

Byte Precabling Solution

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Byte precabling system

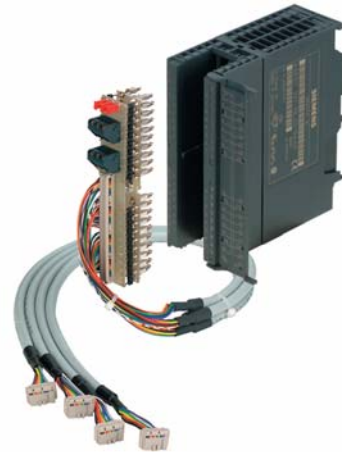
This system allows the user to design a byte wiring system for digital inputs as well as outputs.

It is possible to connect the inputs and outputs either directly by using an 8-channel wiring interface or interface them with relays and optocouplers.

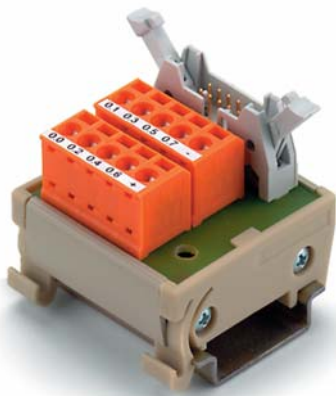
In this case, individual modules from the MICROseries family are used which are directly assembled in groups of 8 and connected by cable to the PLC using an adapter fitted with a 10-pole HE10 female connector.

You can thus use different power supplies on each of the 8 channels.

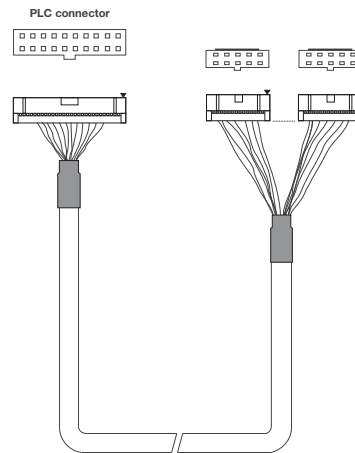
- Screw or tension clamp connection
- Very compact modules
- Clear and accurate labelling



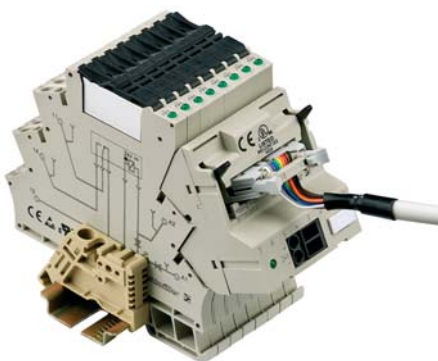
Cable for Siemens S7-300 PLC with front adapter



Wiring interface module for direct connection to the PLC



Cable for Télémécanique Micro and Premium PLCs



Block of eight MICROseries modules for interfacing through relay or optocoupler



Digital MICROinterface adapter

PLC system interface

Wiring and circuitry is becoming increasingly complicated as a result of the growing complexity of machines and systems in process, automation and building services control systems. Conventional connections (point-to-point wiring) between PLC controllers and peripheral devices result in high installation and commissioning cost. The Weidmuller range of PLC system interface products provides the user with a quickly and easily installed output level for SIEMENS SIMATIC® S7.

The specific front adapters replace the usual screw terminal technology used on the PLC input/output cards. 40- or 10-pole connectors transfer the PLC signals to the active or passive components via pre-assembled control leads.

The PLC signals are converted either

- in double word mode to a 40-pole ribbon cable connector, or
 - in byte mode to 4 ribbon cable connectors each with 10 poles.
- PLC I/O cards usually have two connection systems:

- screw clamp
- crimp connectors

In both cases, the signals have to be wired individually with the corresponding connection elements.

Disadvantages of individual wiring:

- High assembly cost
- The risk of wiring mistakes increases with the number of individual wires at one point
- Requires considerable space in the switchboard
- High installation workload
- Time-consuming routing and assembly of connecting leads
- High labelling and documentation workload

System advantages

• Fast

- Reduced planning and design time
- Time-saving installation
- Less time required for commissioning and troubleshooting
- Minimized wiring effort on site thanks to plug-type connectors

• Safe

- Rules out the risk of wiring mistakes
- Clear organization in the switchboard (system cable instead of individual wires)
- Marking corresponds with PLC
- Additional individual marking

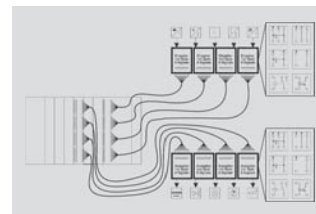
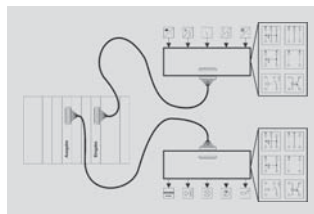
• Variable

- Multitude of about 40 different I/O components
- Variable cable lengths
- Modular design of all components
- 1 x 4 byte and 4 x 1 byte system designs without signal routing module
- Functions mixed by byte to an input or output level
- Expansion possible without difficulty
- Flexibility due to simple swapping of input/output interfaces

• Small

- Saves space in cable ducts
- Small module widths
- No terminal levels

Use of PLC front adapters



Selection Guide

PLC Siemens - S7-300

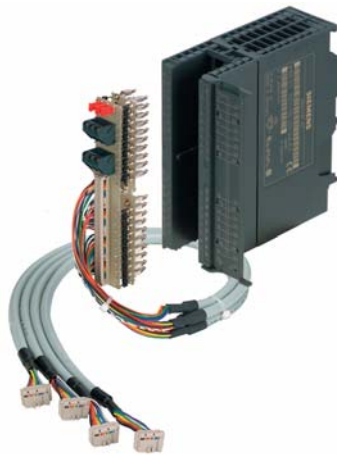
	PLC	Cables		Connection		Interfaces											
		I/O cards	Standard		Option 1			Option 2: adapter + relay or optocoupler as desired									
	Manufacturer order numbers	Order No.	Qty	Screw	Tension c.	Direct inputs or outputs			Adapter			Inputs or outputs with relay			Inputs or outputs with optocoupler		
						Order No.	Qty	Page	Order No.	Qty	Page	Order No.	Qty	Page	Order No.	Qty	Page
Digital input	6ES7 321-1BH01-0AA0	7789235xxx	1	V		8248050000	2	C.12	8773510000	2	C.23	8556060000	16	C.25	8607340000	16	C.27
				Z		8428870000	2	C.11	8773530000	2	C.23	8556080000	16	C.25	8607360000	16	C.27
	6ES7 321-1BH81-0AA0	7789235xxx	1	V		8248050000	2	C.12	8773510000	2	C.23	8556060000	16	C.25	8607340000	16	C.27
				Z		8428870000	2	C.11	8773530000	2	C.23	8556080000	16	C.25	8607360000	16	C.27
	6ES7 321-1BL00-0AA0	843331xxxx	1	V		8248050000	4	C.12	8773510000	4	C.23	8556060000	32	C.25	8607340000	32	C.27
				Z		8428870000	4	C.11	8773530000	4	C.23	8556080000	32	C.25	8607360000	32	C.27
6ES7 321-1BL80-0AA0	843331xxxx	1	V		8248050000	4	C.12	8773510000	4	C.23	8556060000	32	C.25	8607340000	32	C.27	
			Z		8428870000	4	C.11	8773530000	4	C.23	8556080000	32	C.25	8607360000	32	C.27	
6ES7 321-1BH50-0AA0	7789235xxx	1	V		8248050000	2	C.12	8773510000	2	C.23	8556060000	16	C.25	8607340000	16	C.27	
			Z		8428870000	2	C.11	8773530000	2	C.23	8556080000	16	C.25	8607360000	16	C.27	
6ES7 321-7RD00-0AB0	7789235xxx	1	V		8248050000	2	C.12	8773510000	2	C.23	8556060000	16	C.25	8607340000	16	C.27	
			Z		8428870000	2	C.11	8773530000	2	C.23	8556080000	16	C.25	8607360000	16	C.27	
Digital output	6ES7 322-1BH01-0AA0	7789235xxx	1	V		8248050000	2	C.12	8773600000	2	C.23	8533640000*	16	C.25	8607350000	16	C.29
				Z		8428870000	2	C.11	8773620000	2	C.23	8533660000*	16	C.25	8607370000	16	C.29
	6ES7 322-1BH81-0AA0	7789235xxx	1	V		8248050000	2	C.12	8773600000	2	C.23	8533640000*	16	C.25	8607350000	16	C.29
				Z		8428870000	2	C.11	8773620000	2	C.23	8533660000*	16	C.25	8607370000	16	C.29
	6ES7 322-1BL00-0AA0	843331xxxx	1	V		8248050000	4	C.12	8773600000	4	C.23	8533640000*	32	C.25	8607350000	32	C.29
				Z		8428870000	4	C.11	8773620000	4	C.23	8533660000*	32	C.25	8607370000	32	C.29

* Note: It is possible to replace these standard relay modules with the "ACT" version which provides a non-wired common.

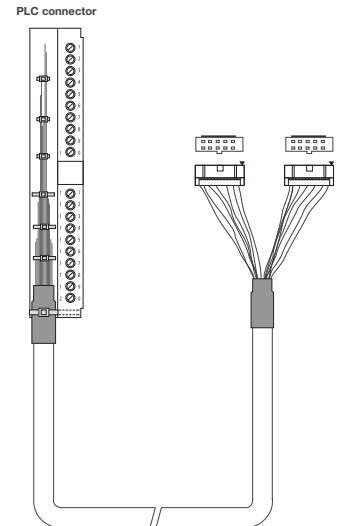
- MRS 24Vdc ACT 8660920000 (screw connection) instead of 8533640000
- MRZ 24Vdc ACT 8660910000 (tension clamp connection) instead of 8533660000



Block of 8 MICROseries modules



Cable 843331xxxx



Cable 7789235xxx

PLC Siemens - S7-400

	PLC	Cables		Connection		Interfaces											
	I/O cards	Standard		Screw	Tension cl.	Option 1			Option 2: adapter + relay or optocoupler as desired								
						Direct inputs or outputs			Adapter			Inputs or outputs with relay			Inputs or outputs with optocoupler		
		Manufacturer order numbers	Order No.			Qty	Order No.	Qty	Page	Order No.	Qty	Page	Order No.	Qty	Page	Order No.	Qty
S	6ES7 421-1BL00-0AA0	833591xxxx	1	V	8248050000	4	C.12	8773510000	4	C.23	8556060000	32	C.25	8607340000	32	C.27	
				Z	8428870000	4	C.11	8773530000	4	C.23	8556080000	32	C.25	8607360000	32	C.27	
S	6ES7 422-1BL00-0AA0	833591xxxx	1	V	8248050000	4	C.12	8773600000	4	C.23	8533640000*	32	C.25	8607350000	32	C.29	
				Z	8428870000	4	C.11	8773620000	4	C.23	8533660000*	32	C.25	8607370000	32	C.29	
S	6ES7 422-7BL00-0AB0	833591xxxx	1	V	8248050000	4	C.12	8773600000	4	C.23	8533640000*	32	C.25	8607350000	32	C.29	
				Z	8428870000	4	C.11	8773620000	4	C.23	8533660000*	32	C.25	8607370000	32	C.29	

* Note: It is possible to replace these standard relay modules with the "ACT" version which provides a non-wired common.

