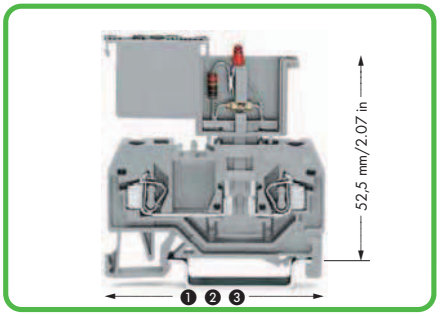
Fuse Plugs on Carrier Terminal Blocks 2.5 mm²
280 Series

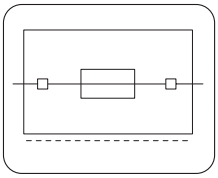
Fuse plug 5 mm wide 125 V / I_N 5 A ❹ Plug width 5 mm / 0.197 in	Fuse plug 5 mm wide 125 V / I_N 5 A ❹ Plug width 5 mm / 0.197 in

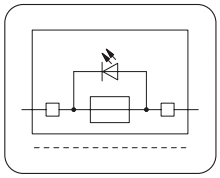






❶ 53 mm / 2.09 in for 280-916
❷ 64 mm / 2.52 in for 280-610
❸ 75 mm / 2.95 in for 280-816
For terminal blocks with side marking, see www.wagocatalog.com





	Item No.	Pack. Unit
Fuse plug,		
with soldered miniature fuse,		
Nominal voltage and current are given by the fuse.		
5 mm wide		
◯ 250 mA FF	**280-850**	100
◯ 500 mA FF	**280-852**	100
◯ 1 A FF	**280-854**	100
◯ 2 A FF	**280-856**	100

	Item No.	Pack. Unit
Fuse plug,		
with soldered miniature fuse,		
with indicator lamp, additional LED,		
15 - 30 VDC. Nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: 5 - 20 mA		
5 mm wide		
◯ 250 mA FF	**280-850/281-413**	100
◯ 500 mA FF	**280-852/281-413**	100
◯ 1 A FF	**280-854/281-413**	100
◯ 2 A FF	**280-856/281-413**	100

Fuse Plug Accessories

Wire commoning chain, 50 connections,
insulated, I_N 8 A

blue **210-123** 1

WMB Multi marking system,

10 strips with 10 markers per card, stretchable 5 - 5.2 mm
plain **793-5501** 5

WMB Multi marking system, plain,

10 strips with 10 markers per card, stretchable 5 - 5.2 mm

yellow	**793-5501/000-002**	
red	**793-5501/000-005**	
blue	**793-5501/000-006**	
gray	**793-5501/000-007**	
orange	**793-5501/000-012**	
light green	**793-5501/000-017**	
green	**793-5501/000-023**	
violet	**793-5501/000-024**	

5

Accessories for Carrier terminal blocks

Appropriate marking system:
WMB (see Section 13)

2-conductor carrier terminal block,
❶ 0.08 - 2.5 mm² / AWG 28 - 14,

Terminal block width 5 mm / 0.197 in
gray **280-916** 100

End and intermediate plate, 2.5 mm thick


orange	**280-309**	100 (4x25)
gray	**280-308**	100 (4x25)

3-conductor carrier terminal block,
❷ 0.08 - 2.5 mm² / AWG 28 - 14,

Terminal block width 5 mm / 0.197 in
gray **280-610** 100

End and intermediate plate, 2.5 mm thick


orange	**280-326**	100 (4x25)
gray	**280-324**	100 (4x25)

4-conductor carrier terminal block,
❸ 0.08 - 2.5 mm² / AWG 28 - 14,

Terminal block width 5 mm / 0.197 in
gray **280-816** 100

End and intermediate plate, 2.5 mm thick


orange	**280-315**	100 (4x25)
gray	**280-314**	100 (4x25)

Comb-style jumper bar, insulated,

I_N = I_N terminal block

2-way	**280-482**	200 (8x25)
3-way	**280-483**	200 (8x25)

Comb-style jumper bar, insulated,

I_N = I_N terminal block

10-way	**280-490**	50 (2x25)

Alternate comb-style jumper bar,

insulated,
I_N = I_N terminal block
2-way **280-492** 200 (8x25)

Operating tool, of insulating material


2-way	**280-432**	1
3-way	**280-433**	1

Operating tool, of insulating material

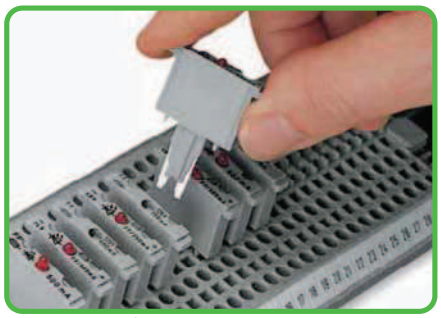
10-way **280-440** 1

Wire commoning chain, 50 connections,

insulated, I_N 8 A
black **210-103** 1

For list of approvals and user guide, see pages 634 to 637.

