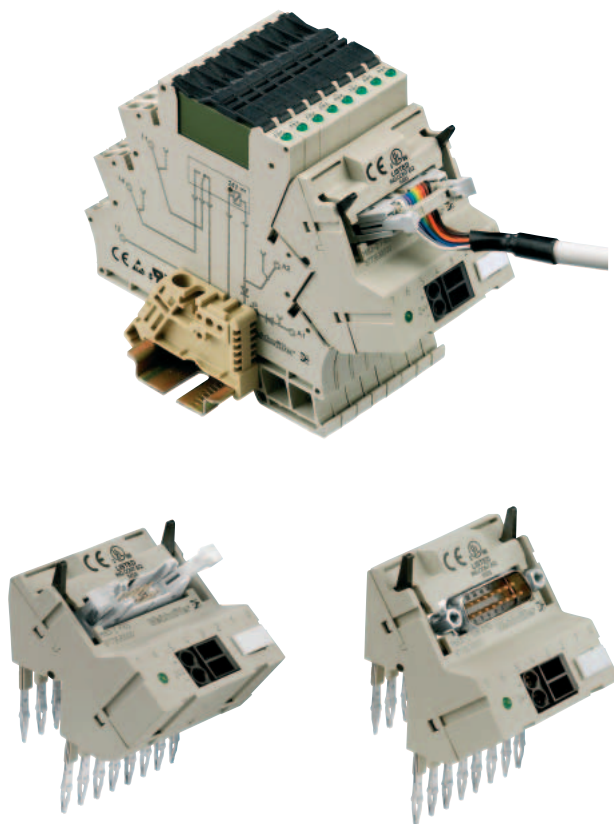


Microinterface digital



The MICROINTERFACE digital is ideal for simple and faultless coupling of 8 MICROSERIES couplers to a PLC I/O. Optionally available with screw or tension clamp connections, a group of 8 terminals is created using the well-known relay or optocoupler modules from the Microseries. The interface module is simply plugged into the cross-connection channels. Pre-assembled cables, which are available in various lengths, are used to connect the modules to the PLC or control unit.

- Electrical isolation and signal conditioning
- High-density installation of the compact modules saves space: just 48 mm required for 8 signals
- SUB-D or ribbon cable connectors to IEC 603-1 ensure optimum adaptability to meet the respective cabling and connection requirements.
- Rapid start-up and troubleshooting
- Additional terminals with LED indicator for the power supply

United Kingdom

Weidmüller Ltd.
1 Abbey Wood Road
Kings Hill
West Malling
Kent ME19 4YT
Phone +44 1732 877032
Fax +44 1732 873873
info@weidmuller.co.uk
www.weidmueller.com

USA

W-Interconnections, Inc.
821 Southlake Boulevard,
Richmond, VA 23236
Phone +1 804 7942877
Fax +1 804 3792593
info@weidmuller.com
www.weidmuller.com

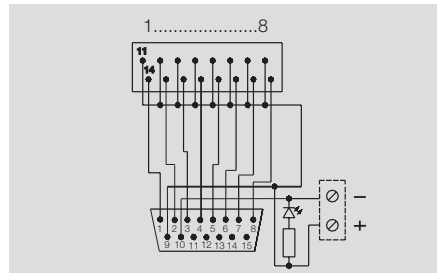
Other countries

Weidmüller Interface GmbH & Co. KG
P.O. Box 3030
D-32720 Detmold
Phone +49 5231 14-0
Fax +49 5231 14-20 83
info@weidmueller.com
www.weidmueller.com

Microinterface digital: Input modules

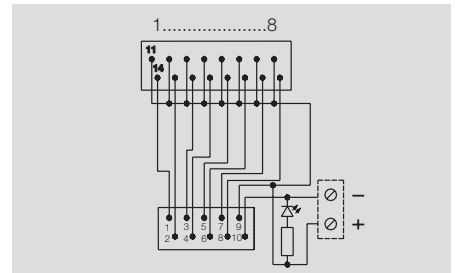
MI 8DI . . . SUB D 15S

SUB-D, 15-pole male



MI 8DI . . . F10S

Ribbon cable connectors, 10-pole



Technical data

Input	
Rated voltage	
Current capacity	
Connection technology	
Power supply terminal	
General data	
Operation temperature	
Storage temperature	
Flammability class	
Approvals	
Insulation coordination acc. to DIN EN 50178	
Basic insulation	
Rated voltage	
Impulse withstand voltage (1.2/50 us)	
Overvoltage category	
Pollution severity	
Clearance and creepage distances to EN	
Clearance and creepage distances to UL 508	
Dimensions	
W x H x D incl. contacts	mm
Information	