- MRS 24Vdc ACT 8660920000 (screw connection) instead of 8533640000
- MRZ 24Vdc ACT 8660910000 (tension clamp connection) instead of 8533660000



Block of 8 MICROseries modules



Cable 833591xxxx

Selection Guide

PLC Télémécanique - Premium/Micro

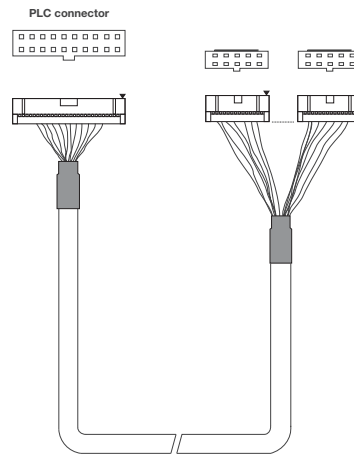
	PLC	Cables		Connection		Interfaces													
		I/O cards	Standard	Qty	Screw	Tension c.	Type	Option 1			Option 2: adapter + relay or optocoupler as desired								
								Direct inputs or outputs			Adapter			Inputs or outputs with relay			Inputs or outputs with optocoupler		
Manufacturer order numbers	Order No.	Qty	Screw	Tension c.	Type	Order No.	Qty	Page	Order No.	Qty	Page	Order No.	Qty	Page	Order No.	Qty	Page		
Digital I/O	TSX DMZ 64DTK	7789303xxx	4	V	Z	Input	8248050000	4	C.12	8773510000	4	C.23	8596060000	32	C.25	8607340000	32	C.27	
							8428870000		C.11	8773530000		C.23	8596080000		C.25	8607360000		C.27	
						Output	8248050000	4	C.12	8773600000	4	C.23	8533640000	32	C.25	8607350000	32	C.27	
							8428870000		C.11	8773620000		C.23	8533660000		C.25	8607370000		C.27	
Digital input	TSX DEY 16FK	7789303xxx	1	V	Z		8248050000	2	C.12	8773510000	2	C.23	8596060000	16	C.25	8607340000	16	C.27	
							8428870000		C.11	8773530000		C.23	8596080000		C.25	8607360000		C.27	
	TSX DEY 32D2K	7789303xxx	2	V	Z		8248050000	4	C.12	8773510000	4	C.23	8596060000	32	C.25	8607340000	32	C.27	
							8428870000		C.11	8773530000		C.23	8596080000		C.25	8607360000		C.27	
Digital output	TSX DEY 64D2K	7789303xxx	4	V	Z		8248050000	8	C.12	8773510000	8	C.23	8596060000	64	C.25	8607340000	64	C.27	
							8428870000		C.11	8773530000		C.23	8596080000		C.25	8607360000		C.27	
Digital output	TSX DSY 32T2K	7789303xxx	2	V	Z		8248050000	4	C.12	8773600000	4	C.23	8533640000*	32	C.25	8607350000	32	C.29	
							8428870000		C.11	8773620000		C.23	8533660000*		C.25	8607370000		C.29	
	TSX DSY 64T2K	7789303xxx	4	V	Z		8248050000	8	C.12	8773600000	8	C.23	8533640000*	64	C.25	8607350000	64	C.29	
							8428870000		C.11	8773620000		C.23	8533660000*		C.25	8607370000		C.29	

* Note: It is possible to replace these standard relay modules with the "ACT" version which provides a non-wired common.

- MRS 24Vdc ACT 8660920000 (screw connection) instead of 8533640000
- MRZ 24Vdc ACT 8660910000 (tension clamp connection) instead of 8533660000



Block of 8 MICROseries modules



Cable 7789303xxx

SIEMENS SIM S7/300 and SIM S7/400

Front adapters SIM S7/300 and SIM S7/400 are contacted quickly and safely to the input and output modules of Siemens Simatic® S7-300 and S7-400 controllers.

Pre-assembled control leads with 10- or 40-pole socket connectors to IEC 603-1/DIN 41651 connect the PLC input/output groups to the passive and active interface units of the PLC system interface.

Electrical isolation of the power supply is accomplished by means of plug-in cross connection on PLC adapters and input/output modules with the following options:

- 1 x 32 signals
- 2 x 16 signals
- 4 x 8 signals

There are two options for the power feed to PLC I/O cards:

- Direct feed on the front adapter via screw terminals
- Feed via passive/active components by means of pre-assembled control wire (max. 1A/byte)

For the 32-bit PLC components, there is a choice of front adapters with four 10-pole < 4 x 1 byte structure or 40-pole control lead < 1 x 4 byte structure. This enables fast, cost-efficient installation and allows wiring mistakes to be minimized and commissioning times to be reduced.

Pole configuration

Front adapter	SIM S7/300...KONV		SIM S7/400...KONV	
	Socket	1 x 40 poles	4 x 10 poles	1 x 40 poles
Pin 1	X 1.9 B0+	X 1.32 B0+		
Pin 2	X 1.1	X 1.40		
Pin 3	X 1.2	X 1.39	X 1.9 B0+	X 1.32 B0+
Pin 4	X 1.3	X 1.38	X 1.1	X 1.40
Pin 5	X 1.4	X 1.37	X 1.2	X 1.39
Pin 6	X 1.5	X 1.36	X 1.3	X 1.38
Pin 7	X 1.6	X 1.35	X 1.4	X 1.37
Pin 8	X 1.7	X 1.34	X 1.5	X 1.36
Pin 9	X 1.8	X 1.33	X 1.6	X 1.35
Pin 10	X 1.10 B0-	X 1.31 B0-	X 1.7	X 1.34
Pin 11	X 2.9 B1+	X 1.22 B1+	X 1.8	X 1.33
Pin 12	X 2.1	X 1.30		
Pin 13	X 2.2	X 1.29		
Pin 14	X 2.3	X 1.28	X 2.9 B1+	X 1.22 B1+
Pin 15	X 2.4	X 1.27	X 2.1	X 1.30
Pin 16	X 2.5	X 1.26	X 2.2	X 1.29
Pin 17	X 2.6	X 1.25	X 2.3	X 1.28
Pin 18	X 2.7	X 1.24	X 2.4	X 1.27
Pin 19	X 2.8	X 1.23	X 2.5	X 1.26
Pin 20	X 2.10 B1-	X 1.21 B1-	X 2.6	X 1.25
Pin 21	X 3.9 B2+	X 1.12 B2+	X 2.7	X 1.24
Pin 22	X 3.1	X 1.20	X 2.8	X 1.23
Pin 23	X 3.2	X 1.19		
Pin 24	X 3.3	X 1.18		
Pin 25	X 3.4	X 1.17		
Pin 26	X 3.5	X 1.16	X 3.9 B2+	X 1.12 B2+
Pin 27	X 3.6	X 1.15	X 3.1	X 1.20
Pin 28	X 3.7	X 1.14	X 3.2	X 1.19
Pin 29	X 3.8	X 1.13	X 3.3	X 1.18
Pin 30	X 3.10 B2-	X 1.11 B2-	X 3.4	X 1.17
Pin 31	X 4.9 B3+	X 1.2 B3+	X 3.5	X 1.16
Pin 32	X 4.1	X 1.10	X 3.6	X 1.15
Pin 33	X 4.2	X 1.9	X 3.7	X 1.14
Pin 34	X 4.3	X 1.8	X 3.8	X 1.13
Pin 35	X 4.4	X 1.7		
Pin 36	X 4.5	X 1.6		
Pin 37	X 4.6	X 1.5		
Pin 38	X 4.7	X 1.4	X 4.9 B3+	X 1.2 B3+
Pin 39	X 4.8	X 1.3	X 4.1	X 1.10
Pin 40	X 4.10 B3-	X 1.1 B3-	X 4.2	X 1.9
Pin 41			X 4.3	X 1.8
Pin 42			X 4.4	X 1.7
Pin 43			X 4.5	X 1.6
Pin 44			X 4.6	X 1.5
Pin 45			X 4.7	X 1.4
Pin 46			X 4.8	X 1.3
Pin 47				
Pin 48			X 1.10 B0-	X 1.11 B0-
Pin 48			X 2.10 B1-	X 1.21 B1-
Pin 48			X 3.10 B2-	X 1.31 B2-
Pin 48			X 4.10 B3-	X 1.1 B3-
Plug-in cross connectors				
	B0+/B1+		B0+/B1+	
	B1+/B2+		B1+/B2+	
	B2+/B3+		B2+/B3+	
	B0-/B1-			
	B1-/B2-			
	B2-/B3-			

PLC Front Adapter for SIEMENS S7

PLC front adapter for SIEMENS S7

- Pre-assembled control cable
- Control cable 1x40- or 4x10 pole in 4 standard lengths
- Separate feeding of the supply voltage via screw connection terminals
- Outstanding cross connectability using ZQV system
- Versatile accessories
- Inexpensive coupling of the interface modules

Front adapter for SIEMENS S7 300 E/A-modules

Digital input:

S7/300 6ES7 321-1BL00-0AA0, 32DI

Digital output :

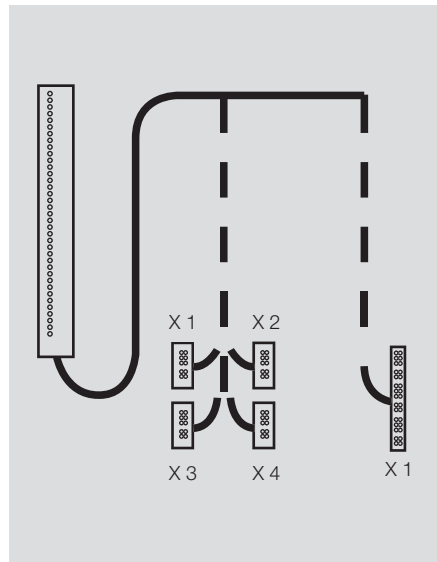
S7/300 6ES7 322-1BL00-0AA0, 32DO

Digital input/output:

S7/300 6ES7 323-1BL00-0AA0, 16DI/16DO

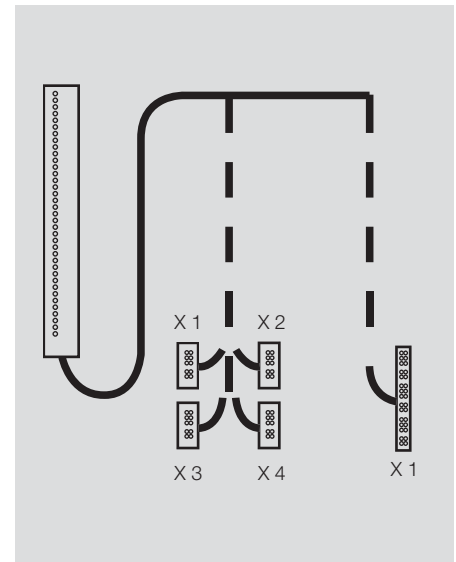
SIEMENS S7/300 1 x 4 Byte

Simatic S7/300 1x4 Byte



SIEMENS S7/300 4 x 1 Byte

Simatic S7/300 4x1Byte



Technical data

Connection data

Connection on process side
Type of connection

Design

Configuration of single conductor
Connection system, supply voltage/other connections

Rated data

Number of signals
Rated voltage
Rated current per connection
Current-carrying capacity/ cable 10-pole/Line, 40-pole
Voltage supply/Byte discon.
Total current feed, max.

Dimensions

Clamping range (rating- / min. / max.) mm²
Length x width x height mm

Note

SIEMENS front panel housing

1x40-pole pre-assembled cable with IEC603/1 plug-in connector

1x40-pole pre-assembled cable with female connector

7-core control line AWG 26/7

PCB screw connection terminals

32 / 1x4 byte

60 V AC/ 75 V DC

1 A

/26 A/ dT = 20 K

yes

16 A

115 x 22 x 32

SIEMENS front panel housing

4 x 10-pole pre-assembled cable with IEC603/1 plug-in connector

4x10-pole pre-assembled cable with 10-pole female connector

7-core control line AWG 26/7

PCB screw connection terminals

32 / 4x1 byte

60 V AC/ 75 V DC

1 A

11.5 A/ dT = 20 K /

yes

16 A

115 x 22 x 32

Ordering data

2 m control line
2.5 m control line
3 m control line
5 m control line

Note

Type	Qty.	Order No.
SIM S7/300 FB40 2.0M	1	8433290200
SIM S7/300 FB40 2.5M	1	8433290250
SIM S7/300 FB40 3.0M	1	8433290300
SIM S7/300 FB40 5.0M	1	8433290500

Type	Qty.	Order No.
SIM S7/300 FB4*10 2.0M	1	8433310200
SIM S7/300 FB4*10 2.5M	1	8433310250
SIM S7/300 FB4*10 3.0M	1	8433310300
SIM S7/300 FB4*10 5.0M	1	8433310500

PLC front adapter for SIEMENS S7

- Pre-assembled control cable
- 1x40-pole or 4x10-pole cables in 4 standard lengths
- Separate feeding of supply voltage via screw connection terminals
- Outstanding cross connectability using ZQV system
- Versatile system accessories
- Inexpensive coupling of interface modules

Front adapter for SIEMENS S7 400 I/O modules

Digital input:

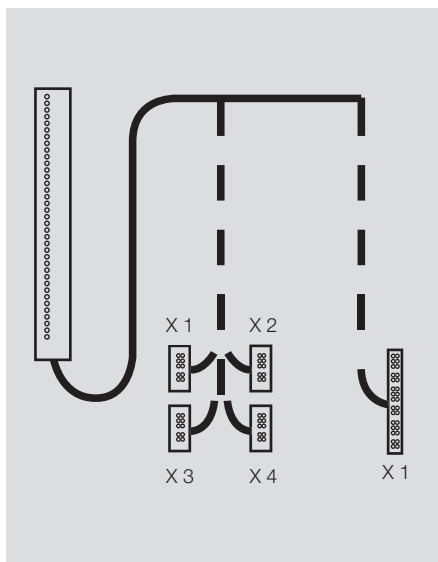
S7/400 6ES7 421-1BL00-0AA0, 32DI

Digital output:

S7/400 6ES7 422-1BL00-0AA0, 32DO

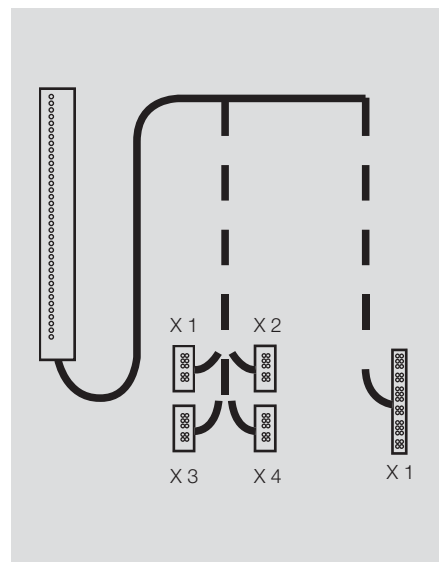
SIEMENS S7/400 1x 4 Byte

Simatic S7/400 1x4Byte



SIEMENS S7/400 4 x 1 Byte

Simatic S7/400 4x1Byte



Technical data

Connection data

Connection on process side
Type of connection

Design

Configuration of single conductor
Connection system, supply voltage/other connections

Rated data

Number of signals
Rated voltage
Rated current per connection
Current-carrying capacity/ cable 10-pole/Line, 40-pole
Voltage supply/Byte discon.
Total current feed, max.