❹ Electrical ratings are given by the fuse or LED nominal voltage (also see pages 234 – 235).

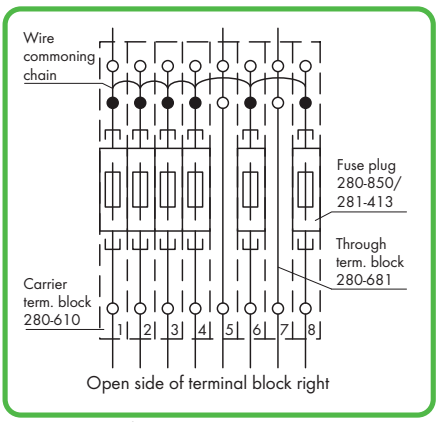


Using pluggable fuse holders with 280/281 and 769 Series rail-mount terminal blocks for control circuit protection is highly advantageous for the user, as the function and the wiring are accomplished by two separate parts:

- No additional cost for assembly and wiring
- No risk of accidental contact with live parts during disconnection of fuse plug
- Quick replacement of fuse plug in case of blown fuse
- The fuse plug can be be removed by service personnel, avoiding unintentional reclosing of the circuit by another person.

Further advantages:

- Extremely high density with only 5 mm/0.197 in width of terminal block/fuse plug
- Optional LED indicates blown fuse.



Fuse protection of individual outputs, supply via wire commoning chain

Applications Notes on Terminal Blocks for Miniature Metric Fuses

Terminal blocks for miniature metric fuses tested acc. to IEC or EN 60947-7-3/VDE 0611-6

When selecting miniature metric fuses, the maximum power loss listed below should not be exceeded.
The power loss is determined according to IEC or EN 60947-7-3/VDE 0611-6 at 23 °C.
The temperature rise of the terminal blocks must be checked according to their application and mounting.
Higher ambient temperatures represent an additional impact on miniature metric fuses. Therefore, in such applications the rated current must be reduced if necessary.
More details from the manufacturer.

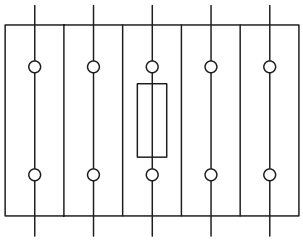
Miniature metric fuses 5 x 20

Series Item No.	Overload and short-circuit protection		Short-circuit protection only	
	Individual arrangement	Block arrangement	Individual arrangement	Block arrangement
Fuse terminal blocks (with screw cap), side-entry (5 x 20 mm)				
282-122 **282-124**	2.5 W	2.5 W	4 W	4 W
Fuse disconnect terminal blocks with pivoting fuse holder for miniature metric fuses (5 x 20 mm)				
281-611 **281-616** **281-611/281-541** **281-611/281-542** **281-611/281-417** **281-611/281-418**	2.5 W	1.6 W	4 W	4 W
Fuse plugs for miniature metric fuses (5 x 20 mm)				
281-511 **281-512** **281-512/281-501** **281-512/281-418** **281-512/281-417**	2.5 W	1.6 W	4 W	4 W

Miniature metric fuses 6.3 x 32

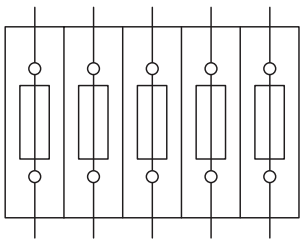
Series Item No.	Overload and short circuit protection		Short-circuit protection only	
	Individual arrangement	Block arrangement	Individual arrangement	Block arrangement
Fuse terminal blocks (with screw cap), side-entry ($^1/_4$" x $1^1/_4$" ≈ 6.3 x 32 mm)				
282-128 **282-128/281-418** **282-128/281-413** **282-128/281-417**	2.5 W	2.5 W	4 W	4 W
Fuse disconnect terminal blocks with pivoting fuse holder for miniature metric fuses ($^1/_4$" x $1^1/_4$" ≈ 6.3 x 32 mm)				
281-623 **281-623/281-541** **281-623/281-542** **281-623/281-417** **281-623/281-418**	2.5 W	1.6 W	4 W	2.5 W

