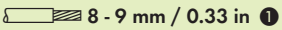
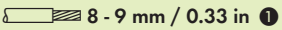
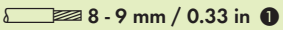
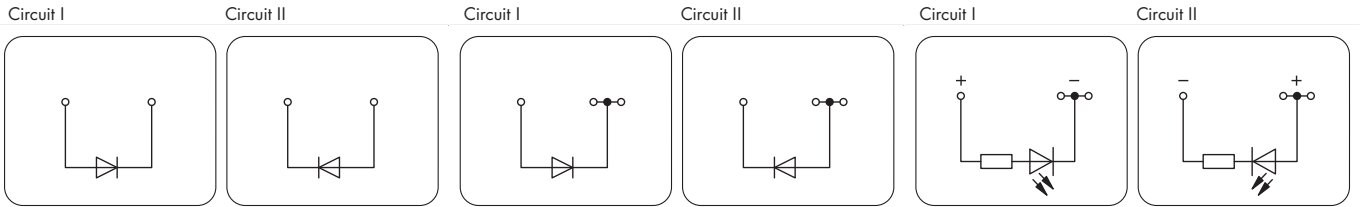
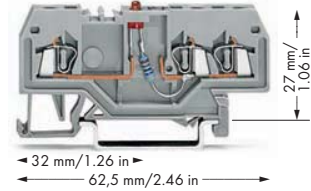
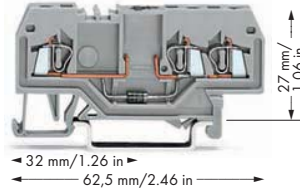
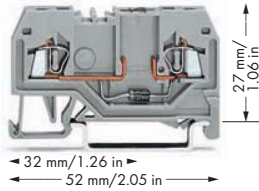
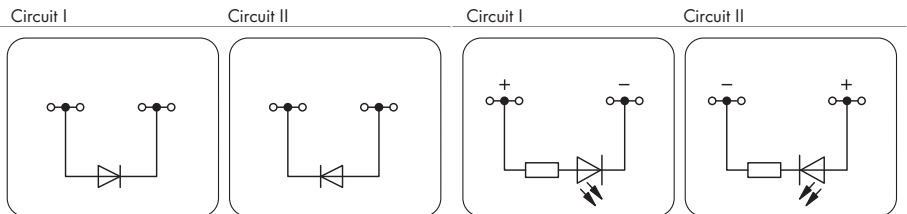
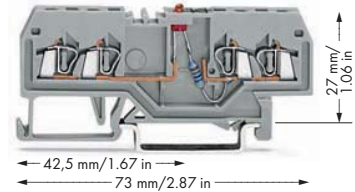
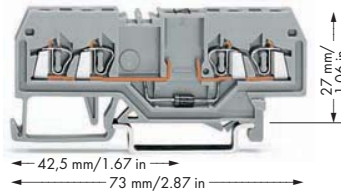


Diode Terminal Blocks and LED Terminal Blocks 1.5 mm² 279 Series

<p>0.08 - 1.5 mm² AWG 28 - 16 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 4 mm / 0.157 in  8 - 9 mm / 0.33 in ①</p>	<p>0.08 - 1.5 mm² AWG 28 - 16 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 4 mm / 0.157 in  8 - 9 mm / 0.33 in ①</p>	<p>0.08 - 1.5 mm² AWG 28 - 16 24 VDC I_F 0.025 A max. Terminal block width 4 mm / 0.157 in  8 - 9 mm / 0.33 in ①</p>
---	---	--



Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
2-conductor diode terminal block with 1N4007 diode, gray		3-conductor diode terminal block with 1N4007 diode, gray		3-conductor LED terminal block with red LED, 24 VDC, gray	
● Circuit I	279-915/281-410	100	● Circuit I	279-673/281-410	100
● Circuit II	279-915/281-411	100	● Circuit II	279-673/281-411	100
				● Circuit I	279-674/281-434
				● Circuit II	279-674/281-413

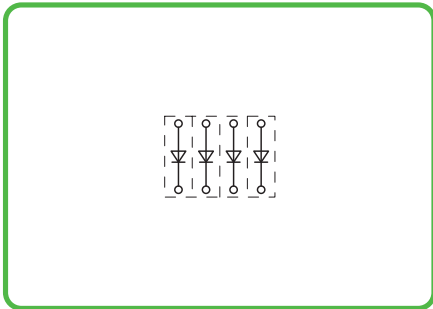


	Item No.	Pack. Unit	Item No.	Pack. Unit	
Through terminal blocks with same profile, see page 162	4-conductor diode terminal block with 1N4007 diode, gray		4-conductor LED terminal block with red LED, 24 VDC, gray		
	● Circuit I	279-815/281-410	100	● Circuit I	279-809/281-434
	● Circuit II	279-815/281-411	100	● Circuit II	279-809/281-413

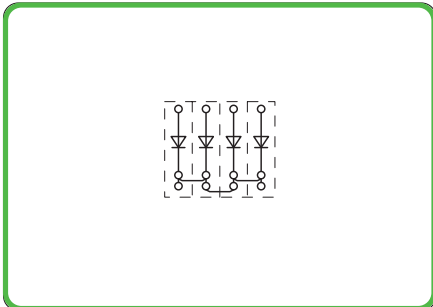
For list of approvals and user guide, see pages 634 to 637.

Circuit Configuration Examples

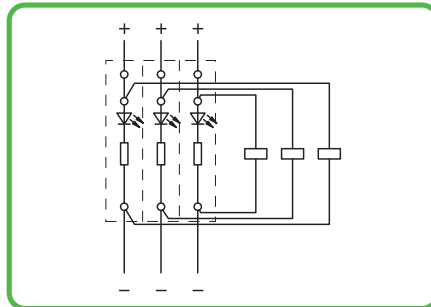
Diode Terminal Blocks and LED Terminal Blocks



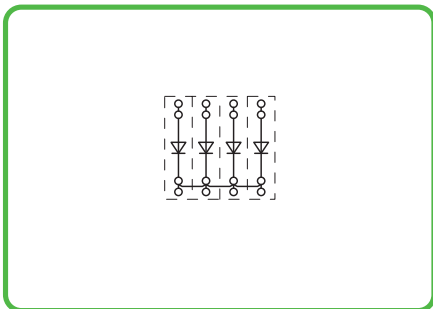
Open diode gates can be created using the following terminal blocks:
279-915/281-410 or
279-915/281-411



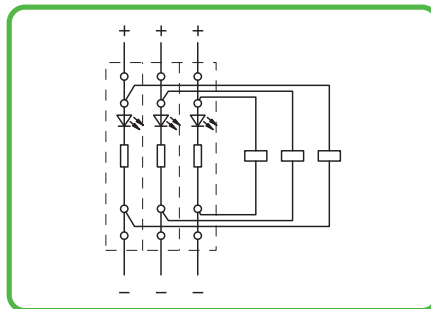
Polarized diode gates with common cathode can be created using the following terminal blocks:
279-673/281-410 or
279-673/281-411



Circuit-related voltage indications can be created using the following terminal blocks:
279-674/281-434 or
279-674/281-413



Polarized diode gates with common cathode can be created using the following terminal blocks:
279-815/281-410 or
279-815/281-411










Circuit-related voltage indications can be created using the following terminal blocks:
279-809/281-434 or
279-809/281-413

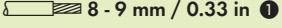
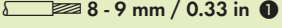
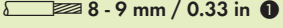
① Strip length, see packaging or instructions.