Dimensions

Clamping range (rating- / min. / max.) mm²
Length x width x height mm

Note

SIEMENS front panel housing

1x40-pole pre-assembled cable with IEC603/1 plug-in connector

1x40-pole pre-assembled cable with female connector

7-core control line AWG 26/7
PCB screw connection terminals

32 / 1x4 byte
60 V AC/ 75 V DC
1 A
/26 A/ dT = 20 K
yes
16 A

274 x 19 x 55

SIEMENS front panel housing

4 x 10-pole pre-assembled cable with IEC603/1 plug-in connector

4x10-pole pre-assembled cable with 10-pole female connector

7-core control line AWG 26/7
PCB screw connection terminals

32 / 4x1 byte
60 V AC/ 75 V DC
1 A
11.5 A/ dT = 20 K /
yes
16 A

274 x 19 x 55

Ordering data

2 m control line
2.5 m control line
3 m control line
5 m control line

Note

Type	Qty.	Order No.
SIM S7/400 FB40 2.0M	1	8335900200
SIM S7/400 FB40 2.5M	1	8335900250
SIM S7/400 FB40 3.0M	1	8335900300
SIM S7/400 FB40 5.0M	1	8335900500

Type	Qty.	Order No.
SIM S7/400 FB4*10 2.0M	1	8335910200
SIM S7/400 FB4*10 2.5M	1	8335910250
SIM S7/400 FB4*10 3.0M	1	8335910300
SIM S7/400 FB4*10 5.0M	1	8335910500

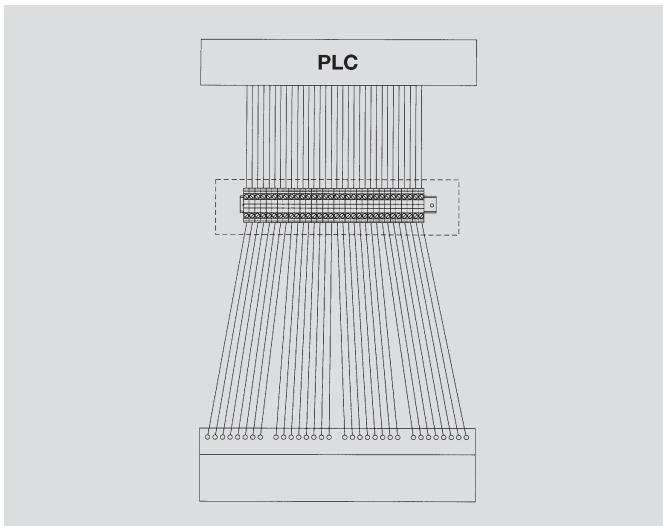
Passive components

The RSF40 or RS F10 passive interface units for 32 or 8 signals allow for efficient connection of peripheral initiators, sensors and actuators to PLC input/output modules. The link between the PLC and the interface module consists of the controller-specific front adapter and the pre-assembled control lead. This wiring version replaces point-to-point wiring, which is prone to mistakes and is costly to install. The necessary auxiliary voltage is provided at the connection units. An optional status indicator (LED) shows the switching state and the operating voltages.

Features

- Choice of screw or tension clamp terminal
- RS45 modules with extremely narrow width of 45 mm
- 32x module via plug-in jumpers in sensor groups (1 x 32, 2 x 16 or 4 x 8 signals)
- Signals grouped by byte
- Test point on the board through connection element
- Clearly organized terminal marking
- Additional labelling panel for group identification
- Clips to TS35 DIN rail (RS 45 profile) in 45 mm width and TS 32/35 DIN rail in 87 mm width

Individual wiring



Input/output module RS 45 profile designed for

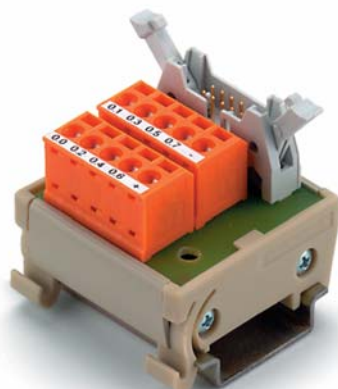
- 1:1 signal transfer of 32 or 8 signals to PLC input/output modules,
- connection of RS F40 LPK2 and RS F10 LPK2 two-wire and three-wire sensors/initiators to PLC input/output modules.

Input/Output in single-conductor system

- Compact design
- Tension clamp connection system
- Clear connection type
- Clips to TS 35

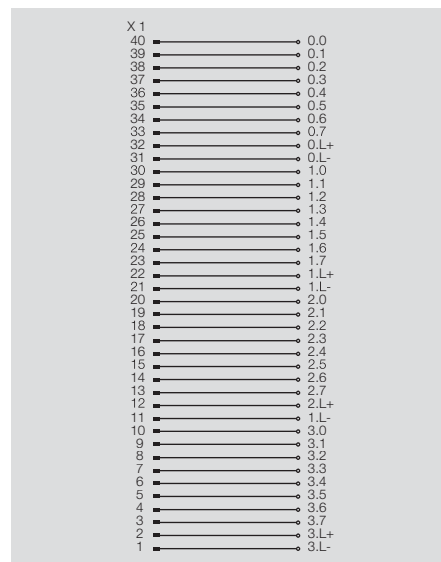
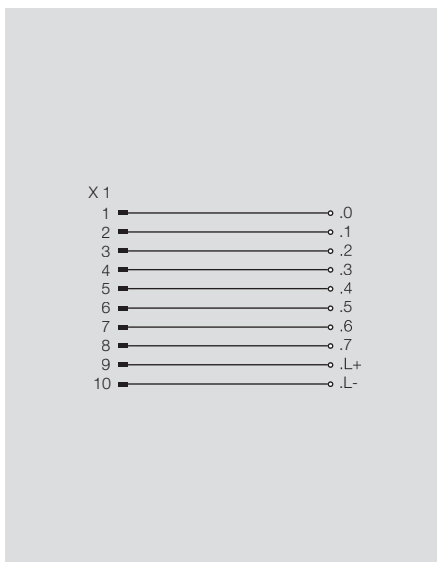
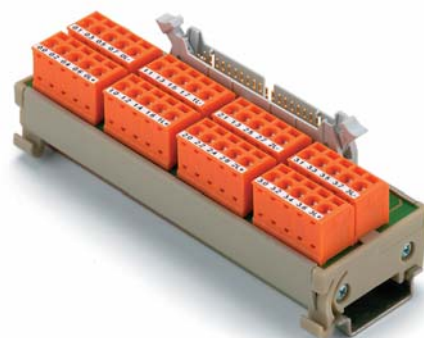
RS F10 I/O8 LMZF

I/O module



RS F40 I/O32 LMZF

I/O module



Technical data

Connection data

Connection on process side
 Stripping length
 Connection system, supply voltage/other connections
 Coupling on control side, 8- way module
 Coupling on control side, 32- way module

Rated data

Number of signals
 Rated voltage
 Rated current per connection
 Common potential at terminal/Voltage supply/Byte discon.
 Ambient temperature (operational)/Storage temperature
 Surge category/Pollution severity
 Terminal rail

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

Note

Ordering data

Type	Qty.	Order No.
RS F10 I/O8 LMZF	1	8428870000

Note

PCB terminal LMZF

7.0 mm

Tension clamp connection terminal

10-pole FB-socket IEC 603-1

8 / 1x1 byte

60 V AC/ 75 V DC

1 A

/

0 °C...+55 °C /-40 °C...+70 °C

II /2

TS 35

1.5 / 0.5 / 2.5

45 x 43 x 54

PCB terminal LMZF

7.0 mm

Tension clamp connection terminal

40-pole FB-socket IEC 603-1

32 / 1x4 byte

60 V AC/ 75 V DC

1 A

/no

0 °C...+55 °C /-40 °C...+70 °C

II /2

TS 35

1.5 / 0.5 / 2.5

45 x 125 x 54

Type	Qty.	Order No.
RS F40 I/O32 LMZF	1	8428880000

Note

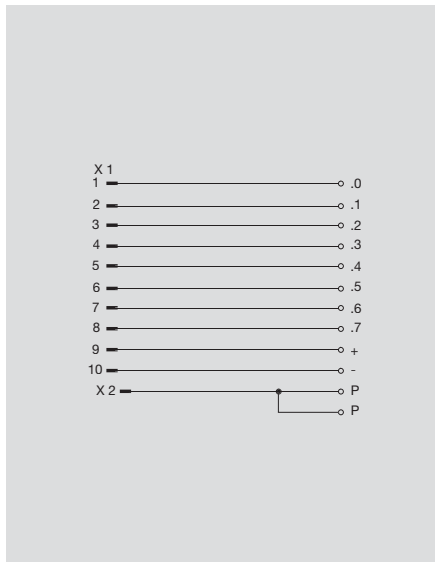
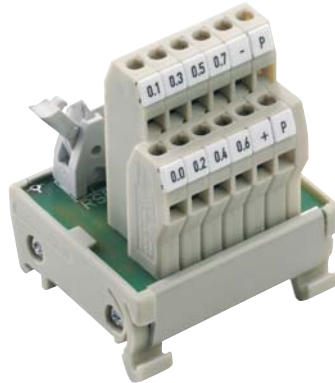
PLC Input/Output Module Passive

Input/Output in single-conductor system

- Compact design
- Screw connection system
- Clear connection type
- Clips to TS 35

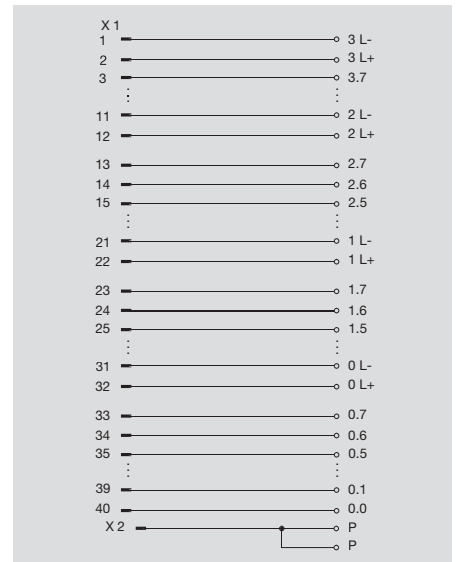
RS F10 LPK 2H/12

I/O module



RS F40 LPK 2H/42

I/O module



Technical data

Connection data

Connection on process side
 Stripping length
 Connection system, supply voltage/other connections
 Coupling on control side, 8- way module
 Coupling on control side, 32- way module

Rated data

Number of signals
 Rated voltage
 Rated current per connection
 Common potential at terminal/Voltage supply/Byte discon.
 Ambient temperature (operational)/Storage temperature
 Surge category/Pollution severity
 Terminal rail

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

Note

Ordering data

Type	Qty.	Order No.
RS F10 LPK 2H/12	1	8248050000
Note		

PCB terminal LPK 2 H

7.0 mm

Screw connection

10-pole FB-socket IEC 603-1

8 / 1x1 byte

60 V AC/ 75 V DC

1 A

/-

0 °C...+55 °C /-40 °C...+70 °C

II /2

TS 35

PCB terminal LPK 2 H

7.0 mm

Screw connection

40-pole FB-socket IEC 603-1

32 / 1x4 byte

60 V AC/ 75 V DC

1 A

/no

0 °C...+55 °C /-40 °C...+70 °C

II /2

TS 35

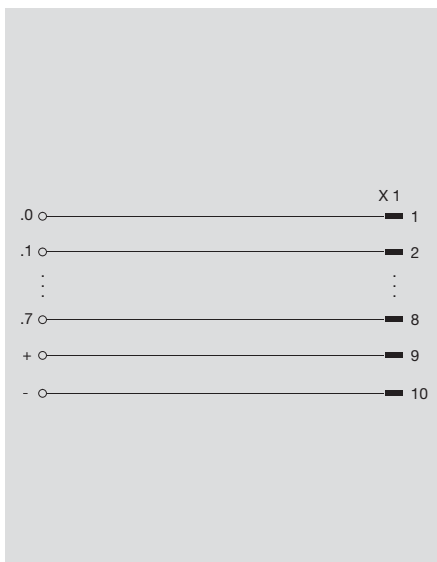
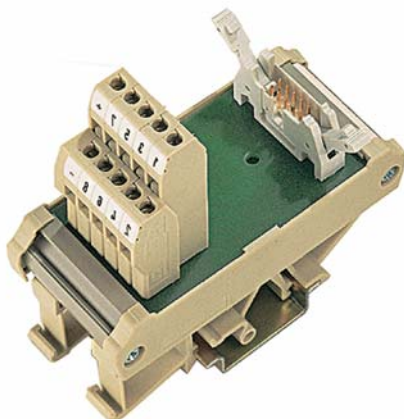
Type	Qty.	Order No.
RS F40 LPK 2H/42	1	8248060000
Note		

