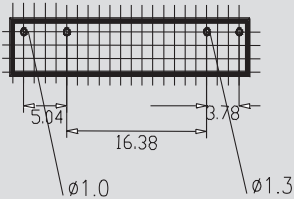
For further data, see also
www.vincotech.com

Ordering data

Nominal control voltage	Type	Order No.	Type	Order No.	Type	Order No.
5 V DC	SSS Relais 5 V/24 V 0.1 A DC	4064320000	SSS Relais 5 V / 24 V 2 A DC	4064310000		
24 V DC	SSS Relais 24 V/24 V 0.1 A DC	4061180000	SSS Relais 24 V/24 V 2 A DC	4061190000	SSS Relais 24 V/230 V 1 A AC	4061210000
60 V DC	SSS Relais 60 V/24 V 0.1 A DC	4061230000	SSS Relais 60 V/24 V 2 A DC	4061200000	SSS Relais 60 V/230 V 1 A AC	4061220000

Dimensions

Printing details

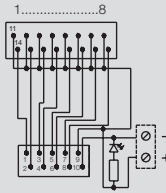


MICROINTERFACE – Relay modules

MICROINTERFACE digital

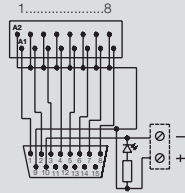
MI8DI-S/Z

Input module



MI8DO-S/Z

Output module



Technical data

Connection data

Type
Type of terminal / Connection system

Rated data

Operating voltage, max.
Current-carrying capacity
Total current feed, max.
Impulse withstand voltage (1.2/50 µs)
Rated insulation voltage
Storage temperature
Ambient temperature (operational)

Insulation coordination (EN 50 178)

Surge category
Pollution severity
Clearances/Creepage distances to EN

Input module

MICROSERIES; Screw or tension clamp connection;
Available for ribbon cable or Sub-D connection

30 V AC/DC
0.5 A per channel
2 A
330 V
32 V
-20 °C...+85 °C
0 °C...+55 °C

1
2
0.1 mm

Output module

MICROSERIES; Screw or tension clamp connection;
Available for ribbon cable or Sub-D connection

30 V AC/DC
0.5 A per channel
2 A
330 V
32 V
-20 °C...+85 °C
0 °C...+55 °C

1
2
0.1 mm

Clamping range (rating- / min. / max.) mm²

Length x width x height mm

Note

2.5 / 0.5 / 2.5

48 x 59 x 53

Wiring diagram for ribbon cable

2.5 / 0.5 / 2.5

48 x 59 x 53

Wiring diagram for SUB-D

Ordering data

Connection system, pre-assembled cable

Ribbon cable connector, 10-pole
SUB-D plug, 15-pole
Ribbon cable connector, 10-pole
SUB-D plug, 15-pole

Type	Qty.	Order No.
MI8DI-S F10 S	1	8773510000
MI8DI-S SUB D15S	1	8773460000
MI8DI-Z F10 S	1	8773530000
MI8DI-Z SUB D15S	1	8773490000

Type	Qty.	Order No.
MI8DO-S F10 S	1	8773600000
MI8DO-S SUB D15S	1	8773550000
MI8DO-Z F10 S	1	8773620000
MI8DO-Z SUB D15S	1	8773570000

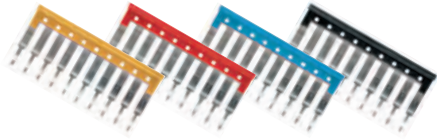
MI8DI-S = Screw connection
MI8DI-Z = Tension clamp connection

MI8DO-S = Screw connection
MI8DO-Z = Tension clamp connection

Accessories

Note

Accessories



Plug-in cross-connection

Type	No. of poles	Qty.	Order No.
yellow			
ZQV 4N / 2 GE	2	60	1758250000
ZQV 4N / 3 GE	3	60	1762630000
ZQV 4N / 4 GE	4	60	1762620000
ZQV 4N / 10 GE	10	20	1758260000
ZQV 4N / 20 GE	20	20	1909020000
red			
ZQV 4N / 2 RT	2	60	1793950000
ZQV 4N / 3 RT	3	60	1793980000
ZQV 4N / 4 RT	4	60	1794010000
ZQV 4N / 10 RT	10	20	1794040000
ZQV 4N / 20 RT	20	20	1909150000
blue			
ZQV 4N / 2 BL	2	60	1793960000
ZQV 4N / 3 BL	3	60	1793990000
ZQV 4N / 4 BL	4	60	1794020000
ZQV 4N / 10 BL	10	20	1794050000
ZQV 4N / 20 BL	20	20	1909100000
black			
ZQV 4N / 2 SW	2	60	1793970000
ZQV 4N / 3 SW	3	60	1794000000
ZQV 4N / 4 SW	4	60	1794030000
ZQV 4N / 10 SW	10	20	1794060000
ZQV 4N / 20 SW	20	20	1909120000

General data – MICROSERIES

Technical data

Conductor		Tension clamp connection	Screw-connection
Solid H07V-U	mm ²	0.5 ... 2.5	0.5 ... 4.0
Stranded H07V-K	mm ²	0.5 ... 2.5	0.5 ... 2.5
"f" with wire end ferrules to DIN 46228-1	mm ²	0.5 ... 1.5	0.5 ... 1.5
"f" with wire end ferrules with plastic collar	mm ²	0.5 ... 1.5	0.5 ... 1.5
Max. clamping range	mm ²	0.13 ... 2.5	0.13 ... 4.0
Plug gauge to IEC 60947-1	size	A 2	A 3
General technical data			
Nominal torque	Nm	-	0,6
Continuous current for 2-pole cross-connection	A	10	10
Continuous current for multi-pole cross-connection	A	10	10
Stripping length	mm	10	7
Ingress protection class		IP 20	IP 20
Housing material		Wemid	Wemid
UL 94 flammability rating		V-0	V-0
Nominal current	A	6	6
Nominal voltage	V	250	250

Other accessories

Type		Qty.	Order No.
Base only			
MXZ 24VDC 1CO BASIS		10	8826000000
MXS 24VDC 1CO BASIS		10	8826010000
MXZ 120VUC 1CO BASIS		10	8826020000
MXS 120VUC 1CO BASIS		10	8826030000
MXZ 230VAC 1CO BASIS		10	8826040000
MXS 230VAC 1CO BASIS		10	8826050000
Markers			
WS 12/6	12 x 6 mm	600	1609900000
Labels, Lasermark			
LM MT 300 15/6 ge	484 labels/sheet	10	1686360000
Screwdriver			
SD 0.6 x 3.5 x 100		10	9008330000
End bracket			
WEW 32/2		100	1061200000

Dimensions