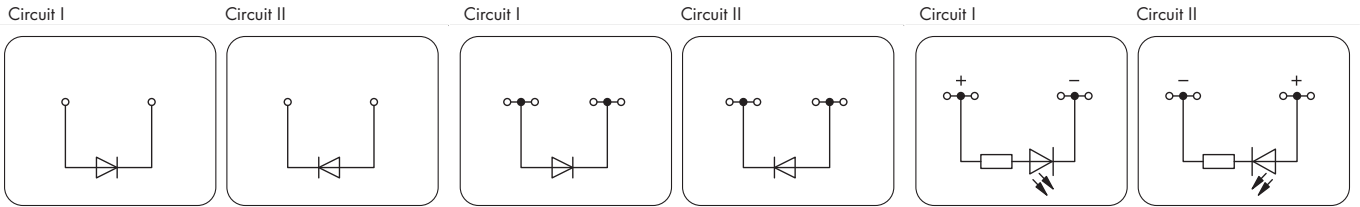
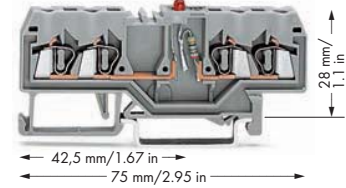
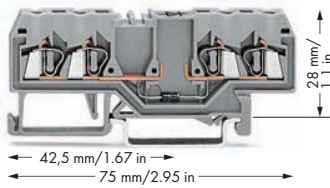
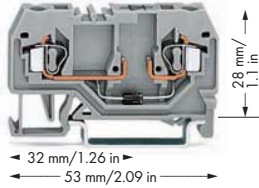
279 Series Accessories

Appropriate marking system:
WMB (see Section 13)

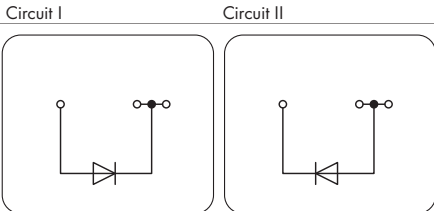
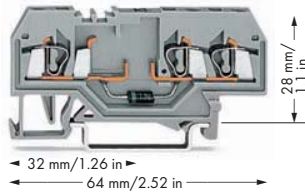
Insulation stop,			
	5 pcs/strip, 0.08 - 0.2 mm ² "s" (0.14 mm ² "f-st") white	279-470	200 (8x25)
Insulation stop,			
	5 pcs/strip, 0.25 mm ² dark gray	279-471	200 (8x25)
Comb-style jumper bar, insulated,			
	I _N = I _N terminal block 2-way	279-482	200 (8x25)
	3-way	279-483	200 (8x25)
Comb-style jumper bar, insulated,			
	I _N = I _N terminal block 10-way	279-490	50 (2x25)
Alternate comb-style jumper bar,			
	insulated, I _N = I _N terminal block 2-way	279-492	200 (8x25)
Operating tool, of insulating material			
	2-way	279-432	1
	3-way	279-433	1
Operating tool, of insulating material			
	10-way	279-440	1

Diode Terminal Blocks and LED Terminal Blocks 2.5 mm² 280 Series

<p>0.08 - 2.5 mm² AWG 28 - 14 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in  8 - 9 mm / 0.33 in ①</p>	<p>0.08 - 2.5 mm² AWG 28 - 14 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in  8 - 9 mm / 0.33 in ①</p>	<p>0.08 - 2.5 mm² AWG 28 - 14 24 VDC I_F 0.025 A max. Terminal block width 5 mm / 0.197 in  8 - 9 mm / 0.33 in ①</p>
---	---	--



Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
2-conductor diode terminal block with 1N4007 diode, gray		4-conductor diode terminal block with 1N4007 diode, gray		4-conductor LED terminal block with red LED, 24 VDC, gray	
● Circuit I	280-915/281-410	100	● Circuit I	280-815/281-410	100
● Circuit II	280-915/281-411	100	● Circuit II	280-815/281-411	100
				● Circuit I	280-809/281-434
				● Circuit II	280-809/281-413

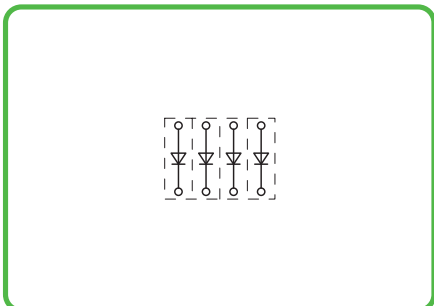


Item No.	Pack. Unit
Through terminal blocks with same profile, see page 164	
3-conductor diode terminal block with 1N4007 diode, gray	
● Circuit I	280-673/281-410
● Circuit II	280-673/281-411

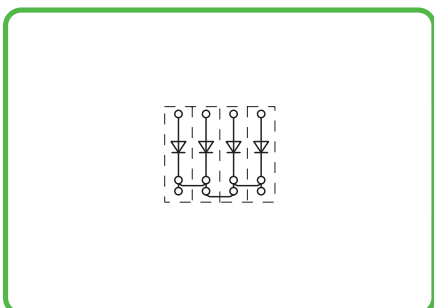
For list of approvals and user guide, see pages 634 to 637.

Circuit Configuration Examples

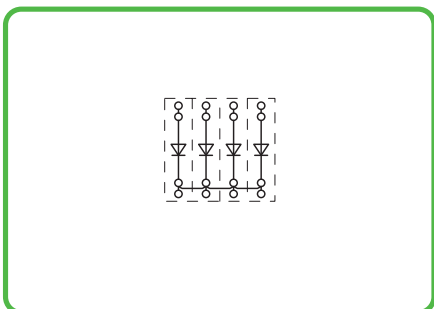
Diode Terminal Blocks and LED Terminal Blocks



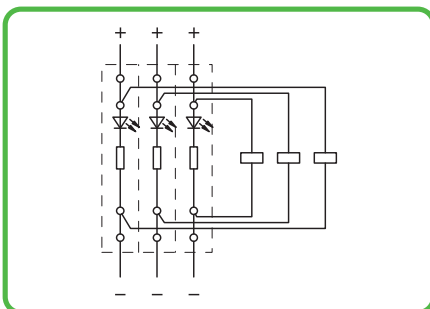
Open diode gates can be created using the following terminal blocks:
280-915/281-410 or
280-915/281-411



Polarized diode gates with common cathode can be created using the following terminal blocks:
280-673/281-410 or
280-673/281-411













Polarized diode gates with common cathode can be created using the following terminal blocks:
280-815/281-410 or
280-815/281-411

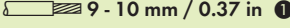
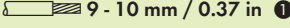
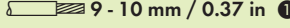