Max. 30 V AC/DC
0.5 A per channel
2.0 A total current, power supply terminal
SUB-D, 15-pole male
With green LED
0...55 °C
-20 °C...85 °C
V0, UL94
CE, UL listed
Yes
32 V
330 V
III
2
0.2 mm
0.54 mm for uncoated / not limited at 32 V

Max. 30 V AC/DC
0.5 A per channel
2.0 A total current, power supply terminal
Ribbon cable connectors, 10-pole, IEC 603-1
With green LED
0...55 °C
-20 °C...85 °C
V0, UL95
CE, UL listed
Yes
32 V
330 V
III
2
0,2 mm
0.54 mm for uncoated / not limited at 32 V

Ordering data

Connection technology Microseries modules	
Screw connection	
Tension clamp connection	
Information	

Type	Qty.	Order No.
MI 8DI-S SUBD 15S	1	8773460000
MI 8DI-Z SUBD 15S	1	8773490000
Information		

Type	Qty.	Order No.
MI 8DI-S F10S	1	8773510000
MI 8DI-Z F10S	1	8773530000
Information		

Accessories

Information

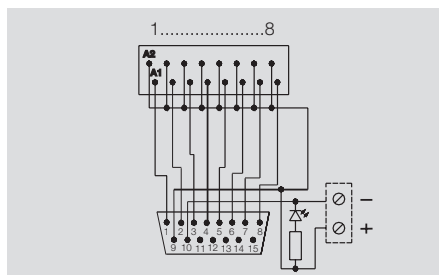
See page 5

See page 5

Microinterface digital: output modules

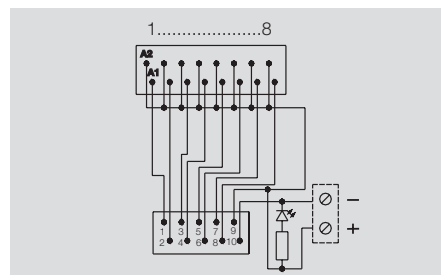
MI 8DO ... SUB D 15S

SUB-D, 15-pole male



MI 8DO ... F10S

Ribbon cable connectors, 10-pole



Technical data

Input			
Rated voltage		Max. 30 V AC/DC	Max. 30 V AC/DC
Current capacity		0.5 A per channel	0.5 A per channel
		2.0 A total current, power supply terminal	2.0 A total current, power supply terminal
Connection technology		SUB-D, 15-pole male	Ribbon cable connectors, 10-pole, IEC 603-1
Power supply terminal		With green LED	With green LED
General data			
Operation temperature		0...55 °C	0...55 °C
Storage temperature		-20 °C...85 °C	-20 °C...85 °C
Flammability class		V0, UL94	V0, UL95
Approvals		CE, UL listed	CE, UL listed
Insulation coordination acc. to DIN EN 50178			
Basic insulation		ja	ja
Rated voltage		32 V	32 V
Impulse withstand voltage (1.2/50 us)		330 V	330 V
Overvoltage category		III	III
Pollution severity		2	2
Clearance and creepage distances to EN		0.2 mm	0.2 mm
Clearance and creepage distances to UL 508		0.54 mm for uncoated / not limited at 32 V	0.54 mm for uncoated / not limited at 32 V
Dimensions			
W x H x D incl. contacts	mm	48.0 x 53.0 x 53.0	48.0 x 53.0 x 53.0
Information			

Ordering data

Connection technology Microseries modules		Type	Qty.	Order No.	Type	Qty.	Order No.
Screw connection		MI 8DO-S SUBD 15S	1	8773550000	MI 8DO-S F10S	1	8773600000
Tension clamp connection		MI 8DO-Z SUBD 15S	1	8773570000	MI 8DO-Z F10S	1	8773620000
Information							

Accessories

Information		
	See page 5	See page 5

PLC Front adapter for SIEMENS S7

PLC Front adapter for SIEMENS S7

- Pre-assembled control cable
- Control cable 4 x 10 pole in 4 standard lengths
- Separate feeding of the supply voltage via screw connection terminals
- Potential separation with plug-in jumpers
- Versatile accessories
- Inexpensive coupling of the 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