Input/Output in single-conductor system

- Screw connection system
- Clear connection type
- Optional status indicator
- Additional labelling panel for group type
- Clips to TS 32/35

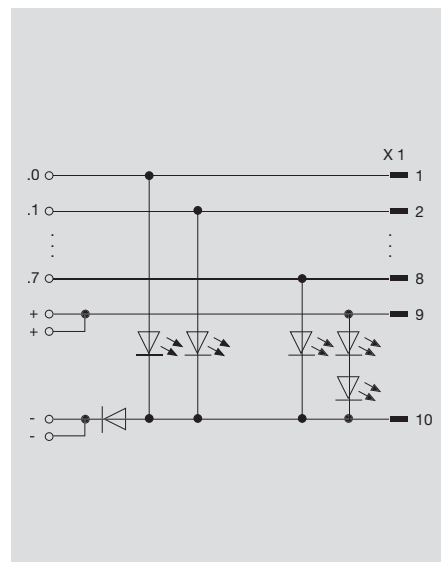
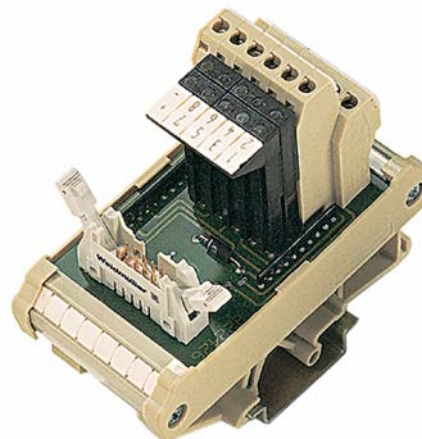
RS F10 I/O8 LPK2

I/O module



RS F10 I/O8 LD LPK2

I/O module



Technical data

Connection data

Connection on process side
 Stripping length
 Connection system, supply voltage/other connections
 Coupling on control side, 8- way module

Rated data

Number of signals
 Rated voltage
 Rated current per connection
 LED current
 Ambient temperature (operational)/Storage temperature
 Surge category/Pollution severity
 Terminal rail

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

Note

Ordering data

Type	Qty.	Order No.
RS F10 I/O8 LPK2	1	8224290000

Note

PCB terminal LPK 2 H

7.0 mm

Screw connection

10-pole FB-socket IEC 603-1

8 / 1x1 byte

60 V AC/ 75 V DC

1 A

0 °C...+55 °C /-40 °C...+70 °C

II /2

TS 32, TS 35

1.5 / 0.5 / 2.5

87 x 40 x 80

PCB terminal LPK 2 H

7.0 mm

Screw connection

10-pole FB-socket IEC 603-1

8 / 1x1 byte

24 V DC ±20 %

1 A

< 5 mA

0 °C...+55 °C /-40 °C...+70 °C

II /2

TS 32, TS 35

1.5 / 0.5 / 2.5

87 x 40 x 80

Type	Qty.	Order No.
RS F10 I/O8 LD LPK2	1	8224260000

Note

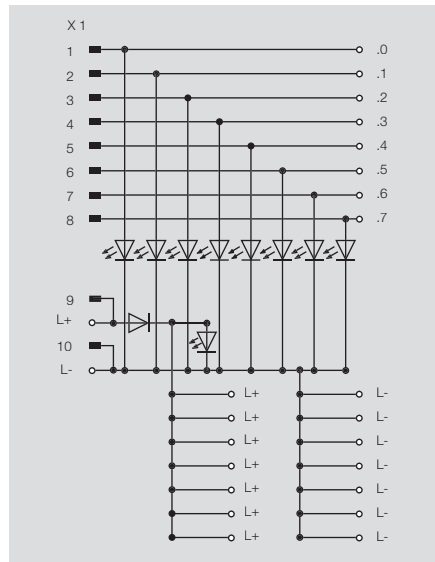
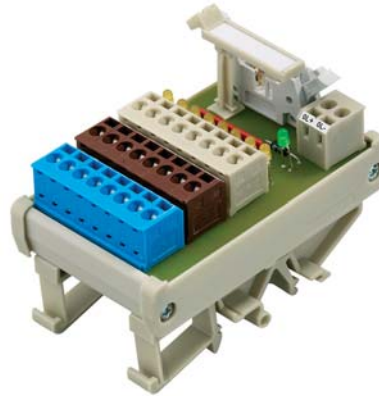
PLC Input/Output Module Passive

Input module in 3-conductor system

- Tension clamp connection system
- Connection of 3-wire initiators
- Optional status indicator
- Additional labelling panel for group type
- Clips to TS 32/35

RS F10 INIT8 LD LMZF

Input module



Technical data

Connection data

Connection on process side
 Stripping length
 Connection system, supply voltage/other connections
 Coupling on control side, 8- way module

Rated data

Number of signals
 Rated voltage
 Rated current per connection
 LED current
 Common potential at terminal/Voltage supply/Byte discon.
 Ambient temperature (operational)/Storage temperature
 Surge category/Pollution severity
 Terminal rail

PCB terminal LMZF
 7.0 mm
 Tension clamp connection terminal
 10-pole FB-socket IEC 603-1

8 / 1x1 byte
 24 V DC ±20 %
 1 A
 < 5 mA
 +/- potential /-
 0 °C...+55 °C /-40 °C...+70 °C
 II /2
 TS 32, TS 35

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

1,5 / 0,5 / 2,5
 87 x 54 x 73

Note

Ordering data

Type	Qty.	Order No.
RS F10 INIT8 LD LMZF	1	8428890000

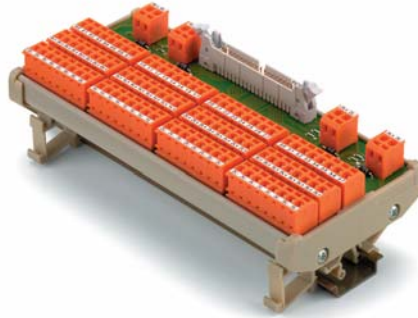
Note

Input module in 3-conductor system

- Tension clamp connection system
- Connection of 3-wire initiators
- Wire jumpers on the 32-way modules enable group-type splitting of the initiators into 1x32, 2x16 or 4x8 signals
- Clear byte-by-byte grouping of signals
- Optional status indicator
- Additional labelling panel for group type
- Clips to TS 32/35

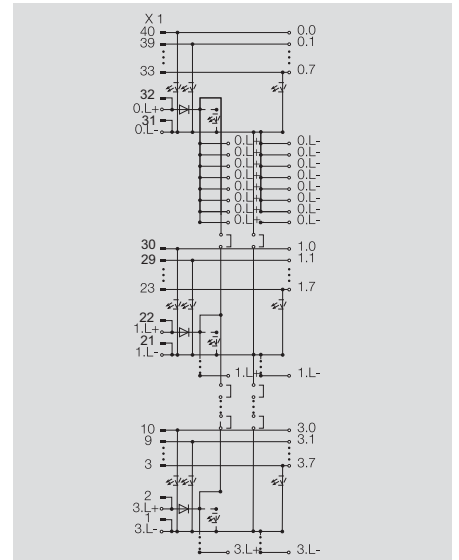
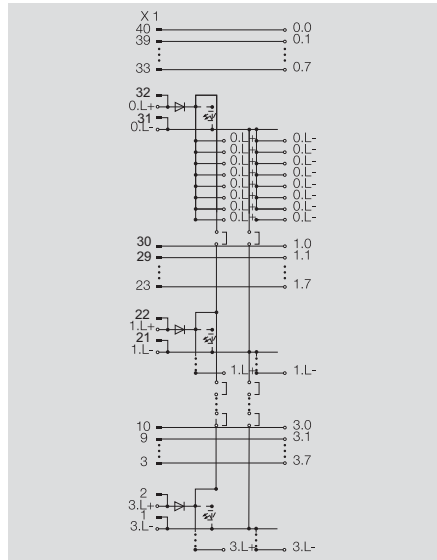
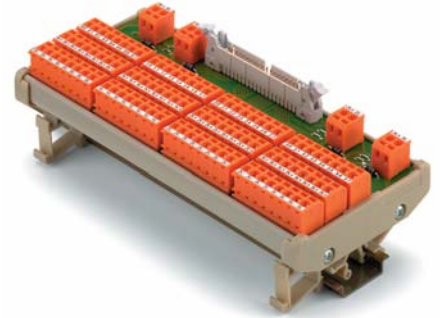
RS F40 INIT32 LMZF

Input module



RS F40 INIT32 LD LMZF

Input module



Technical data

Connection data	
Connection on process side	
Stripping length	
Connection system, supply voltage/other connections	
Coupling on control side, 32- way module	

Rated data	
Number of signals	
Rated voltage	
Rated current per connection	
LED current	
Common potential at terminal/Voltage supply/Byte discon.	
Ambient temperature (operational)/Storage temperature	
Surge category/Pollution severity	
Terminal rail	

Dimensions	
Clamping range (rating- / min. / max.)	mm ²
Length x width x height	mm

Note	

Ordering data

Type	Qty.	Order No.
RS F40 INIT32 LMZF	1	8430980000

Note	

Connection data	
PCB terminal LMZF	
7.0 mm	
Tension clamp connection terminal	
40-pole FB-socket IEC 603-1	

Rated data	
32 / 1x4 byte	
60 V AC/ 75 V DC	
1 A	
+/- potential /yes	
0 °C...+55 °C /-40 °C...+70 °C	
II /2	
TS 32, TS 35	

Dimensions	
1.5 / 0.5 / 2.5	
87 x 185 x 73	

Note	

Connection data	
PCB terminal LMZF	
7.0 mm	
Tension clamp connection terminal	
40-pole FB-socket IEC 603-1	

Rated data	
32 / 1x4 byte	
24 V DC ±20 %	
1 A	
< 5 mA	
+/- potential /yes	
0 °C...+55 °C /-40 °C...+70 °C	
II /2	
TS 32, TS 35	

Dimensions	
1.5 / 0.5 / 2.5	
87 x 185 x 73	

Note	

Type	Qty.	Order No.
RS F40 INIT32 LD LMZF	1	8428900000

Note	

Active components

Relay output modules allow transmission of electric signals between PLC controller and the actuator level. A signal isolator guarantees transmission free of reference potential and decoupling of the electric signals.

Relay output modules for controlling actuators free from reference potential from a PLC.

- RS F40 16 RS for output of 16 signals (with expansion module max. 32 signals),
- RS F40 LMZF 32 RS for output of 32 signals,
- RS F10 8RS for output of 8 signals.