Fuse terminal block in individual arrangement



Terminal block assembly including
one fuse terminal block and 4 through terminal blocks

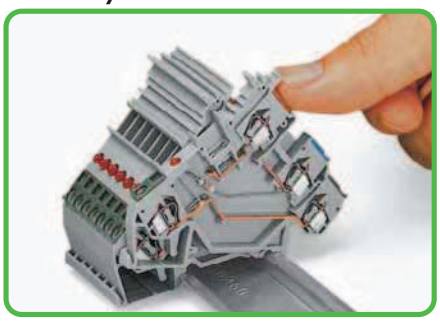
Fuse terminal blocks in block arrangement



Terminal block assembly including
5 fuse terminal blocks

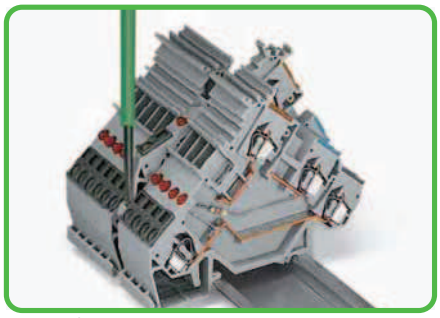
Sensor and Actuator Terminal Blocks
280 Series

Assembly



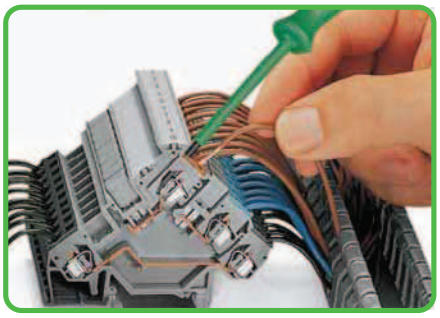
Assembly on the carrier rail. Terminal blocks with ground connection automatically establish a direct contact to the rail.

Removal



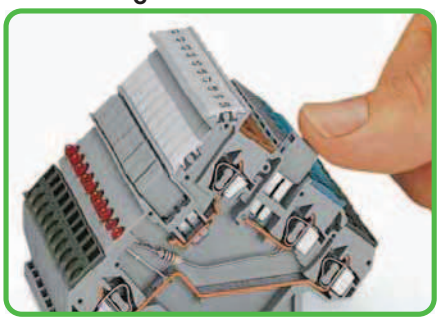
Removal from the carrier rail.
Notice: Remove jumper contacts first.