Front adapter for SIEMENS S7 300 I/O modules

Digital input:

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

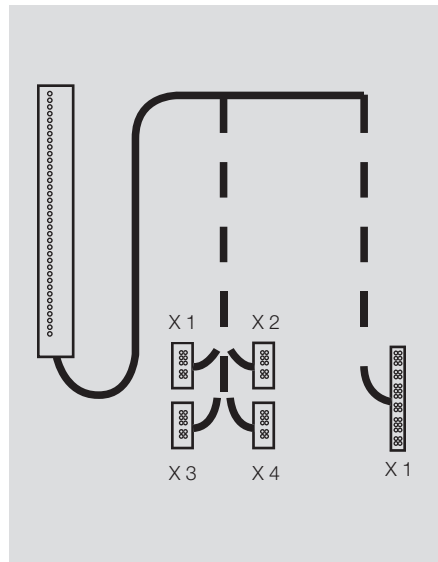
Digital output:

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

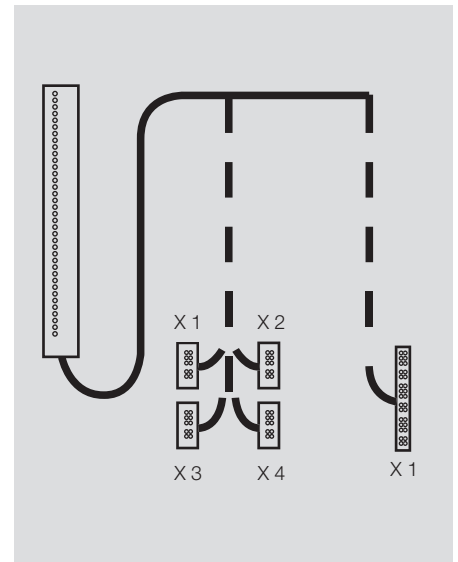
Digital input/output:

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

SIEMENS S7/400 4 x 1 Byte



SIEMENS S7/300 4 x 1 Byte



Technical data

Connection data

Connection with the process
Connection technology converted cable
Design
Design of single conductor
Connection technology supply voltage/other connections

Rated data

Number of signals
Rated voltage
Rated current per connection
Total current carrying capacity/ cable 10-pole/Ltg. 40 pol.
Volt. supply/Byte disconnect.
Total current feed, max.

Dimensions

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

Information

SIEMENS front panel housing

4 x 10-pole tattered cable with IEC603/1 plug connector
4 x 10-pole conv. cable with 10-pole spring connector
7 leads control wire AWG 26/7
LP-screw connection terminals

4 x 8 4 byte
60 VAC / 75 VDC
1A
11.5 A / (ΔT= 20K)
Yes
16 A

274.0 x 19.0 x 55.0

SIEMENS front panel housing

4 x 10-pole tattered cable with IEC603/1 plug connector
4 x 10-pole conv. cable with 10-pole spring connector
7 leads control wire AWG 26/7
LP-screw connection terminals

4 x 8 4 byte
60 VAC / 75 VDC
1A
11.5 A / (ΔT= 20K)
Yes
16 A

115.0 x 22.0 x 32.0

Ordering data

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

Information

Type	Qty.	Order No.
SIM S7/400 FB4x10 2.0M	1	8335910200
SIM S7/400 FB4x10 2.5M	1	8335910250
SIM S7/400 FB4x10 3.0M	1	8335910300
SIM S7/400 FB4x10 5.0M	1	8335910500

Type	Qty.	Order No.
SIM S7/300 FB4x10 2.0M	1	8433310200
SIM S7/300 FB4x10 2.5M	1	8433310250
SIM S7/300 FB4x10 3.0M	1	8433310300
SIM S7/300 FB4x10 5.0M	1	8433310500

MICROSERIES Optokoppler

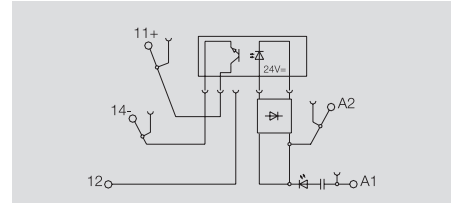
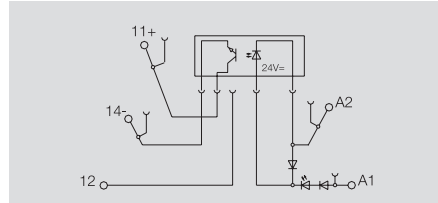
Output current 24 Vdc / 0.1A