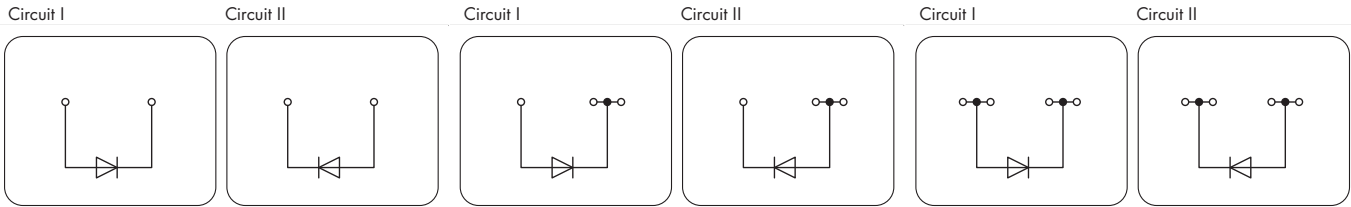
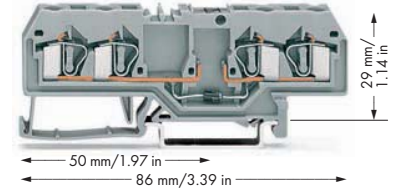
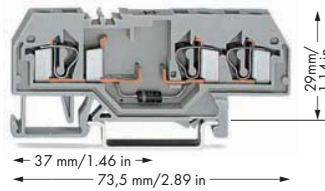
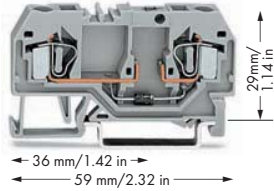
Circuit-related voltage indications can be created using the following terminal blocks:
280-809/281-434 or
280-809/281-413

① Strip length, see packaging or instructions.

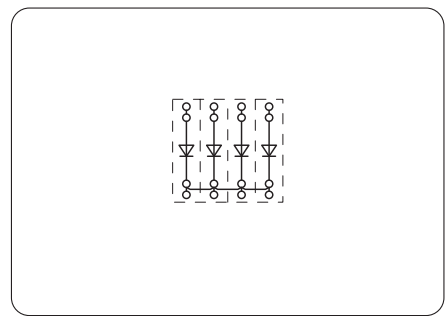
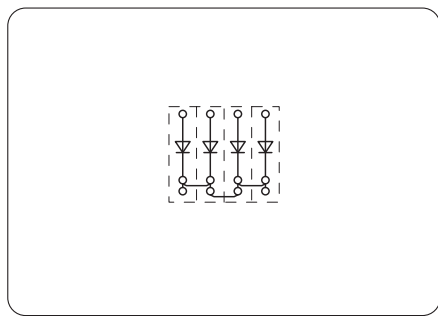
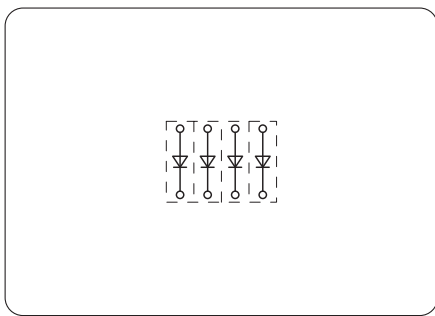
280 Series Accessories			
Appropriate marking system: WMB (see Section 13)			
	5 pcs/strip, 0.08 - 0.2 mm ² "s" (0.14 mm ² "f-st") white	280-470	200 (8x25)
	5 pcs/strip, 0.25 - 0.5 mm ² light gray	280-471	200 (8x25)
	5 pcs/strip, 0.75 - 1 mm ² dark gray	280-472	200 (8x25)
	Comb-style jumper bar, insulated, I _N = I _N terminal block	2-way 280-482 3-way 280-483	200 (8x25) 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 3-way 280-433	1 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
	Wire commoning chain, 50 connections, insulated, I _N 8 A	blue 210-123	1

Diode Terminal Blocks 4 mm² 281 Series

0.08 - 4 mm² AWG 28 - 12 U_N 250 V, U_{RM} 1000 V Terminal block width 6 mm / 0.236 in  9 - 10 mm / 0.37 in ①	0.08 - 4 mm² AWG 28 - 12 U_N 250 V, U_{RM} 1000 V Terminal block width 6 mm / 0.236 in  9 - 10 mm / 0.37 in ①	0.08 - 4 mm² AWG 28 - 12 U_N 250 V, U_{RM} 1000 V Terminal block width 6 mm / 0.236 in  9 - 10 mm / 0.37 in ①
--	--	--

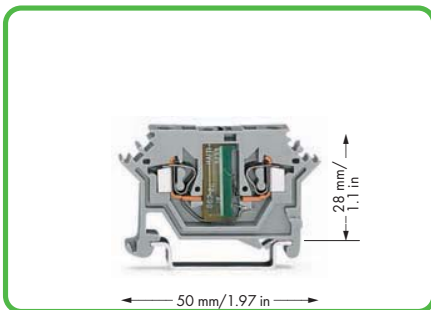


Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
2-conductor diode terminal block with 1N4007 diode, 0.5 A continuous current, gray		3-conductor diode terminal block with 1N4007 diode, 0.5 A continuous current, gray		4-conductor diode terminal block with 1N4007 diode, 0.5 A continuous current, gray	
● Circuit I	281-915/281-410 50	● Circuit I	281-673/281-410 50	● Circuit I	281-665/281-410 50
● Circuit II	281-915/281-411 50	● Circuit II	281-673/281-411 50	● Circuit II	281-665/281-411 50
2-conductor diode terminal block with 1N5408 diode, 1.5 A continuous current, gray		3-conductor diode terminal block with 1N5408 diode, 1.5 A continuous current, gray		4-conductor diode terminal block with 1N5408 diode, 1.5 A continuous current, gray	
● Circuit I	281-915/281-400 50	● Circuit I	281-673/281-400 50	● Circuit I	281-665/281-400 50
● Circuit II	281-915/281-401 50	● Circuit II	281-673/281-401 50	● Circuit II	281-665/281-401 50
Other terminal blocks with the same profile:		Other terminal blocks with the same profile:		Other terminal blocks with the same profile:	
Through	281-901 Page 170	Through	281-681 Page 170	Through	281-652 Page 170



Open diode gate Polarized diode gate, common cathode Polarized diode gate, common cathode

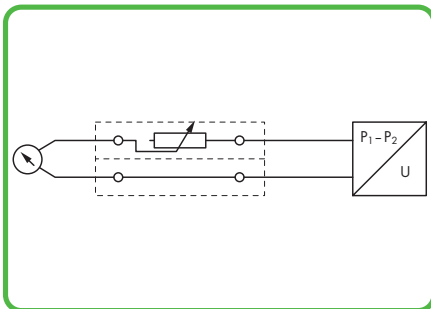
For list of approvals and user guide, see pages 634 to 637.



Variable resistor terminal blocks, with balancing resistance
0.5 Ohm - 20 Ohm, 0.75 W
gray 280-615/281-412 ②

0.5 Ohm - 20 Ohm, 0.75 W
blue 280-645/281-412 ② ③

20 Ohm - 1 kOhm, 0.75 W
gray 280-615/281-428 ②



Variable resistor terminal blocks
Trimming circuit for differential pressure

② Other resistors on request

③ Suitable for Ex i applications in connection with the 280-331 intermediate plate

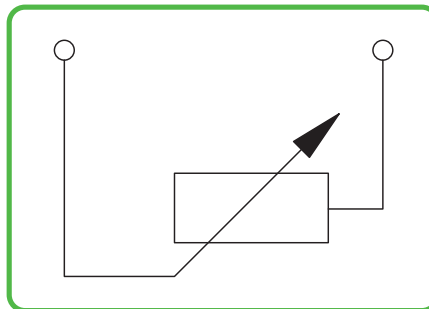


End plates for variable resistor terminal blocks

orange 280-331 100 (4x25)

gray 280-330 100 (4x25)

For terminal blocks with side marking (e.g., 280-601), see www.wagocatalog.com



Circuit diagram
Variable resistor terminal block with balancing resistance

① Strip length, see packaging or instructions.