The advantages of active interface components:

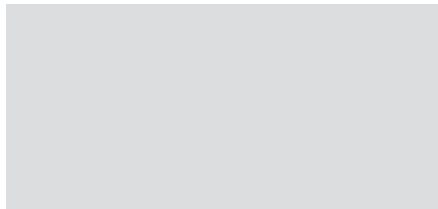
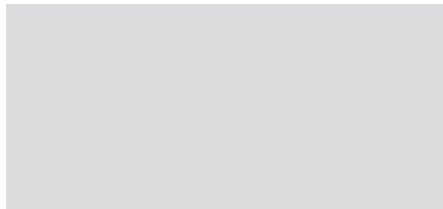
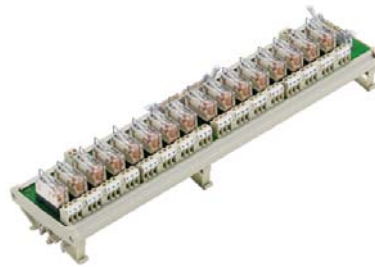
- low-disturbance and noise-free signal transmission
- power gain
- compact design
- cost- and time-saving wiring with pre-assembled lines
- screw or tension spring connections as required
- inexpensive adaptation via pre-assembled control lines to the PLC
- electrical isolation of input and output circuits
- expansion board for upgrading a 16-way module to a 32-way module
- plug-in relay
- integral switching status indicator
- labelling panel for group type
- can be clipped to TS 32/35

Relays

- Screw connection system
- Base and expansion modules each equipped with 16 relays
- Plug-in relays with changeover contact
- Expansion module connected via 20-pole ribbon cable
- Electrical isolation of input and output circuits
- LED status indicator
- For mounting on TS 32/35

RS F40 16RS OUT

Output module



Technical data

Connection data

Number of signals
 Connection on process side
 Type of connection
 Connection system, supply voltage/other connections
 Stripping length

16 / 1x2 byte
 Screw connection
 40-pole pin connector IEC 603/1
 Screw connection/ IEC 603-1 20-pole
 7.00 mm

Input

Rated voltage
 DC Response/drop-out Volt
 Rated current DC
 Pick-up/drop-out current, DC coil
 Power rating
 Status indicator LED / current consumption
 Response time / Drop-out time
 max. switching frequency at rated load

24 V DC ±10%
 > 16 V / < 4 V
 30 mA
 23 mA / 2 mA
 0.75 W
 yellow /3.00 mA
 < 8 ms/ < 7 ms
 10.0 Hz

Output

max. switching voltage AC/max. DC
 Continuous current/Making current/min. switching current
 max. switching power
 Type of relay/Relay mounting
 Type of contact/Contact base material

250 V/250 V
 6 A/8 A /100 mA
 2000 VA / 200 W
 RCL314024 /pluggable
 CO contact /AgNi 90/10

Insulation coordination (EN 50178)

Ambient temperature (operational)
 Storage temperature
 Rated voltage
 Dielectric strength, Input/Output
 Surge category
 Pollution severity
 DIN Rail compatibility
 Standards/Approvals

0 °C...+55 °C
 -40 °C...+70 °C
 300 V
 4 kV_{eff}
 II
 2
 TS 32, TS 35
 EN 50178 /CE

Dimensions

Clamping range (rating- / min. / max.)
 Length x width x height

mm² 2,5 / 0,5 / 4
 mm 87 x 350 x 76

Note

Ordering data

Basic module
 Expansion module

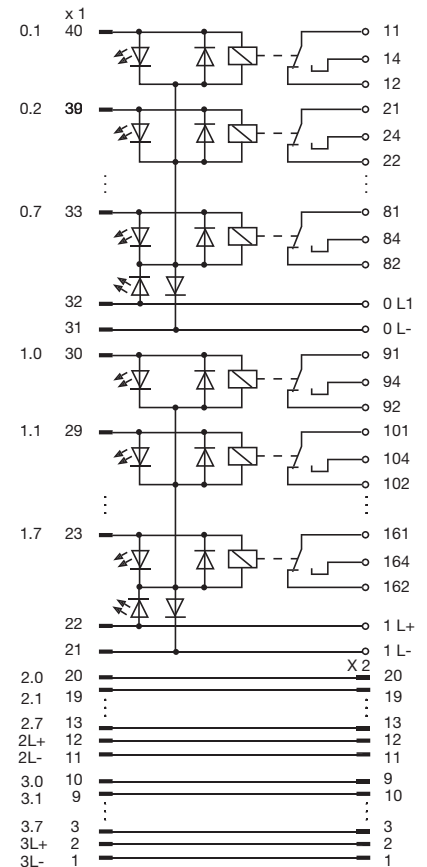
Type	Qty.	Order No.
RS F40 16RS OUT 24VDC	1	8224181001
RS F40 16RS OUT 24VDC E	1	8224191001

Note

Accessories

Note

Spare relay RCL314024 8693260000



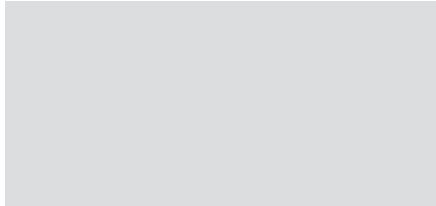
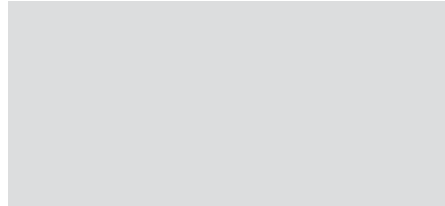
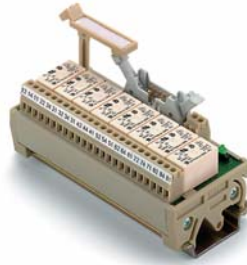
PLC Input/Output Module Active

Relays

- Screw connection system
- Compact design
- Electrical isolation of input and output circuits
- Relay soldered with changeover contact
- LED status indicator
- Clips to TS 35

RS F10 8R OUT 24VDC

Output module



Technical data

Connection data

Type
 Number of signals
 Connection on process side
 Type of connection
 Connection system, supply voltage/other connections
 Stripping length

IEC603-1 10-pole/ screw connection
 8 / 1x1 byte
 Screw connection
 10-pole pin connector IEC 603/1
 Screw connection LM 3.5
 5.00 mm

Input

Rated voltage
 DC Response/drop-out Volt
 Rated current DC
 Pick-up/drop-out current, DC coil
 Power rating
 Status indicator LED / current consumption
 Response time / Drop-out time

24 V DC $\pm 10\%$
 $> 18 \text{ V} / < 4 \text{ V}$
 20 mA
 20 mA / 2mA
 0.5 W
 yellow /5.00 mA
 $< 8 \text{ ms} / < 4 \text{ ms}$

Output

max. switching voltage AC/max. DC
 Continuous current/Making current/min. switching current
 max. switching power
 Type of relay/Relay mounting
 Type of contact/Contact base material

250 V/120 V
 3 A/5 A /100 mA
 1250 VA / 80 W
 DOLD OW5691 /soldered
 CO contact /AgNi

Insulation coordination (EN 50178)

Ambient temperature (operational)
 Storage temperature
 Rated voltage
 Dielectric strength, Input/Output
 Surge category
 Pollution severity
 DIN Rail compatibility
 Standards/Approvals

0 °C...+55 °C
 -40 °C...+70 °C
 250 V
 4 kV_{eff}
 II
 2
 TS 32, TS 35
 EN 50178 /CE

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

1.5 / 0.5 / 1.5
 45 x 93 x 51

Note

Ordering data

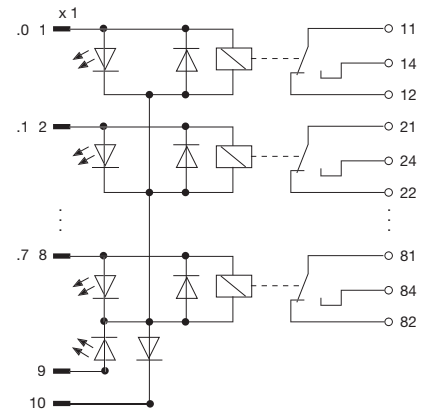
IEC603-1 10-pole/ screw connection

Type	Qty.	Order No.
RS F10 8R OUT 24VDC	1	8329800000

Note

Accessories

Note

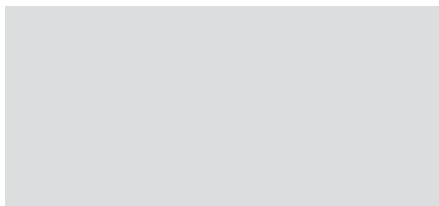
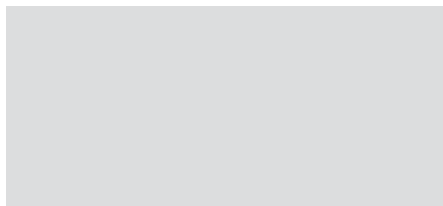


Relays

- Tension clamp connection system
- Compact design
- Electrical isolation of input and output circuits
- 8 plug-in relays
- NO contact design
- LED status indicator
- Additional labelling panel for group type
- Clips to TS 32/35

RS F10 8RS OUT LMZF

Output module



Technical data

Connection data	
Type	IEC603-1 10-pole/ tension clamp connection
Number of signals	8 / 1x1 byte
Connection on process side	PCB terminal LMZF
Type of connection	10-pole pin connector IEC 603/1
Connection system, supply voltage/other connections	Tension clamp connection
Stripping length	7.00 mm
Input	
Rated voltage	24 V DC ±10%
DC Response/drop-out Volt	> 19 V / < 7 V
Rated current DC	30 mA
Pick-up/drop-out current, DC coil	20 mA / 2mA
Power rating	0.5 W
Status indicator LED / current consumption	yellow /3.00 mA
Response time / Drop-out time	< 5 ms / < 15 ms
Output	
max. switching voltage AC/max. DC	250 V /125 V
Continuous current/Making current/min. switching current	3 A/5 A /10 mA
max. switching power	1250 VA / 600 W
Type of relay/Relay mounting	FUJITSU NYP-24WK /pluggable
Type of contact/Contact base material	NO contact /AgNi 5µm Au
Insulation coordination (EN 50178)	
Ambient temperature (operational)	0 °C...+55 °C
Storage temperature	-40 °C...+70 °C
Rated voltage	300 V
Dielectric strength, Input/Output	2.5 kV
Surge category	II
Pollution severity	2
DIN Rail compatibility	TS 32, TS 35
Standards/Approvals	EN 50178 /CE

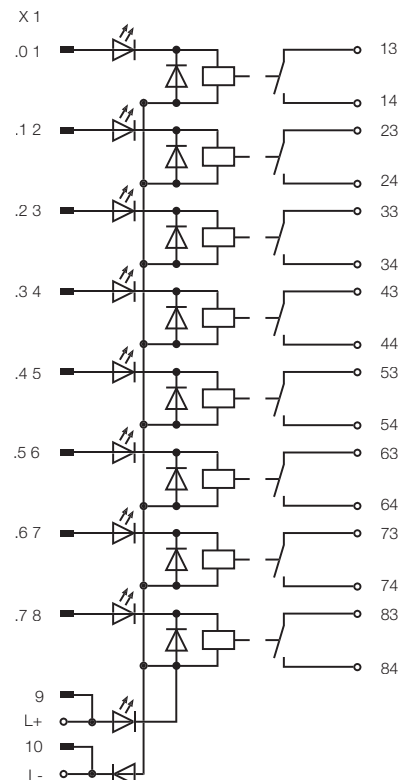
Dimensions	
Clamping range (rating- / min. / max.)	mm² 1.5 / 0.5 / 2.5
Length x width x height	mm 87 x 78 x 73
Note	

Ordering data

IEC603-1 10-pole/ tension clamp connection		
Type	Qty.	Order No.
RS F10 8RS OUT LMZF	1	8430990000
Note		

Accessories

Note	Spare relay NYP-24 WK 4052510000
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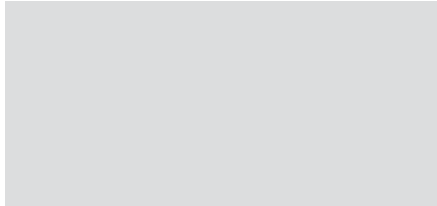
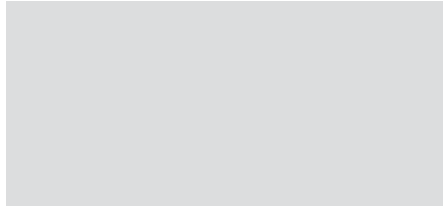
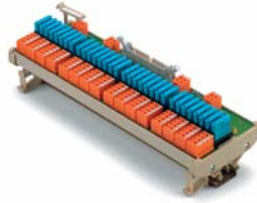
PLC Input/Output Module Active

Relays

- Tension clamp connection system
- Compact design
- Electrical isolation of input and output circuits
- 32 plug-in relays
- NO contact design
- LED status indicator
- Additional labelling panel for group type
- Clips to TS 32/35

RS F40 32RS OUT LMZF

Output module



Technical data

Connection data

Type
 Number of signals
 Connection on process side
 Type of connection
 Connection system, supply voltage/other connections
 Stripping length

IEC603-1 40-pole/ tension clamp connection
 32 / 1x4 byte
 PCB terminal LMZF
 40-pole pin connector IEC 603/1
 Tension clamp connection
 7.00 mm

Input

Rated voltage
 DC Response/drop-out Volt
 Rated current DC
 Pick-up/drop-out current, DC coil
 Power rating
 Status indicator LED / current consumption
 Response time / Drop-out time

24 V DC ±10%
 > 19 V / < 7 V
 30 mA
 20 mA/ 2mA
 0.5 W
 yellow /3.00 mA
 < 5 ms / < 15 ms

Output

max. switching voltage AC/max. DC
 Continuous current/Making current/min. switching current
 max. switching power
 Type of relay/Relay mounting
 Type of contact/Contact base material

250 V/125 V
 3 A/5 A /10 mA
 1250 VA / 600 W
 FUJITSU NYP-24WK /pluggable
 NO contact /AgNi 5µm Au

Insulation coordination (EN 50178)

Ambient temperature (operational)
 Storage temperature
 Rated voltage
 Dielectric strength, Input/Output
 Surge category
 Pollution severity
 DIN Rail compatibility
 Standards/Approvals

0 °C...+55 °C
 -40 °C...+70 °C
 300 V
 2.5 kV
 II
 2
 TS 32, TS 35
 EN 50178 /CE

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

1.5 / 0.5 / 2.5
 87 x 263 x 73

Note

Ordering data

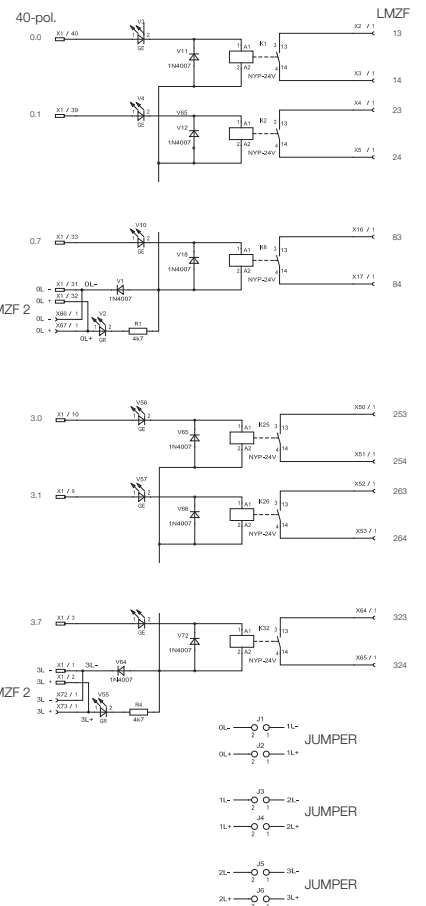
IEC603-1 40-pole/ tension clamp connection

Type	Qty.	Order No.
RS F40 32RS OUT LMZF	1	8431000000

Note

Accessories

Note
 Spare relay NYP-24 WK 4052510000



MICROinterface Digital

Link field and control with a system instead of masses of wires.