Universal interface between control and sensor/ actuator

- Pluggable cross-connection ZQV 4N
- Solid-state relay interchangeable
- Width 6.1 mm
- Screw or tension clamp connection technology
- Mounting on TS35

24VDC/24VDC 0.1A

24VDC 0.1A



Technical data

Input

Rated voltage
Rated current
Power rating
Max. input frequency
Auxiliary voltage
Status indicator

24 VDC +/- 20 %
5.7 mA
140 mW
No
LED green

24 VDC +/- 20 %
5.7 mA
140 mW
300 Hz
No
LED green

Output

Output voltage
Output current (max.)
Voltage drop at max. load
Block-state curr. (closed circuit curr.)
Switch-on delay/Switch-off delay
Short-circuit proof/Protective circuit

3 V... 48 VDC
0.1 A
< 1 V
< 1 mA
35 µs / 355 µs
No/integrated freewheel diode

3 V...33 VDC
2 A
< 120 mV
approx. 10 µA
< 55 µs / < 1.2 ms
No/integrated freewheel diode

General data

Ambient temp., fitted w. distance
Ambient temp., fitted w/o distance
Storage temperature
Approvals

-25 °C...+50 °C
-25 °C...+50 °C
-40 °C...+60 °C
CE cRUus

-25 °C...+50 °C
-25 °C...+50 °C
-40 °C...+60 °C
CE cRUus

Insulation coordination acc. to DIN EN 50178

Standards
Rated voltage
Rated impulse voltage
Creepage and clearance path input - output
Overvoltage category
Pollution severity

EN 50178
300
4.0
≥ 5.5 mm
III
2

EN 50178
300
4.0
≥ 5.5 mm
III
2

Dimensions

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

Screw connection Tension clamp c.

2.50 / 0.50 / 4 2.50 / 0.50 / 4
93.0 x 6.1 x 92.0 93.0 x 6.1 x 92.0

Screw connection Tension clamp c.

2.50 / 0.50 / 4 1.50 / 0.50 / 2.50
93.0 x 6.1 x 92.0 93.0 x 6.1 x 92.0

Information

CE, UL/UR
Mounting on TS35

CE, UL/UR
Mounting on TS35

Ordering data

Connection technology

Screw connection
Tension clamp c.

Type	(Qty.=10)	Order No.
MOS 24 VDC / 24 VDC 0.1A		8607340000
MOZ 5 VDC / 24 VDC 0.1A		8633010000

Type	(Qty.=10)	Order No.
MOS 24 VDC / 24 VDC 2A		8607350000
MOZ 24 VDC / 24 VDC 2A		8607370000

Information

Accessories

Information

Pluggable cross-connection
ZQV 4N

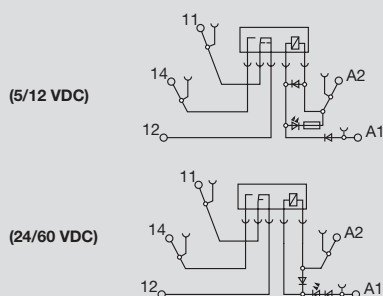
Pluggable cross-connection
ZQV 4N

MICROSERIES Relay couplers

1 change-over contact

Module can be used as an universal interface between control and actuator for switching small and medium loads

- The pluggable cross-connection in input and output minimizes the effort to wire
- Width 6.1 mm
- Relay interchangeable, also with opto-couplers
- Create groups with Microinterface digital



Output

Max. switching voltage AC/Continuous current	250 V / 6 A
Min. switching power	12 V / 100 mA
Response time / Release time	6.2 ms / 3.9 ms
Contact base material	AgSnO
Mechanical endurance	20 x 10 ⁶ switching cycles
Max. switching frequency at rated load	0.1 Hz

Rated data

Status indicator/Free wheel diode/Reverse volt. prot.	LED green/Yes/available
Ambient temp., fitted w. distance	-25 °C...+50 °C
Storage temperature	-40 °C...+60 °C
Climate	40 °C / 93 % rel. humidity without condensation
Approvals	CE, cURus