281 Series Accessories

Appropriate marking system:
WMB (see Section 13)

Insulation stop,			
	5 pcs/strip, 0.08 - 0.2 mm ² "s" (0.14 mm ² "f-st")		
	white	281-470	200 (8x25)

Insulation stop,			
	5 pcs/strip, 0.25 - 0.5 mm ²		
	light gray	281-471	200 (8x25)

Insulation stop,			
	5 pcs/strip, 0.25 - 1.5 mm ²		
	dark gray	281-472	200 (8x25)

Comb-style jumper bar, insulated,			
	I _N = I _N terminal block		
	2-way	281-482	100 (4x25)
	3-way	281-483	100 (4x25)
	5-way	281-485	100 (4x25)
	10-way	281-490	50 (2x25)

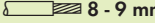
Alternate comb-style jumper bar,			
	insulated, I _N = I _N terminal block		
	2-way	281-492	100 (4x25)

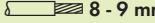
Operating tool, of insulating material			
	2-way	280-432	1
	3-way	280-433	1
	5-way	281-440	1


Wire commoning chain, 50 connections,			
	insulated, I _N 8 A		
	black	210-103	1

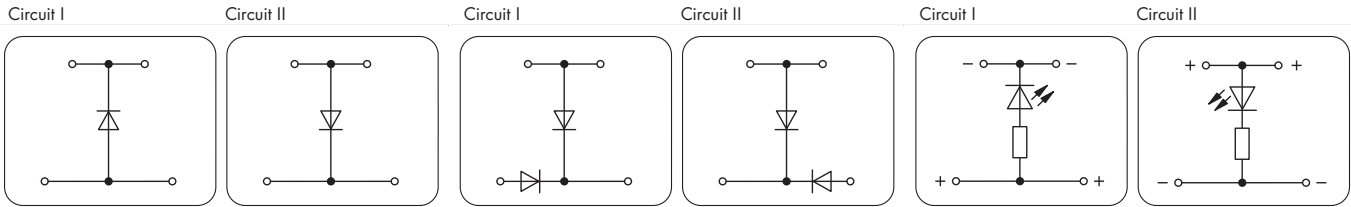
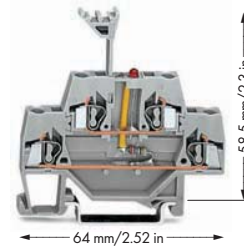
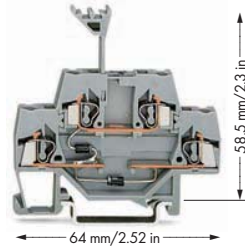
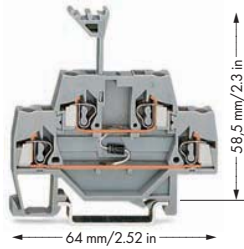
Wire commoning chain, 50 connections,			
	insulated, I _N 8 A		
	blue	210-123	1

Double-Deck Diode Terminal Blocks and LED Terminal Blocks 2.5 mm² 280 Series

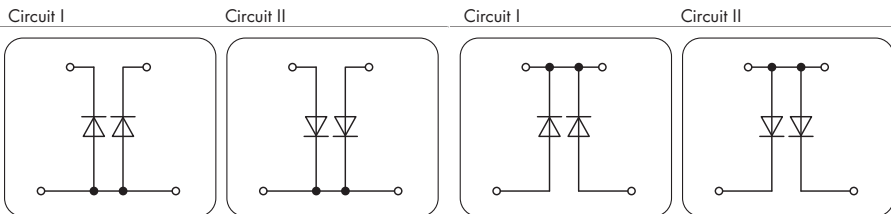
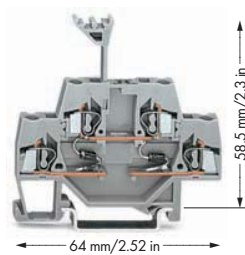
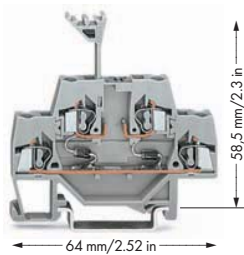
0.08 - 2.5 mm² | AWG 28 - 14
 U_N 250 V, U_{RM} 1000 V
 1N4007 - 0.5 A continuous current
 Terminal block width 5 mm / 0.197 in
 8 - 9 mm / 0.33 in ①

0.08 - 2.5 mm² | AWG 28 - 14
 U_N 250 V, U_{RM} 1000 V
 1N4007 - 0.5 A continuous current
 Terminal block width 5 mm / 0.197 in
 8 - 9 mm / 0.33 in ①

0.08 - 2.5 mm² | AWG 28 - 14
 24 VDC
 I_F 0.025 A max.
 Terminal block width 5 mm / 0.197 in
 8 - 9 mm / 0.33 in ①



Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Double-deck diode terminal block with 1N4007 diode, gray		Double-deck diode terminal block with 2 diodes 1N4007, gray		Double-deck LED terminal block with red LED, 24 VDC, gray	
● Circuit I	280-940/281-410 50	● Circuit I	280-941/281-492 50	● Circuit I	280-943/281-434 50
● Circuit II	280-940/281-411 50	● Circuit II	280-941/281-491 50	● Circuit II	280-943/281-413 50

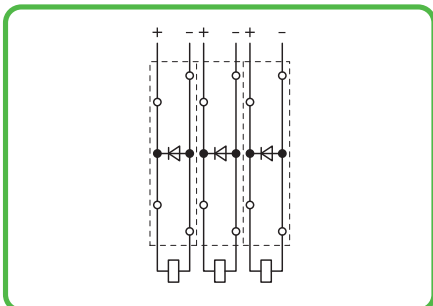


Item No.	Pack. Unit	Item No.	Pack. Unit	
Double-deck diode terminal block with 2 diodes 1N4007, gray		Double-deck diode terminal block with 2 diodes 1N4007, gray		Through terminal blocks with same profile, see page 184
● Circuit I	280-942/281-487 50	● Circuit I	280-941/281-489 50	
● Circuit II	280-942/281-488 50	● Circuit II	280-941/281-490 50	

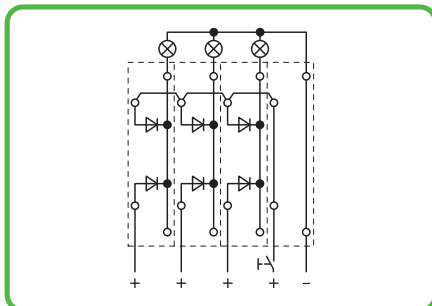
For list of approvals and user guide, see pages 634 to 637.