MICROinterface Digital is the answer to connecting eight MICROSERIES couplers to a PLC I/O module via pre-assembled lines. It results in simple, error-free connections between field and control.

First, set up a block of eight couplers using Weidmüller's well-known relays or optos from the MICROSERIES range (available with screw or tension clamp connections). Plug the interface module into the corresponding cross-connection openings using a ribbon cable or SUB-D connection. Using the pre-assembled cables available in various lengths, simply connect to the main PLC.

Features

- No tools required for installation
- Compatible with MICROSERIES screw and tension clamp connections
- Electrical isolation and signal adaptation with relays or optos as required

MICROinterface module for ribbon cable connection

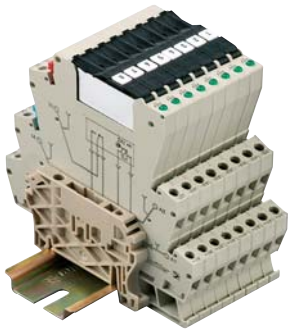


MICROinterface module for SUB-D connection

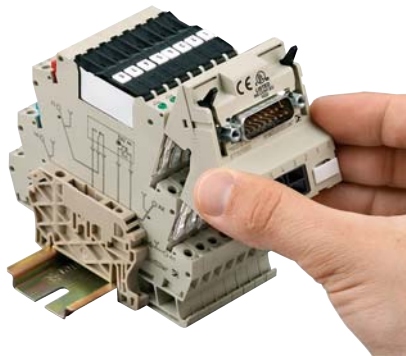


Adapter and Solution for MICROSERIES Relays and Optocouplers

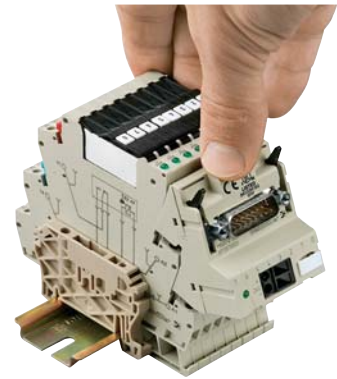
Instructions for assembling the adapter



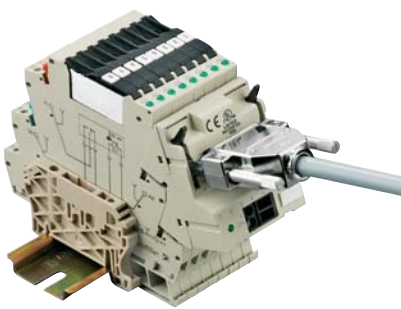
Assemble a block of 8 MICROseries on the rail and adjust the stops



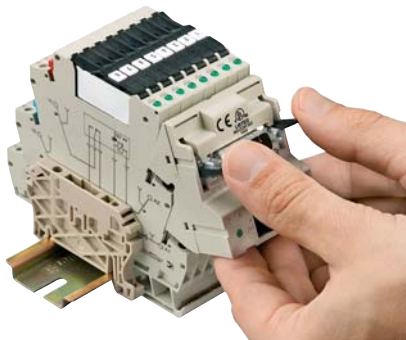
Insert the adapter in the transverse connection channel and ensure it is correctly positioned



Push down on the center of the adapter from above



Connect the prefabricated cable fitted with an HE10 or D-SUB connector



To remove the cable, move the two retaining clips apart

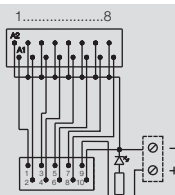
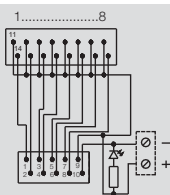
MICROinterface digital

MI8DI-S/Z

MI8DO-S/Z

Input module

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	
Clamping range (rating- / min. / max.)	mm ²
Length x width x height	mm
Note	

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		
Wiring diagram for ribbon cable		

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		
Wiring diagram for SUB-D		

Ordering data

Connection system, pre-assembled cable	Type	Qty	Order No.
Ribbon cable connector, 10-pole	MI8DI-S F10 S	1	8773510000
SUB-D plug, 15-pole	MI8DI-S SUB D15S	1	8773460000
Ribbon cable connector, 10-pole	MI8DI-Z F10 S	1	8773530000
SUB-D plug, 15-pole	MI8DI-Z SUB D15S	1	8773490000

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

Note

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

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

Accessories

Note	10-pole ribbon cable (see pg. C.33 for additional options)	8235360000
	15-pole female D-Sub cable (see pg. C.31)	7789250xxx

10-pole ribbon cable (see pg. C.33 for additional options)	8235360000
15-pole female D-Sub cable (see pg. C.31)	7789250xxx

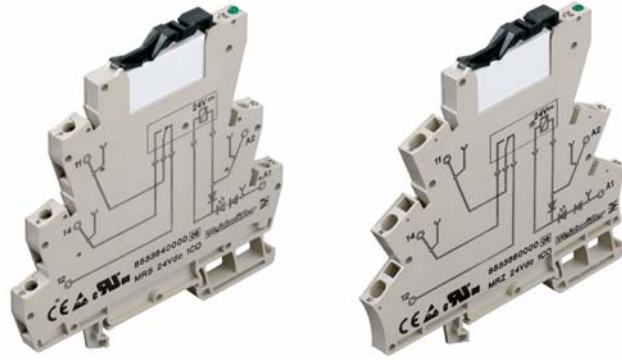
10-pole ribbon cable (see pg. C.33 for additional options)	8235360000
15-pole female D-Sub cable (see pg. C.31)	7789250xxx

Relays – MICROSERIES

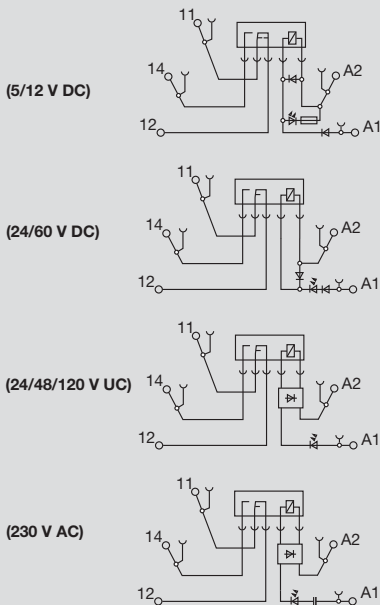
1 change-over contact
AC/DC/UC coil

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

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



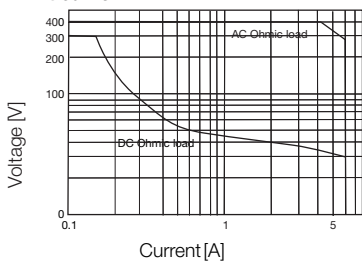
C



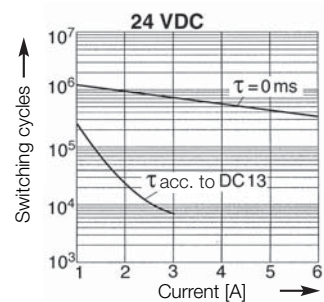
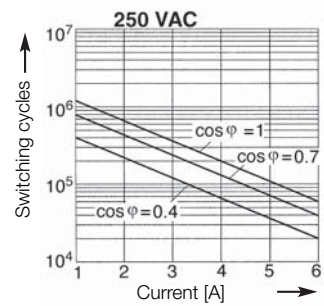
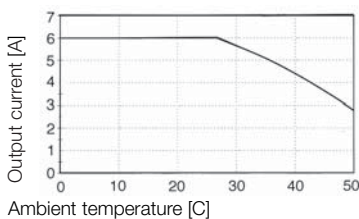
Output		
max. switching voltage AC1/Continuous current	250 V/6 A	
min. switching power	12 V / 100 mA	
Response time / Drop-out time	6.2ms/3.9ms	
Contact base material	AgSnO	
Mechanical endurance	20*10 ⁶ switching cycles	
max. switching frequency at rated load	0.1 Hz	
Rated data		
Status indicator/Free wheel diode	green LED/Yes	
Reverse pol. prot	available	
Ambient temperature (operational)	-25 °C...+50 °C	
Storage temperature	-40 °C...+60 °C	
Humidity	40°C/93% RH, no condensation	
Approvals	CE; cULus;	
Insulation coordination (EN 50178)		
Standards	EN 50178	
Rated voltage	300 V	
Impulse withstand voltage	4 kV	
Clearance and creepage distances for control/load side	≥ 5.5 mm	
Surge category	III	
Pollution severity	2	
Protective separation to VDE 0106 part 101	Yes	
Dimensions		Screw connection
Clamping range (rating- / 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

Applications

Limit curve



Current-Temperature rise curve



**1 change-over contact
AC/DC/UC coil**

C

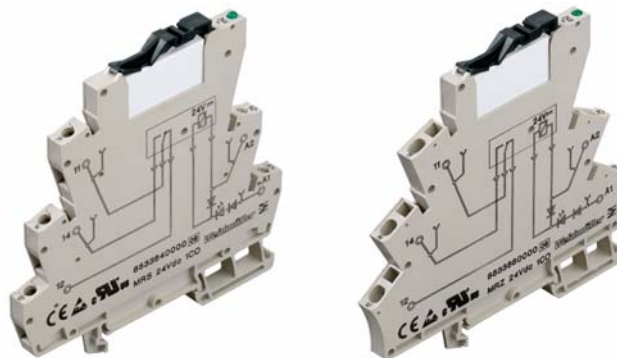
Ordering data	5 V DC 1CO	12 VDC 1CO	24 V DC 1CO	24 V UC 1CO
Input				
Rated voltage	5 V DC ±20%	12 V DC ±20%	24 V DC ±20 %	24 V UC ±10 %
Rated current AC				11 mA
Rated current DC	38.5 mA	17 mA	6.6mA	6.4 mA
Power rating	193 mW	210 mW	160 mW	154 mW
AC Response/dropout Volt				15.8V/7V
DC Response/dropout Volt	3.2V/1.6V	6.4V/ 2.5V	15.4V/6.5V	15.8V/7V
AC pickup/dropout current				3.6mA/1.3mA
DC pickup/dropout current	21.6mA/8mA	8.4mA/2.4mA	4mA/1.2mA	3.6mA/1.3mA
Ordering data Relay with socket				
Screw connection	Type MRS 5Vdc 1CO	Type MRS 12Vdc 1CO	Type MRS 24Vdc 1CO	Type MRS 24Vuc 1CO
Order No.	8556080000	8556070000	8533640000	8556050000
Tension spring connection	Type MRZ 5Vdc 1CO	Type MRZ 12Vdc 1CO	Type MRZ 24VDC 1CO	Type MRZ 24Vuc 1CO
Order No.	8556150000	8556140000	8533660000	8556120000
Ordering data Spare relay (pluggable)				
Type	RSS113005 05Vdc-Rel1U	RSS113012 12Vdc-Rel1U	RSS113024 24Vdc-Rel1U	RSS113024 24Vdc-Rel1U
Order No.	4061580000	4061610000	4060120000	4060120000
Note				