Insulation coordinates (EN 50 178)

Standards	EN 50178
Rated voltage	300 V
Impulse withstand voltage	4 kV
Creepage and clearance path input - output	=>5.5mm
Overvoltage category	III
Pollution severity	2
Secure separation acc. to VDE 0106 Part 101	Yes

Dimensions

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

Screw connection

2.5 / 0.5 / 4
93.0 / 6.1 / 92.0

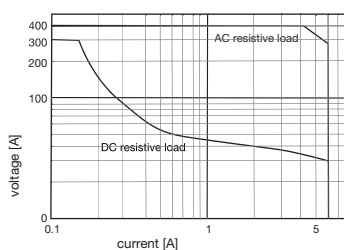
Tension clamp connection

1.5 / 0.5 / 2.5
94.0 / 6.1 / 91.0

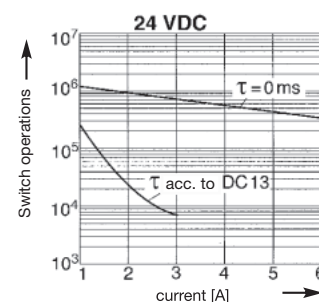
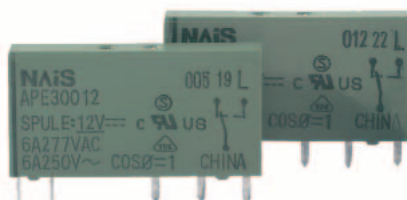
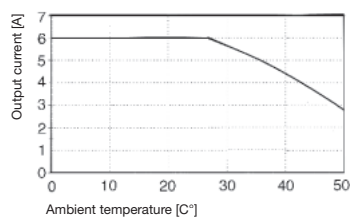
Information

Applications

DC-load breaking capacity



Derating curve



MICROSERIES

1 change-over contact

Ordering data

Input	5VDC 1CO	12VDC 1CO	24VDC 1CO	24VUC 1CO
Rated voltage	5 VDC +/- 20 %	12 VDC +/- 20 %	24 VDC +/- 20 %	24 VUC +/- 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
Oper./drop-out volt. AC-coil				15.8 V / 7 V
Oper./drop-out volt. DC-coil	3.2 V / 1.6 V	6.4 V / 2.5 V	15.4 V / 6.5 V	15.8 V / 7 V
Pull-in curr./release curr. AC-coil				3.6 mA / 1.3 mA
Pull-in curr./release curr. DC-coil	21.6 mA / 8 mA	8.4 mA / 2.4 mA	4 mA / 1.2 mA	3.6 mA / 1.3 mA

Ordering data Complete module

Screw connection	Type	MRS 5VDC 1CO	MRS 12VDC 1CO	MRS 24VDC 1CO	MRS 24VUC 1CO
	Order No.	8556080000	8556070000	8533640000	8556050000
Tension clamp connection	Type	MRZ 5VDC 1CO	MRZ 12VDC 1CO	MRZ 24VDC 1U	MRZ 24VUC 1CO
	Order No.	8556150000	8556140000	8533660000	8556120000

Ordering data Spare relay, pluggable

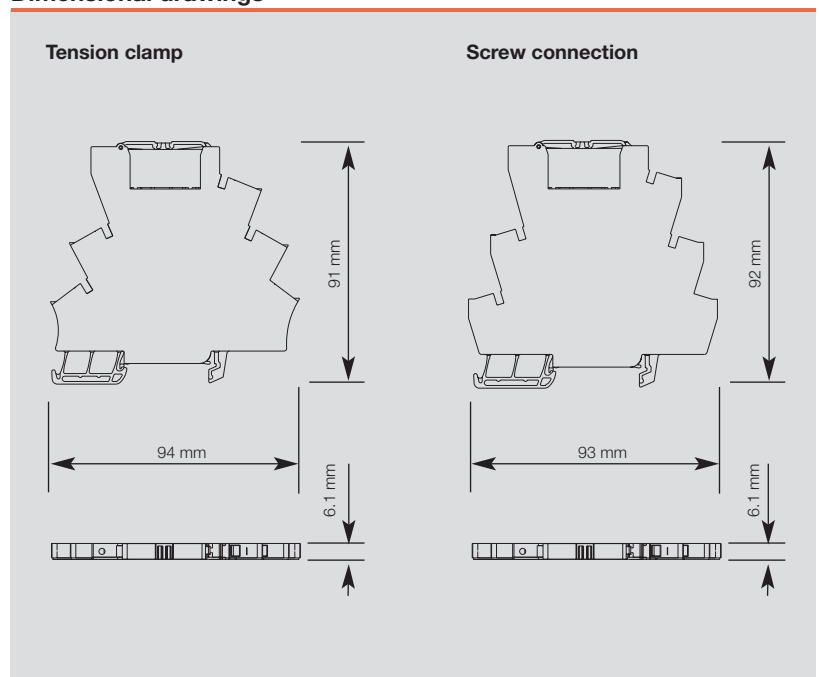
Type	APE 30005V 05VDC-Rel1U	APE 30012V 12VDC-Rel1U	APE 30024V 24VDC-Rel1U	APE 30024V 24VDC-Rel1U
Order No.	4061580000	4061610000	4060120000	4060120000