Circuit Configuration Examples

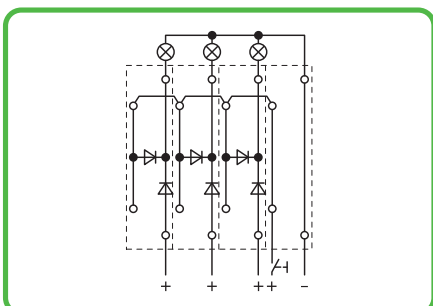
Double-Deck Diode and LED Terminal Blocks



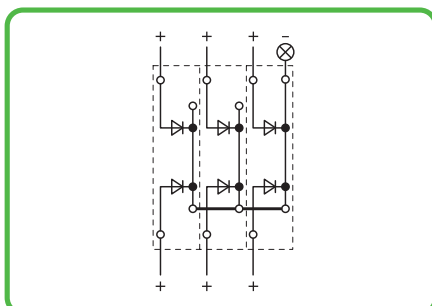
Recovery diodes can be created using the following terminal blocks:
280-940/281-410 or
280-940/281-411



Lamp test circuits can be created using the following terminal blocks:
280-942/281-487 or
280-942/281-488



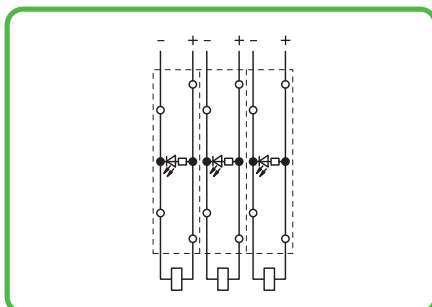
Lamp test circuits can be created using the following terminal blocks:
280-941/281-492 or
280-941/281-491



Collective fault signals can be created using the following terminal blocks:
280-941/281-489 or
280-941/281-490

Double-deck diode terminal blocks

have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits. Using LED terminal blocks, monitoring units can be designed, e.g., for control and operating circuits. The terminal blocks provide high-density wiring, while maintaining a width of only 5 mm/0.197 in.



Circuit-related voltage indications can be created using the following terminal blocks:
280-943/281-434 or
280-943/281-413

① Strip length, see packaging or instructions.

280 Series Accessories

Appropriate marking systems
(see Section 13)

End and intermediate plate, 2.5 mm thick			
orange	280-341	100	(4x25)
gray	280-340	100	(4x25)

Insulation stop,			
5 pcs/strip,			
0.08 - 0.2 mm ² "s" (0.14 mm ² "f-st")			
white	280-470	200	(8x25)

Insulation stop,			
5 pcs/strip,			
0.25 - 0.5 mm ²			
light gray	280-471	200	(8x25)

Insulation stop,			
5 pcs/strip,			
0.75 - 1 mm ²			
dark gray	280-472	200	(8x25)

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

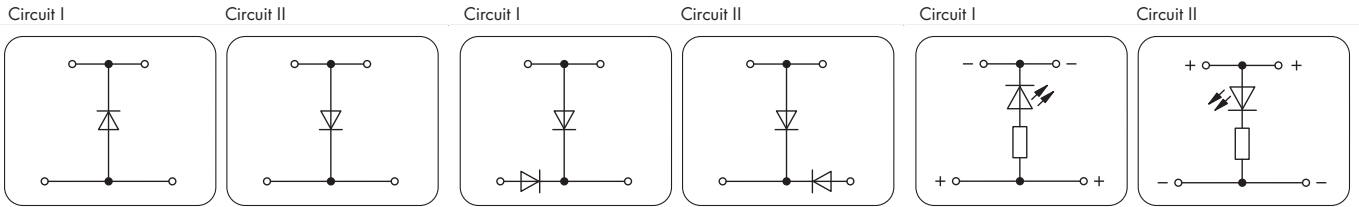
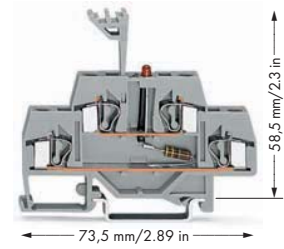
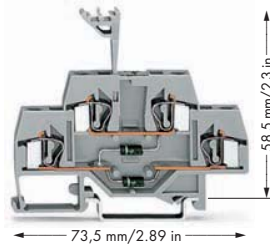
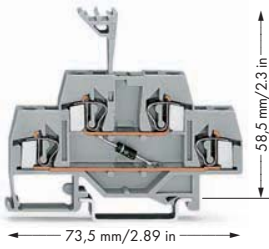
Wire commoning chain, 50 connections,			
insulated, I _N 8 A			
blue	210-123		1

Double-Deck Diode Terminal Blocks and LED Terminal Blocks 4 mm² 281 Series

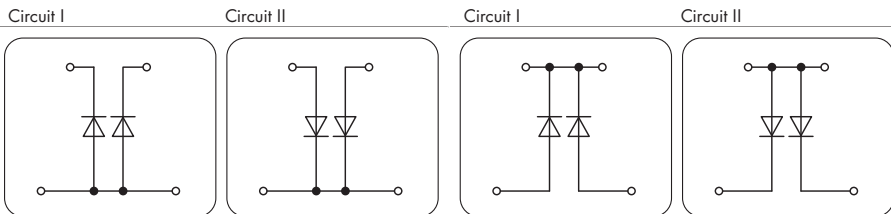
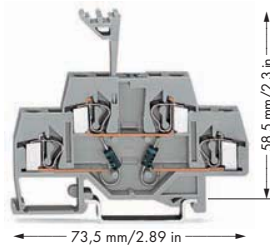
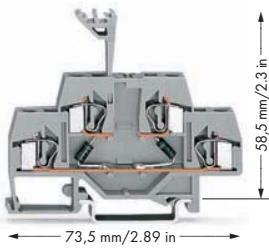
0.08 - 4 mm² | AWG 28 - 12
 U_N 250 V, U_{RM} 1000 V
 1N4007 - 0.5 A continuous current
 Terminal block width 6 mm / 0.236 in
 9 - 10 mm / 0.37 in ①

0.08 - 4 mm² | AWG 28 - 12
 U_N 250 V, U_{RM} 1000 V
 1N4007 - 0.5 A continuous current
 Terminal block width 6 mm / 0.236 in
 9 - 10 mm / 0.37 in ①

0.08 - 4 mm² | AWG 28 - 12
 24 VDC
 I_f 0.025 A max.
 Terminal block width 6 mm / 0.236 in
 9 - 10 mm / 0.37 in ①



Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Double-deck diode terminal block with 1N4007 diode, gray		Double-deck diode terminal block with 2 diodes 1N4007, gray		Double-deck LED terminal block with red LED, 24 VDC, gray	
● Circuit I	281-633/281-410	50	● Circuit I	281-635/281-492	50
● Circuit II	281-633/281-411	50	● Circuit II	281-635/281-491	50
				● Circuit I	281-634/281-434
				● Circuit II	281-634/281-413

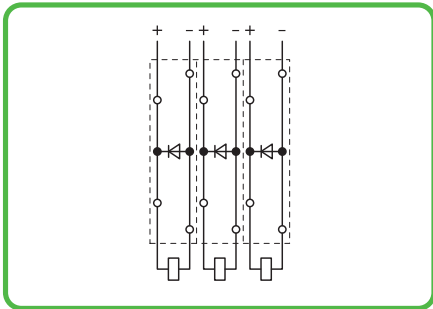


Item No.	Pack. Unit	Item No.	Pack. Unit		
Double-deck diode terminal block with 2 diodes 1N4007, gray		Double-deck diode terminal block with 2 diodes 1N4007, gray		Through terminal blocks with same profile, see page 188	
● Circuit I	281-636/281-487	50	● Circuit I		281-635/281-489
● Circuit II	281-636/281-488	50	● Circuit II	281-635/281-490	50

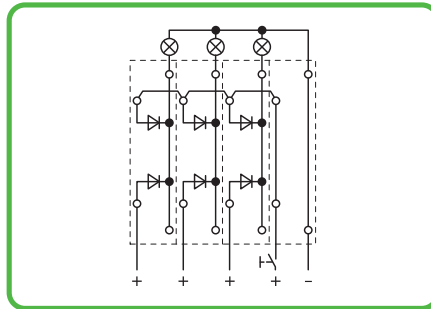
For list of approvals and user guide, see pages 634 to 637.