CAGE CLAMP® connection

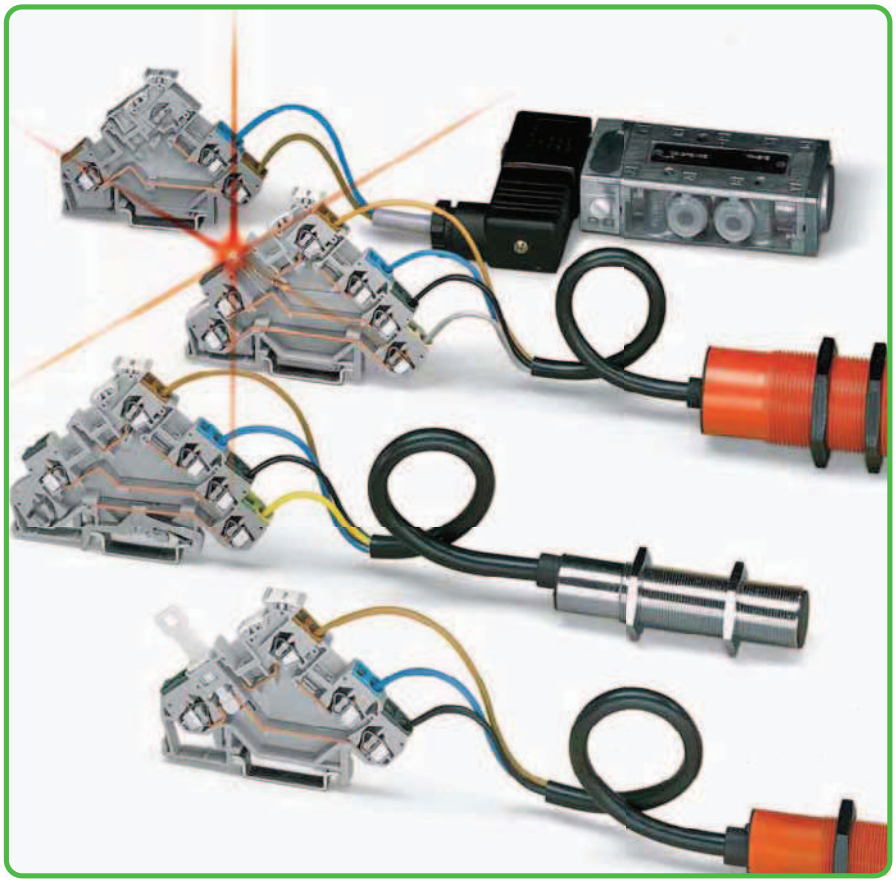


Conductor termination with straight operating tool (210-720).

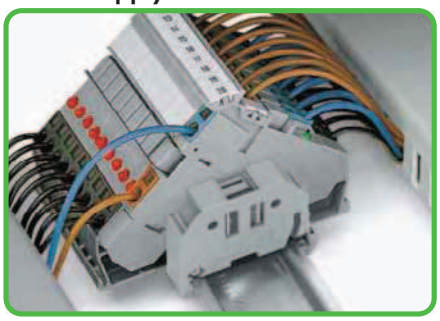
Commoning



Commoning with adjacent jumpers. Push down the adjacent jumper until fully inserted.

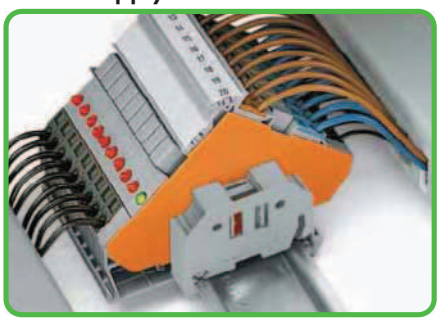


Power supply

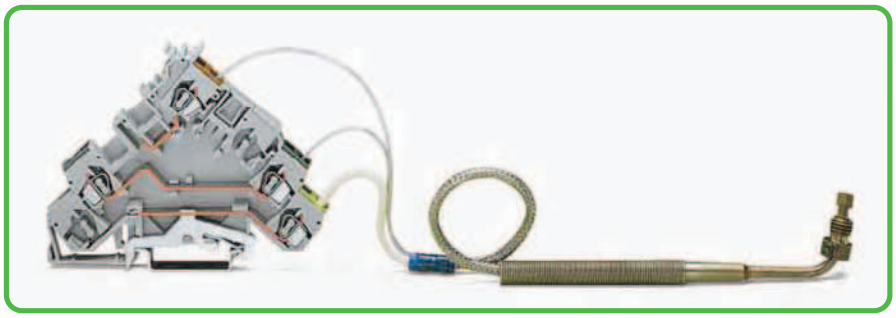


Sensor terminal blocks.
Power supply from control cabinet side.

Power supply



Sensor terminal blocks.
Power supply from sensor side.



Actuator terminal block and thermocouple with shield contact.



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded

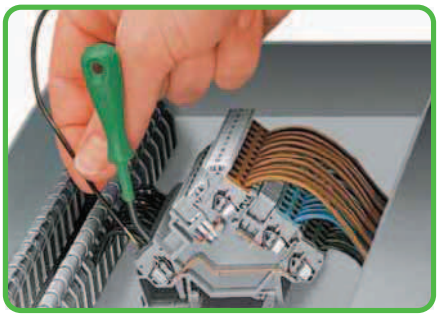


fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

– Description and Handling –

CAGE CLAMP® connection



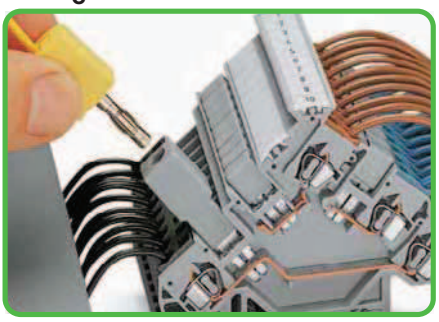
Conductor termination with angled operating tool (210-658).