Ordering data	48 V UC 1CO	60 V DC 1CO	120 V UC 1CO	230 V AC 1CO
Input				
Rated voltage	48 V UC ±10 %	5 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	29V/11V		71V/22V	103V/49V
DC Response/dropout Volt	29V/11V	35V/11V	71V/22V	
AC pickup/dropout current	2.2mA/1.3mA		1.8mA/0.5mA	5mA/2.5mA
DC pickup/dropout current	2.2mA/1.3mA	1.6mA/0.6mA	1.8mA/0.5mA	
Ordering data Relay with socket				
Screw connection	Type MRS 48Vuc 1CO	Type MRS 60Vdc 1CO	Type MRS 120Vuc 1CO	Type MRS 230Vac 1CO
Order No.	8556040000	8556060000	8556030000	8556020000
Tension spring connection	Type MRZ 48Vuc 1CO	Type MRZ 60Vdc 1CO	Type MRZ 120Vuc 1CO	Type MRZ 230Vac 1CO
Order No.	8556110000	8556130000	8556100000	8556090000
Ordering data Spare relay (pluggable)				
Type	RSS113048 48Vdc-Rel1U	RSS113060 60Vdc-Rel1U	RSS113060 60Vdc-Rel1U	RSS113024 24Vdc-Rel1U
Order No.	4061620000	4061630000	4061630000	4060120000
Note				

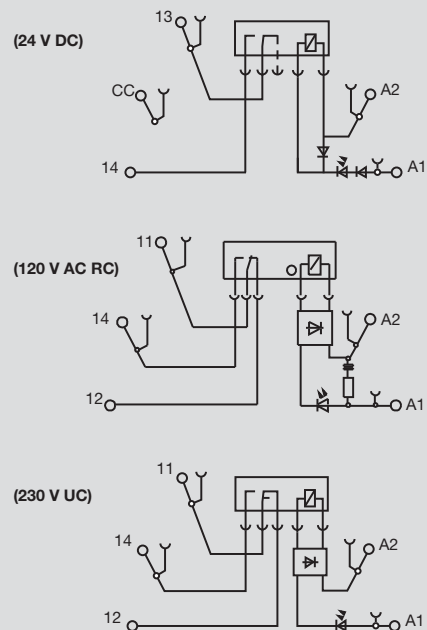
Relays – MICROSERIES

1 NO contact special versions

- 24 VDC actuator version:
Bridgeable, potential-free connection for direct connection of actuators at the output
- 120 VAC 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



C



Output	
max. switching voltage AC1/Continuous current	250 V/6 A
min. switching power	12 V / 100 mA
Response time / Drop-out time	6.6 ms/5.8 ms
Contact base material	AgSnO
Mechanical endurance	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 pol. prot	available
Ambient temperature (operational)	-25 °C...+55 °C
Storage temperature	-40 °C...+60 °C
Humidity	40°C/93% RH, no condensation
Approvals	CE; cULus;
Insulation coordination (EN 50178)	
Standards	EN 50178
Rated voltage	300 V
Impulse withstand voltage	4 kV (1.2/50 µs)
Clearance and creepage distances for control/load side	≥ 5.5 mm
Surge category	III
Pollution severity	2
Protective separation to VDE 0106 part 101	

Dimensions	Screw connection	Tension clamp connection
Clamping range (rating- / min. / max.)	mm ² 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	24 V DC ACT	120 V AC 1CO RC	230 V UC 1CO	
Input				
Rated 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	

Ordering data Complete module				
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

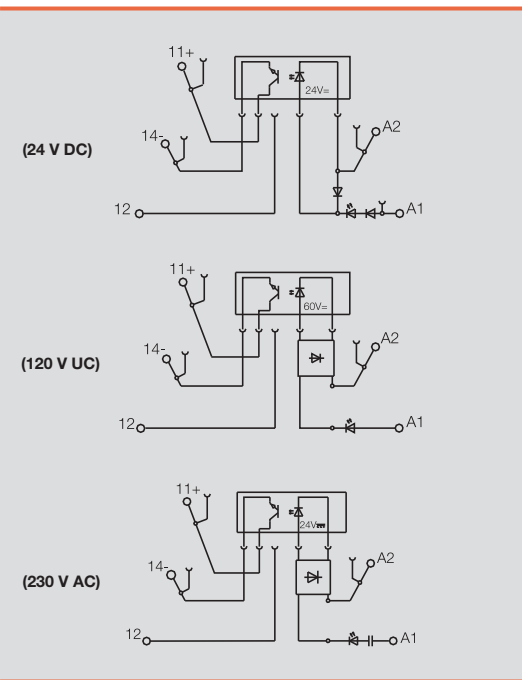
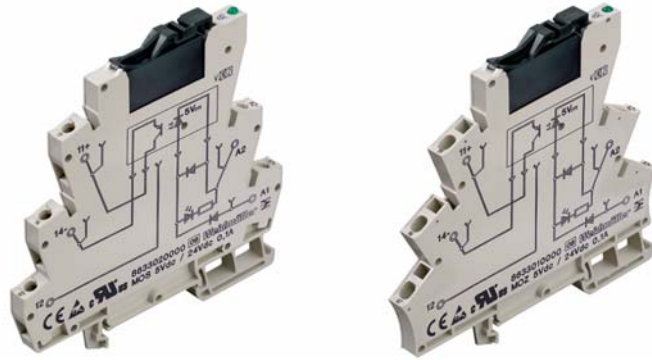
Ordering data Spare relay, pluggable				
	Type	RSS113024 24Vdc-Rel1U	RSS113060 60Vdc-Rel1U	RSS113060 60Vdc-Rel1U
	Order No.	4060120000	4061630000	4061630000

Note				

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 wide
- Screw or tension clamp connection
- For mounting on TS 35



Load side	
Nominal switching voltage	3...48 V DC
Nominal 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
General data	
Ambient temperature (operational)	-25 °C...+50 °C
Storage temperature	-40 °C...+60 °C
Approvals	CE; cULus;
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	4.0 kV
Clearance and creepage distances for control/load side	≥ 5.5 mm
Surge category	III
Pollution severity	2
Dimensions	
Clamping range (rating- / 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

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 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
max. input frequency	10 Hz	300 Hz	DC: 10 Hz / AC: 3 Hz	3 Hz
Switch-on delay	< 6,5 ms	35µs	< 6.5 ms	< 6.5 ms
Switch-off delay	< 10 ms	355µs	< 10 ms	< 10 ms

Ordering data

Complete module					
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

Ordering data

Spare relay, pluggable					
	Type	SSS Relais 5V/24V 0,1ADC	SSS Relais 24V/24V 0,1Adc	SSS Relais 60V/24V 0,1Adc	SSS Relais 24V/24V 0,1Adc
	Order No.	4064320000	4061180000	4061230000	4061180000

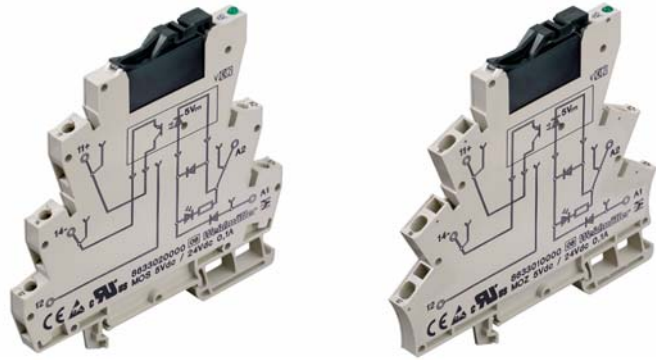
Note				

Optos – MICROSERIES

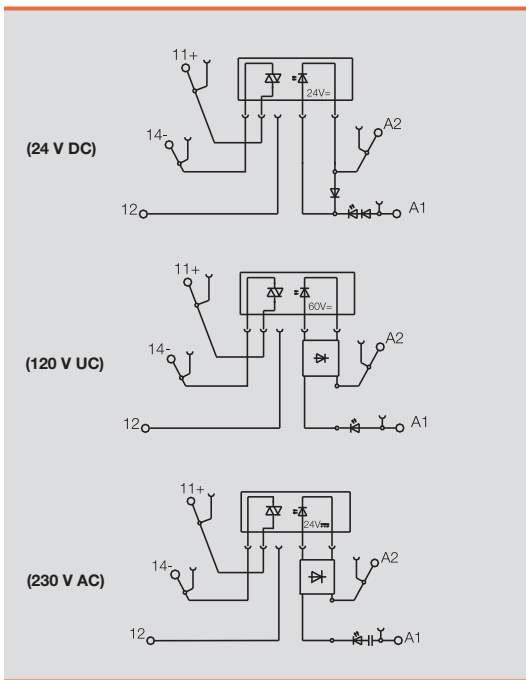
MOS / MOZ 24...240 V AC / 1 A

Universal interface between control and sensor/actuator

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



C



Load side	
Nominal switching voltage	24...240 V AC
Nominal 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
General data	
Ambient temperature (operational)	-25 °C...+50 °C
Storage temperature	-40 °C...+60 °C
Approvals	CE; cULus;
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	4.0 kV
Clearance and creepage distances for control/load side	≥ 5.5 mm
Surge category	III
Pollution severity	2
Dimensions	
Clamping range (rating- / 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

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 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%
max. 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

Ordering data

Complete module				
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

Ordering data

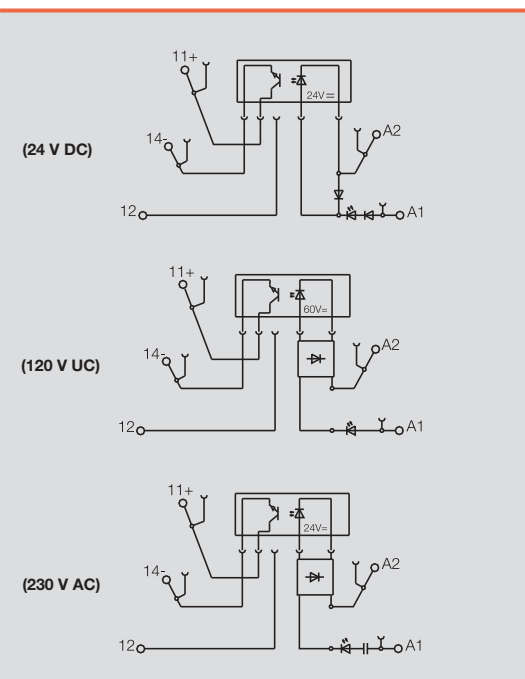
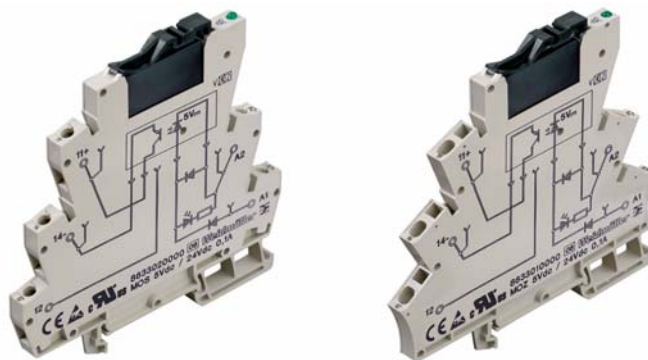
Spare relay, pluggable				
	Type	SSS Relais 24V/230V 1Aac	SSS Relais 60V/230V 1Aac	SSS Relais 24V/230V 1Aac
	Order No.	4061210000	4061220000	4061210000

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 wide
- Screw or tension clamp connection
- For mounting on TS 35



Load side			
Nominal switching voltage	3...33 V DC		
Nominal 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		
General data			
Ambient temperature (operational)	-25 °C...+50 °C		
Storage temperature	-40 °C...+60 °C		
Approvals	CE; cULus;		
Insulation coordination (EN 50 178)			
Standards	EN 50178		
Rated voltage	300 V		
Rated impulse withstand voltage	4.0 kV		
Clearance and creepage distances for control/load side	≥ 5.5 mm		
Surge category	III		
Pollution severity	2		
Dimensions		Screw connection	Tension clamp connection
Clamping range (rating- / min. / max.)	mm ²	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	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 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
max. 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

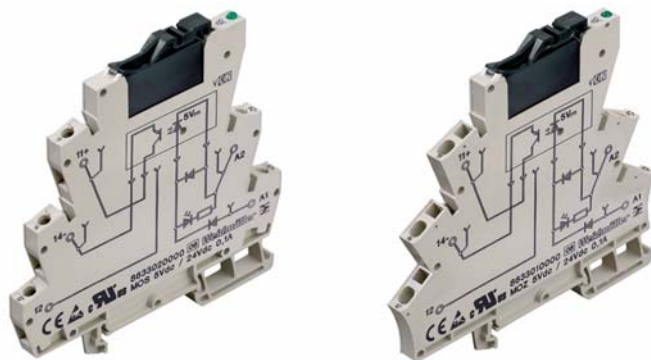
Ordering data	5 V DC / 24 V DC 2 A	24 V DC / 24 V DC 2 A	120 V UC / 24 V DC 2 A	230 V AC / 24 V DC 2 A
Complete module				
Screw connection	Type MOS 5Vdc / 24Vdc 2A	Type MOS 24Vdc / 24Vdc 2A	Type MOS 120Vuc / 24Vdc 2A	Type MOS 230Vac / 24Vdc 2A
	Order No. 8633000000	Order No. 8607350000	Order No. 8607700000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