Circuit Configuration Examples

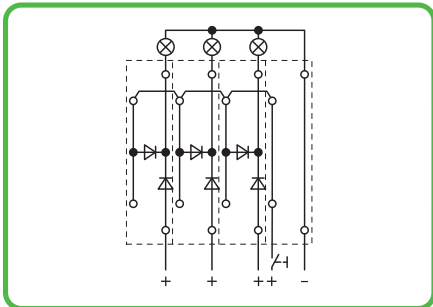
Double-Deck Diode and LED Terminal Blocks



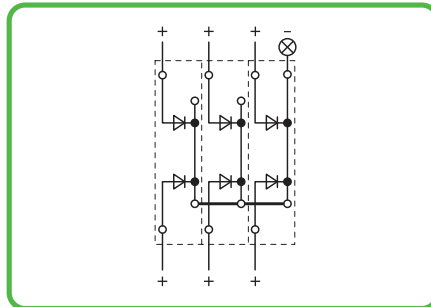
Recovery diodes can be created using the following terminal blocks:
281-633/281-410 or
281-633/281-411



Lamp test circuits can be created using the following terminal blocks:
281-636/281-487 or
281-636/281-488



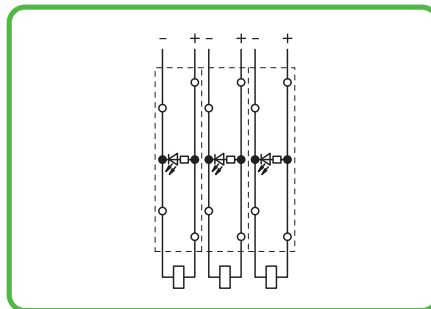
Lamp test circuits can be created using the following terminal blocks:
281-635/281-492 or
281-635/281-491



Collective fault signals can be created using the following terminal blocks:
281-635/281-489 or
281-635/281-490

Double-deck diode terminal blocks

have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits. Using LED terminal blocks, monitoring units can be designed, e.g., for control and operating circuits. The terminal blocks provide high-density wiring, while maintaining a width of only 6 mm/0.236 in.



Circuit-related voltage indications can be created using the following terminal blocks:
281-634/281-434 or
281-634/281-413

① Strip length, see packaging or instructions.

281 Series Accessories

Appropriate marking system:
WMB (see Section 13)

End and intermediate plate, 2.5 mm thick			
orange	281-341	100	(4x25)
gray	281-340	100	(4x25)

Insulation stop,			
5 pcs/strip,			
0.08 - 0.2 mm ² "s" (0.14 mm ² "f-st")			
white	281-470	200	(8x25)

Insulation stop,			
5 pcs/strip,			
0.25 - 0.5 mm ²			
light gray	281-471	200	(8x25)

Insulation stop,			
5 pcs/strip,			
0.25 - 1.5 mm ²			
dark gray	281-472	200	(8x25)

Comb-style jumper bar, insulated,			
$I_N = I_N$ terminal block			
2-way	281-482	100	(4x25)
3-way	281-483	100	(4x25)
5-way	281-485	100	(4x25)
10-way	281-490	50	(2x25)

Alternate comb-style jumper bar,			
insulated,			
$I_N = I_N$ terminal block			
2-way	281-492	100	(4x25)

Operating tool, of insulating material			
2-way	280-432		1
3-way	280-433		1
5-way	281-440		1

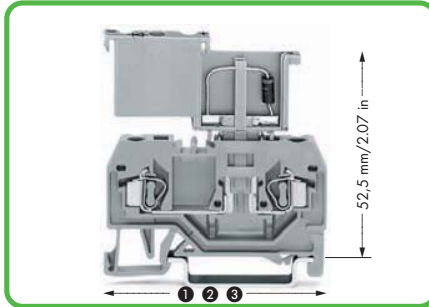
Wire commoning chain, 50 connections,			
insulated, I_N 8 A			
black	210-103		1

Wire commoning chain, 50 connections,			
insulated, I_N 8 A			
blue	210-123		1

Pluggable Diode Modules on Carrier Terminal Blocks 2.5 mm² 280 Series



Diode module with 1N4007 diode
 U_N 250 V, U_{RM} 1000 V
 I_N 1 A
 Plug width 5 mm / 0.197 in

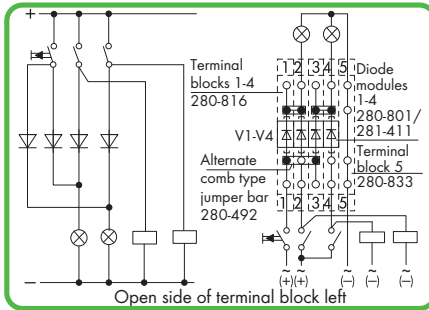
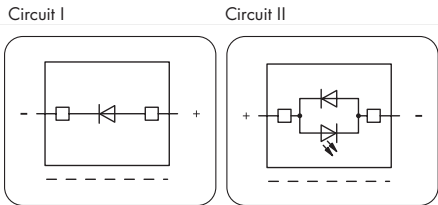


These diode have been designed for use in lamp test circuits or collective fault indicating systems, and offer the following advantages:

- Separation into functional and wiring level
- Polarized direction of switching
- Quick and easy exchange of modules
- High density with only 5 mm/0.197 in width of terminal block and module.