Marking

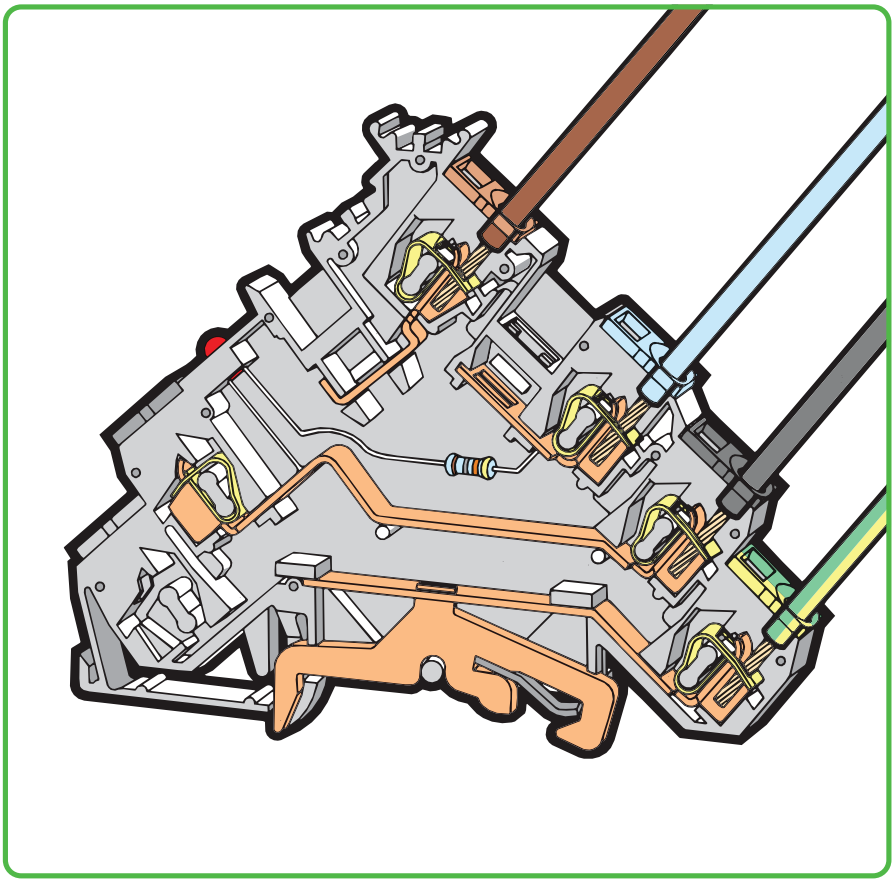


Marking with WMB Multi marking system.
For additional systems, see Section 13.

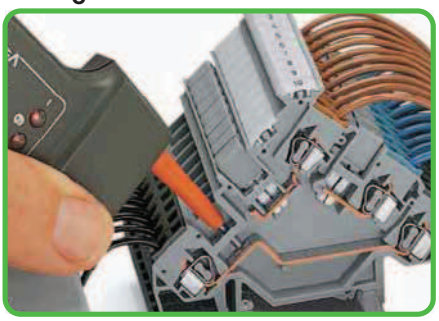
Testing



Testing via banana plug and 209-170 test plug adapter.

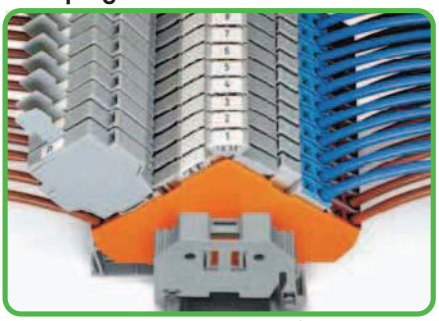


Testing

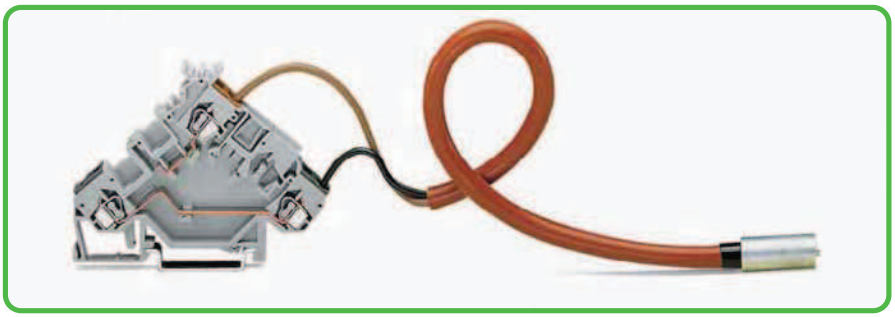


Testing with voltage tester directly on the current bar.