Optos – MICROSERIES

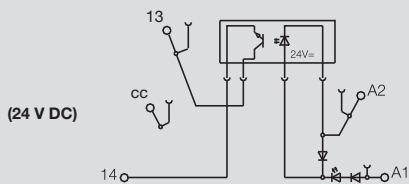
MOS / MOZ actuator version 3...33 V DC / 2 A

Universal interface between control and sensor/actuator

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



C



Load side		
Nominal switching voltage	3...33 V DC	
Nominal switching current	2 A	
Voltage drop at max. load	≤ 120 mV	
Short-circuit-proof/Protective circuit	no/Integrated free-wheel diode	
General data		
Ambient temperature (operational)	-25 °C...+50 °C	
Storage temperature	-40 °C...+60 °C	
Approvals	CE; cULus;	
Insulation coordination (EN 50 178)		
Standards	EN 50178	
Rated voltage	300 V	
Rated impulse withstand voltage	4.0 kV	
Clearance and creepage distances for control/load side	≥ 5.5 mm	
Surge category	III	
Pollution severity	2	
Dimensions	Screw connection	Tension clamp connection
Clamping range (rating- / min. / max.)	mm ² 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 voltage	24 V DC ±20 %			
Power rating	140 mW ±10 %			
max. input frequency				
Switch-on delay	< 55 µs			
Switch-off delay	< 1,2 ms			

Ordering data Complete module				
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, pluggable				
	Type	SSS Relais 24V/24V 2Adc		
	Order No.	4061190000		

Note				

H-system cables

All PLCs



Card type	16-Input/Output card	16-Input/Output card (LC)	16-Input/Output card	16-Input/Output card (LC)
Order No.	7789100xxx	7789388xxx	7789306xxx	7789301xxx
Data				
Interface connector	HE - 20-pole female	HE - 20-pole female	HE - 20-pole female	HE - 20-pole female
Cable type	0.25 mm ² LIYY	0.14 mm ² LIYY	0.25 mm ² LIYY	0.14 mm ² LIYY
Resistance	< 80 Ω/km	< 150 Ω/km	< 80 Ω/km	< 150 Ω/km
PLC connector	No connector - ferrules	No connector - ferrules	HE - 20-pole female	HE - 20-pole female

S-system cables

All PLCs



Card type	4-Input/Output card	8-Input/Output card	16-Input/Output card	8 - 16-Input/Output card
Order No.	7789250xxx	7789252xxx	7789254xxx	7789262xxx
Data				
Interface connector	D-Sub - 15-pole female	D-Sub - 25-pole female	D-Sub - 37-pole female	D-Sub - 37-pole female
Cable type	0.25 mm ² LIYCY	0.25 mm ² LIYCY	0.25 mm ² LIYCY	0.25 mm ² LIYCY
Resistance	< 80 Ω/km	< 80 Ω/km	< 80 Ω/km	< 80 Ω/km
PLC connector	No connector - ferrules	No connector - ferrules	No connector - ferrules	D-Sub - 37-pole male

Universal Cables

R System cables

All PLCs



Card type	32-Input/Output card	16-Input/Output card	8-Input/Output card
Order No.	7789106xxx	7789104xxx	7789108xxx
Data			
Interface connector	RSV 1.6 - 36-pole male	RSV 1.6 - 24-pole male	RSV 1.6 - 12-pole male
Cable type	0.25 mm ² LIYY	0.25 mm ² LIYY	0.25 mm ² LIYY
Resistance	< 80 Ω/km	< 80 Ω/km	< 80 Ω/km
PLC connector	No connector - ferrules	No connector - ferrules	No connector - ferrules

Table of color codes according to DIN 47.100

No.	Color	No.	Color	No.	Color
1	White	22	Brown/Blue	43	Blue/Black
2	Brown	23	White/Red	44	Red/Black
3	Green	24	Brown/Red	45	White/Brown/Black
4	Yellow	25	White/Black	46	Yellow/Green/Black
5	Gray	26	Brown/Black	47	Gray/Pink/Black
6	Pink	27	Gray/Green	48	Blue/Red/Black
7	Blue	28	Yellow/Gray	49	White/Green/Black
8	Red	29	Pink/Green	50	Green/Brown/Black
9	Black	30	Yellow/Pink	51	White/Yellow/Black
10	Violet	31	Green/Blue	52	Yellow/Brown/Black
11	Gray/Pink	32	Yellow/Blue	53	White/Gray/Black
12	Red/Blue	33	Green/Red	54	Gray/Brown/Black
13	White/Green	34	Yellow/Red	55	White/Pink/Black
14	Brown/Green	35	Green/Black	56	Pink/Brown/Black
15	White/Yellow	36	Yellow/Black	57	White/Blue/Black
16	Yellow/Brown	37	Gray/Blue	58	Brown/Blue/Black
17	White/Gray	38	Pink/Blue	59	White/Red/Black
18	Gray/Brown	39	Gray/Red	60	Brown/Red/Black
19	White/Pink	40	Pink/Red	61	Black/White
20	Pink/Brown	41	Gray/Black		
21	White/Blue	42	Pink/Black		

Preassembled control lead

The control lead is preassembled with 10 or 40 pole plug-in socket according to IEC 603/1 DIN 41 651.

It is used for connecting the PLC front adapter with the passive or active PLC input/output modules.

The connecting line for the PLC system interface is available in standard lengths of 1m to 5m.



Spring socket DIN 416451 / IEC 603-1

No.	Color code	Function
1	black	B-
2	brown	B3 +
3	red	B3.7
4	orange	B3.6
5	yellow	B3.5
6	green	B3.4
7	blue	B3.3
8	violet	B3.2
9	gray	B3.1
10	white	B3.0
11	white/black	B-
12	white/brown	B2 +
13	white/red	B2.7
14	white/orange	B2.6
15	white/yellow	B2.5
16	white/green	B2.4
17	white/blue	B2.3
18	white/violet	B2.2
19	white/gray	B2.1
20	brown/black	B2.0
21	brown/red	B-
22	brown/orange	B1 +
23	brown/yellow	B1.7
24	brown/green	B1.6
25	brown/blue	B1.5
26	brown/violet	B1.4
27	brown/gray	B1.3
28	brown/white	B1.2
29	green/black	B1.1
30	green/brown	B1.0
31	green/red	B-
32	green/orange	B0 +
33	green/blue	B0.7
34	green/violet	B0.6
35	green/gray	B0.5
36	green/white	B0.4
37	yellow-black	B0.3
38	yellow-brown	B0.2
39	yellow-red	B0.1
40	yellow-orange	B0.0

Technical data

Rated voltage	300 V
Current carrying capacity	1 A
Total current load	
- 40-pole lead	26 A/∅T = 20 K
- 10-pole lead	11,5 A/∅T = 20 K
Rated cross-section of cores	0,14 mm ²
Resistance value	55 mΩ/m
Storage temperature	-10 °C...+80 °C

Ordering data

Ribbon round conductor designed on both sides

Type	Length*	Order No.
10-pole plug connector for transfer of 1 byte to DIN 41651 / IEC 603-1		
FBK 10/100 RK	1.00 m	8235360000
FBK 10/200 RK	2.00 m	8235380000
FBK 10/350 RK	3.50 m	8235410000
FBK 10/400 RK	4.00 m	8235420000
FBK 10/500 RK	5.00 m	8235440000

Ordering data

Ribbon round conductor designed on both sides

Type	Length*	Order No.
40-pole plug connector for transfer of 4 byte to DIN 41651 / IEC 603-1		
FBK 40/050 RK	1.00 m	8216350000
FBK 40/150 RK	1.50 m	8216360000
FBK 40/200 RK	2.00 m	8216370000
FBK 40/250 RK	2.50 m	8216380000
FBK 40/300 RK	3.00 m	8216390000
FBK 40/350 RK	3.50 m	8216400000
FBK 40/400 RK	4.00 m	8216410000
FBK 40/500 RK	5.00 m	8235350000

* special lengths on request

Accessories

Electromechanical relays



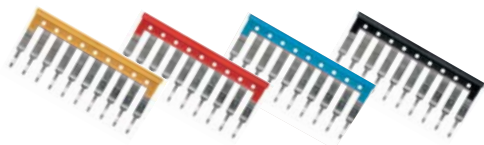
Relay type	Type Riderseries - 1CO	Type Riderseries - 2CO	Type Microseries - 1CO
Order No.	RCL 314024 8693260000	RCL 424024 4058570000	RSS 113024 (standard) 4060120000 RSS 112024 (Au plated) 4061590000
Data			Standard Au plated
Coil rated voltage	24 Vdc (+10, -30%)	24 Vdc (+10, -30%)	24 Vdc (+/- 20%)
Coil rated current/Power consumption	17 mA / 0.4 VA	17 mA / 0.4 VA	6.6 mA / 160 mW
Release Voltage/Min. holding current	2.4 V/1.6 mA	2.4 V/ 1.6 mA	6.5 V/ 1.2 mA
Contact configuration	1CO	2CO	1CO
Contact material	AgNi 90/10	AgNi 90/10	AgSnO ₂ AgSnO ₂ 5µ Au
Max. turn on delay / max turn-off delay	7 ms / 3 ms (20 ms with damping diode.)	7 ms / 3 ms (20 ms with damping diode.)	5 ms / 2.5 ms
Power/ max. resistive load switchable under AC	4000 VA / 250 V - 16 A (cosφ=1)	2000 VA / 250 V - 8 A (cosφ=1)	1500 VA / 250 V - 6 A (cosφ=1)
Power/max. switchable resistive load under DC	300 W / 30 V - 10 A (L/R=0 ms)	150 W / 30 V - 5 A (L/R=0 ms)	-
Max. current	16 A	8 A	6 A
Min. switchable load	10 mA/ 12 V	10 mA/ 12 V	100 mA / 12 V 10 mA / 12 V
Dielectric strength voltage (coil/contact)	4000 Vac (50/60Hz) / 1 min.	4000 Vac (50/60Hz) / 1 min.	
Dielectric strength voltage (between contacts of the same pole)	1000 Vac (50/60Hz) / 1 min.	1000 Vac (50/60Hz) / 1 min.	
Dielectric strength voltage (between contacts of different poles)	-	2500 Vac (50/60Hz) / 1 min.	
Mechanical service life	30 x 10 ⁶ switching cycles	30 x 10 ⁶ switching cycles	20 x 10 ⁶ switching cycles
Electrical service life	1 x 10 ⁶ switching cycles (2500 VA - cosφ=1)	1 x 10 ⁶ switching cycles (1250 VA - cosφ=1)	6 x 10 ⁶ switching cycles (1500 VA - cosφ=1)

Static relays



Static relay type	Type Plugseries - ODC	Type Plugseries - OAC	Type Microseries
Order No.	STD 07205 8576340000	STA 07220 8576370000	SSS 24/24-100mA 4061180000 SSS 24/24-2A 4061190000
Data			100 mA version 2 A version
Rated input voltage/operating voltage	15...24 Vdc / 12...30 Vdc	15...24 Vdc - / 12...30 Vdc	24 Vdc/16...30 Vdc 24 Vdc/16...30 Vdc
Input current	max. 10 mA	max. 10 mA	7 mA ±10% 7 mA ±10%
Drop out voltage	-	-	10 Vdc 10 Vdc
Output voltage	max. 30 Vdc	12...275 Vac	3...48 Vdc 3...33 Vdc
Output current	0.001...2.5 Adc	0.05...2 Aac	100 mAdc max. 2 Adc
Inrush current	12 Adc (1 s)	100 Aac (10 ms)	- -
Turn-on delay	2 ms max.	12 ms max.	- -
Turn-off delay	18 ms max.	20 ms max.	- -
Output voltage drop	max. 0.4 V	-	<1 V <120 mV
Leakage current	10 µA	10 µA	- -
Dielectric strength voltage (input/output)	4000 Vac	4000 Vac	2500 Vac 2500 Vac

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	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		-	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			
MRZ 24VDC 1CO BASIS		10	8826000000
MRS 24VDC 1CO BASIS		10	8826010000
MRZ 120VUC 1CO BASIS		10	8826020000
MRS 120VUC 1CO BASIS		10	8826030000
MRZ 230VAC 1CO BASIS		10	8826040000
MRS 230VAC 1CO BASIS		10	8826050000
Markers			
WS 12/6	12 x 6 mm	200	1061160000
Labels, Lasermark			
LM MT 300 15/6 ge	484 labels / sheet	10	1686360000
Screwdriver			
SD 0,6 x 3,5 x 100		10	9008330000

Dimensions