For terminal blocks with side marking, see www.wagocatalog.com

- ① Length of 280-916: 53 mm / 2.09 in
2-conductor carrier terminal block, front-entry
- ② Length of 280-610: 64 mm / 2.52 in
3-conductor carrier terminal block, front-entry
- ③ Length of 280-816: 75 mm / 2.95 in
4-conductor carrier terminal block, front-entry
- ④ See application notes for:
Insulation stop, page 199
Comb-style jumper bar, page 200
Operating tool, page 200



Lamp test circuit with blocking diodes

Accessories

Insulation stop,			
④	5 pcs/strip, 0.08 - 0.2 mm ² "s" (0.14 mm ² "f-sp") white	280-470	200 (8x25)

Insulation stop,			
④	5 pcs/strip, 0.25 - 0.5 mm ² light gray	280-471	200 (8x25)

Insulation stop,			
④	5 pcs/strip, 0.75 - 1 mm ² dark gray	280-472	200 (8x25)

Comb-style jumper bar, insulated,			
④	$I_N = I_N$ 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

Wire commoning chain, 50 connections,			
	insulated, I_N 8 A blue	210-123	1

Item No.	Pack. Unit
Diode module, with 1N4007 diode, 5 mm wide	280-801/281-411 100
Diode module, with recovery diode 1N4007, red LED, 5 mm wide	
● 24 VDC	280-801/281-420 100
● 48 VDC	280-801/281-421 100

Carrier Term. Blocks and Accessories

Appropriate marking system: WMB (see Section 13)

2-conductor carrier terminal block,			
①	0.08 - 2.5 mm ² / AWG 28 - 14, Terminal block width 5 mm / 0.197 in gray	280-916	100

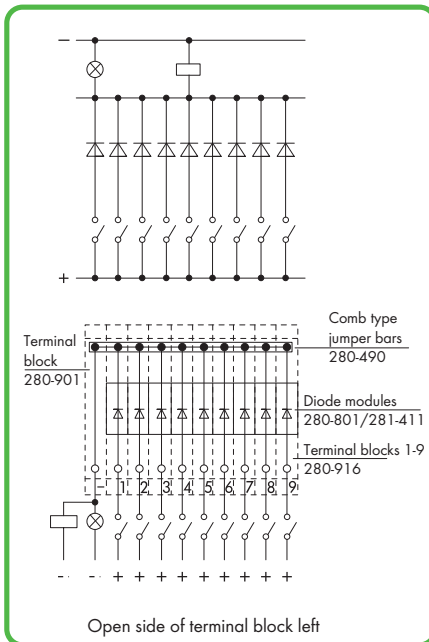
End and intermediate plate, 2.5 mm thick			
	orange	280-309	100 (4x25)
	gray	280-308	100 (4x25)

3-conductor carrier terminal block,			
②	0.08 - 2.5 mm ² / 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,			
③	0.08 - 2.5 mm ² / AWG 28 - 14, Terminal block width 5 mm / 0.197 in gray	280-816	100

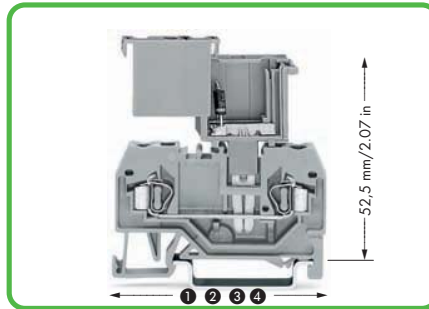
End and intermediate plate, 2.5 mm thick			
	orange	280-315	100 (4x25)
	gray	280-314	100 (4x25)



Diode gate for collective fault indication

Pluggable Diode Modules on Through Terminal Blocks 2.5 mm² 280 Series

Diode module
with 1N4007 diode
 U_N 250 V, U_{RM} 1000 V
 I_N 1 A
Plug width 10 mm / 0.394 in



Similar to a push-in jumper, these diode modules are simply pushed into the contact slots of the current bars for two adjacent through terminal blocks.

This offers the following advantages:

- The modules are suitable for all 280 Series through terminal blocks.
- Easily retrofit terminal blocks with diode modules.

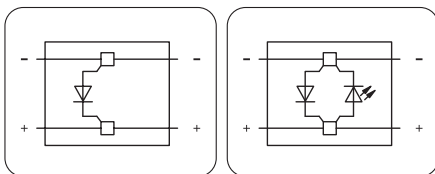
For terminal blocks with side marking, see www.wagocatalog.com




* AWG 12: THHN, THWN

- 1 Length of 280-901: 53 mm / 2.09 in
2-conductor through terminal block, front-entry
- 2 Length of 280-681: 64 mm / 2.52 in
3-conductor through terminal block, front-entry
- 3 Length of 280-833: 75 mm / 2.95 in
4-conductor through terminal block, front-entry
- 4 Length of 280-101: 42.5 mm / 1.67 in
2-conductor through terminal block, side-entry
- 5 See application notes for:
Insulation stop, page 199
Comb-style jumper bar, page 200
Operating tool, page 200

Circuit I




Circuit II



Item No.	Pack. Unit
Diode module, with 1N4007 diode, 10 mm wide	
 280-803/281-411	50
Diode module, with recovery diode 1N4007, additional LED, 10 mm wide	
 24 VDC 280-803/281-420	50
 48 VDC 280-803/281-421	50

Through Term. Blocks and Accessories

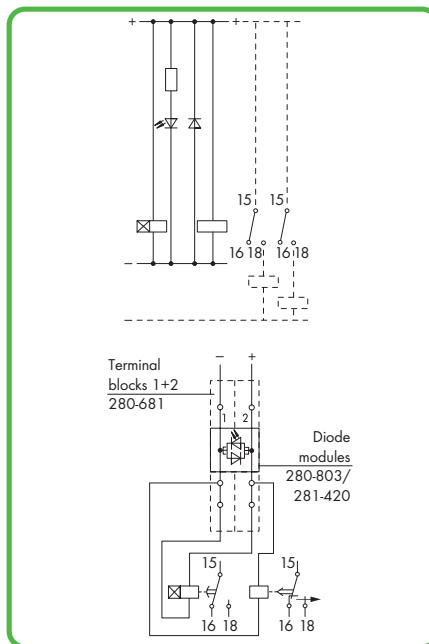
Appropriate marking system:
WMB (see Section 13)

2-conductor through terminal block,  1	0.08 - 2.5 mm ² / AWG 28 - 12 *, Terminal block width 5 mm / 0.197 in gray 280-901	100
End and intermediate plate, 2.5 mm thick	orange 280-309 gray 280-308	100 (4x25) 100 (4x25)
3-conductor through terminal block,  2	0.08 - 2.5 mm ² / AWG 28 - 12 *, Terminal block width 5 mm / 0.197 in gray 280-681	100
End and intermediate plate, 2.5 mm thick	orange 280-326 gray 280-324	100 (4x25) 100 (4x25)
4-conductor through terminal block,  3	0.08 - 2.5 mm ² / AWG 28 - 12 *, Terminal block width 5 mm / 0.197 in gray 280-833	100
End and intermediate plate, 2.5 mm thick	orange 280-315 gray 280-314	100 (4x25) 100 (4x25)



Further advantages:


- Separation into functional and wiring level
- Modules can be replaced quickly by other types of modules




Free-wheeling diode and voltage check

Accessories


2-conductor through terminal block,

 4	0.08 - 2.5 mm ² / AWG 28 - 12 *, Terminal block width 5 mm / 0.197 in gray 280-101	100
---	--	-----


End and intermediate plate, 2.5 mm thick

	orange 280-302 gray 280-301	100 (4x25) 100 (4x25)
---	--	--------------------------


Insulation stop,

 5	5 pcs/strip, 0.08 - 0.2 mm ² "s" (0.14 mm ² "f-st") white 280-470	200 (8x25)
---	--	------------

Insulation stop,

 5	5 pcs/strip, 0.25 - 0.5 mm ² light gray 280-471	200 (8x25)
---	---	------------