Fuse plugs

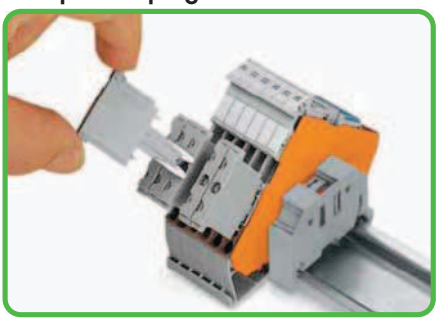


Actuator terminal blocks with 281-511 fuse plugs (requires additional intermediate plates).



Actuator terminal block with thermocouple.

Component plugs



Actuator terminal blocks with component plugs (280-801).



fine-stranded, tip-bonded



fine-stranded, with ferrule ❶ (gastight crimped)

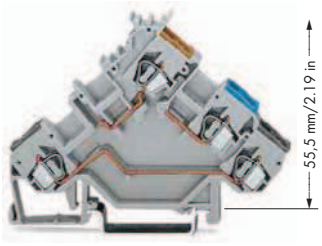


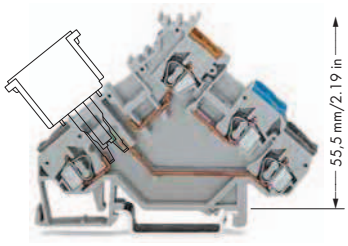
fine-stranded, with pin terminal (gastight crimped)

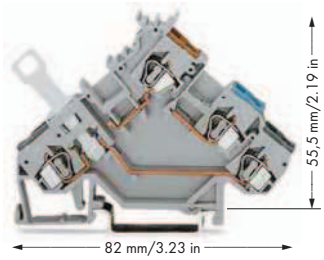
❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

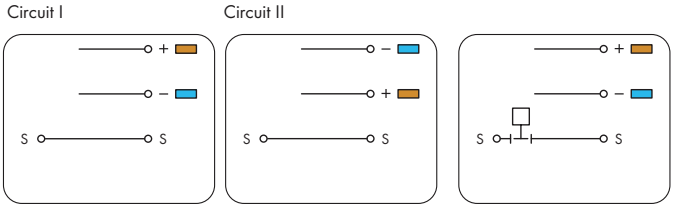
Sensor Terminal Blocks 2.5 mm² for 3-Conductor Sensors
280 Series

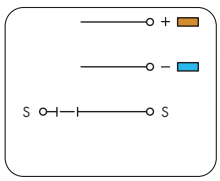
0.08 - 2.5 mm² 400 V/6 kV/3 ❶ I_N 20 A	AWG 28 - 12 * 300 V, 15 A 300 V, 15 A	0.08 - 2.5 mm² 250 V/4 kV/3 ❶ ❷ I_N 6 A ❷	AWG 28 - 12 * 300 V, 6 A 300 V, 15 A	0.08 - 2.5 mm² 400 V/6 kV/3 ❶ I_N 10 A	AWG 28 - 12 * 300 V, 10 A 300 V, 15 A
Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❸		Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❸		Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❸	











	Item No.	Pack. Unit
Sensor terminal block		
Circuit I	**280-560**	50
Circuit II	**280-553**	50

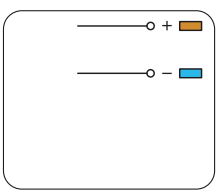
	Item No.	Pack. Unit
Sensor terminal block,		
for component plugs		
	280-561 ❹	50

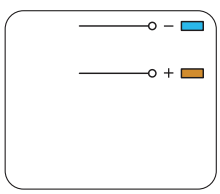
	Item No.	Pack. Unit
Sensor disconnect terminal block,		
for signal interruption		
	280-563	50











	Item No.	Pack. Unit
Sensor supply terminal block,		
power supply from sensor side		
	280-564	10

	Item No.	Pack. Unit
Spacer,		
same profile as 3-conductor sensor terminal blocks or appropriate actuator terminal blocks		
Spacers with the profile clearly differentiate between sensor or actuator terminal groups, e.g., of different power supply.		
gray	**280-559**	50

	Item No.	Pack. Unit
Sensor supply terminal block,		
power supply from control panel side, with end plate		
	280-567	20
Technical data:		
400 V/6 kV/3		I_N 20 A

For list of approvals and user guide, see pages 634 to 637.