Information

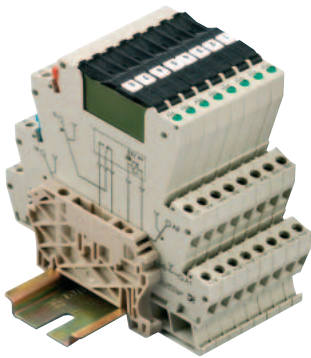
Pluggable cross-connector

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 / 41 GE	41	10	1758270000
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 / 41 RT	41	10	1794070000
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 / 41 BL	41	10	1794080000
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 / 41 SW	41	10	1794090000

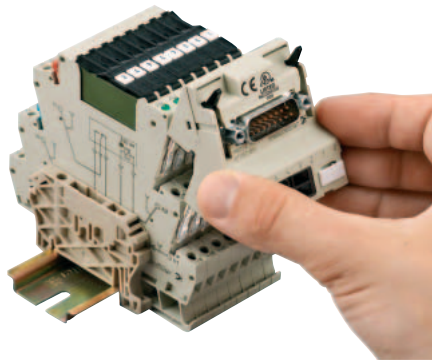
Dimensional drawings



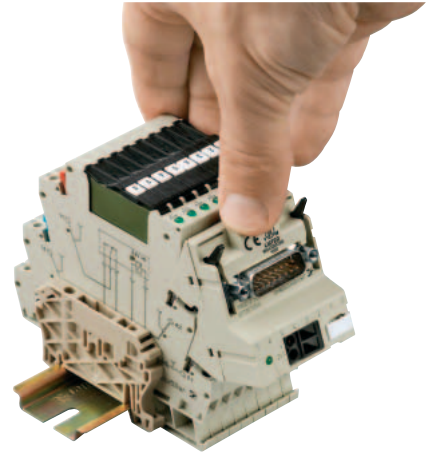
Assembly instructions: Microinterface digital



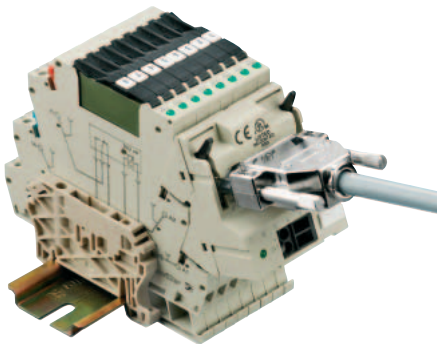
Create a group of 8 Microseries modules, add end bracket.



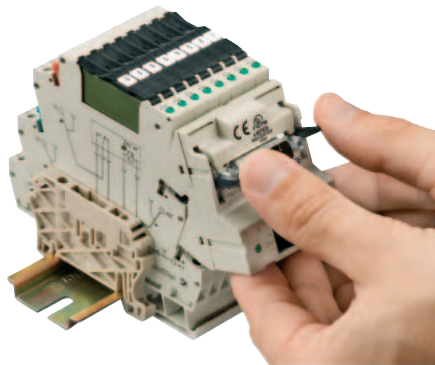
Insert the adapter into the cross-connection channels; ensure correct positioning.



Apply pressure to the middle of the adapter from above.



Connect pre-assembled cable with SUB-D or ribbon cable connector.



To remove, press the retaining clips downwards.

Information:

The basic terminal of the relay coupler can optionally be fitted with optocouplers:

The connecting terminal: 12 remains free.
11 => '+'