Insulation stop,

 5	5 pcs/strip, 0.75 - 1 mm ² dark gray 280-472	200 (8x25)
---	--	------------


Adjacent jumper, insulated,

	$I_N = I_N$ terminal block gray 280-402	200 (8x25)
---	---	------------

Wire commoning chain, 50 connections,

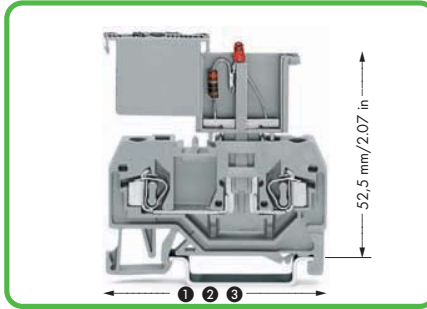
	insulated, I_N 8 A black 210-103	1
---	--	---

Wire commoning chain, 50 connections,

	insulated, I_N 8 A blue 210-123	1
---	---	---

Pluggable LED and Neon Indicator Modules on Carrier Terminal Blocks 2.5 mm² 280 Series

LED module
 I_N 5.6 mA; I_F 25 mA
Neon indicator module
 I_N 0.5 mA
 Plug width 5 mm / 0.197 in



The monitoring of control and operating current circuits with LED and neon indicator modules on rail-mounted terminal blocks offers various advantages to the user:

- No additional cost for assembly and wiring
- Separation into functional and wiring level
- Modules can be replaced quickly and easily by other types of modules

- 1 Length of 280-916: 53 mm / 2.09 in
2-conductor carrier terminal block, front-entry
- 2 Length of 280-610: 64 mm / 2.52 in
3-conductor carrier terminal block, front-entry
- 3 Length of 280-816: 75 mm / 2.95 in
4-conductor carrier terminal block, front-entry

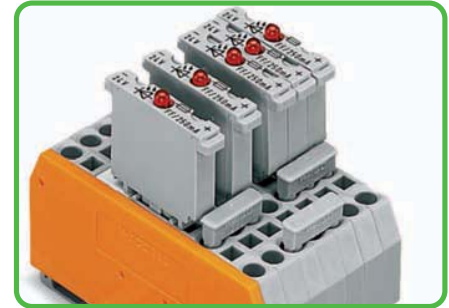
Item No.	Pack. Unit
LED module, with red LED, 5 mm wide	
○ 24 VDC 280-801/281-413	100
○ 48 VDC 280-801/281-414	100
LED module, with red LED, 5 mm wide	
○ 24 V AC/DC 280-801/281-415	100
○ 48 V AC/DC 280-801/281-416	100
Neon indicator module, 5 mm wide	
○ 120 V AC/DC 280-801/281-418	100
○ 230 V AC/DC 280-801/281-417	100
Carrier terminal blocks, see page 264	



Further advantages:

- Polarized direction of switching
- High density with only 5 mm/0.197 in width of terminal block and module

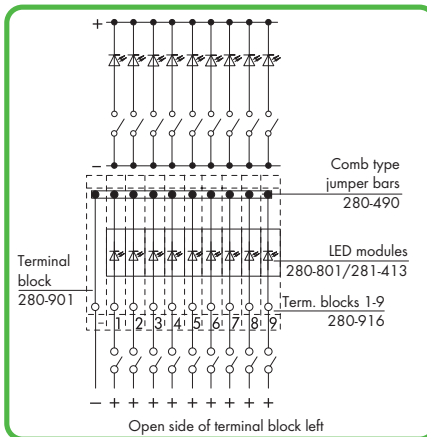
For terminal blocks with side marking, see www.wagocatalog.com



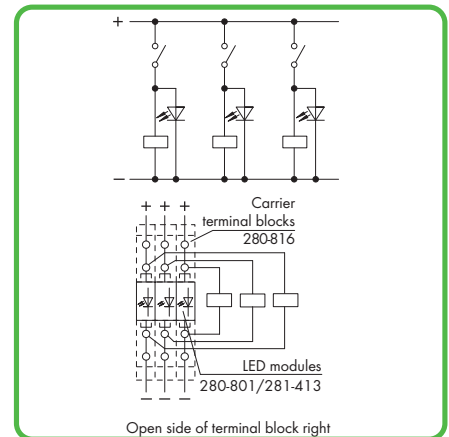
Carrier terminal blocks with component plugs
 Alternate comb-style jumper bars
 3-way, comb-style jumper bar

Circuit Diagrams

LED module	24 VDC 280-801/281-413	100
	48 VDC 280-801/281-414	
LED module	24 V AC/DC 280-801/281-415	100
	48 V AC/DC 280-801/281-416	
Neon indicator module	120 V AC/DC 280-801/281-418	100
	230 V AC/DC 280-801/281-417	



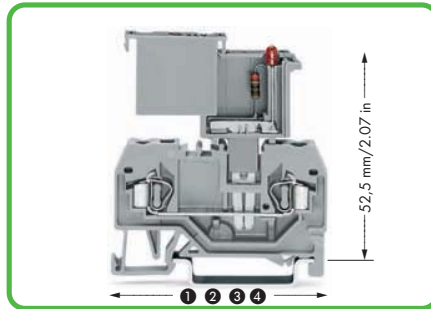
LED gate for collective fault indication - individual display



Voltage control refers to current circuits

Pluggable LED and Neon Indicator Modules on Through Terminal Blocks 2.5 mm² 280 Series

LED module
 I_N 5.6 mA; I_F 25 mA
Neon indicator module
 I_N 0.5 mA
 Plug width 10 mm / 0.394 in



Similar to a push-in jumper, these LED and neon indicator modules are simply pushed into the current bar contact slots of two adjacent through terminal blocks. This offers the following advantages:

- The modules are suitable for all 280 Series through terminal blocks
- Easily retrofit terminal blocks with diode modules

Further advantages:

- Separation into functional and wiring level
- Modules can be replaced quickly by other types of modules

- 1 Length of 280-901: 53 mm / 2.09 in
2-conductor through terminal block, front-entry
- 2 Length of 280-681: 64 mm / 2.52 in
3-conductor through terminal block, front-entry
- 3 Length of 280-833: 75 mm / 2.95 in
4-conductor through terminal block, front-entry
- 4 Length of 280-101: 42.5 mm / 1.67 in
2-conductor through terminal block, side-entry

For terminal blocks with side marking, see www.wagocatalog.com



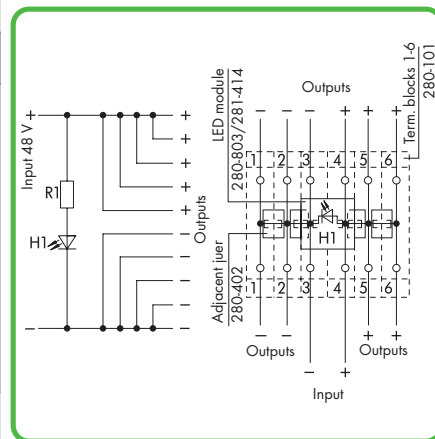
Diode and LED modules on through terminal blocks with side marking

Item No.	Pack. Unit
LED module, with red LED, 10 mm wide	
24 VDC 280-803/281-413	50
48 VDC 280-803/281-414	50
LED module, with red LED, 10 mm wide	
24 V AC/DC 280-803/281-415	50
48 V AC/DC 280-803/281-416	50
Neon indicator module, 10 mm wide	
120 V AC/DC 280-803/281-418	50
230 V AC/DC 280-803/281-417	50

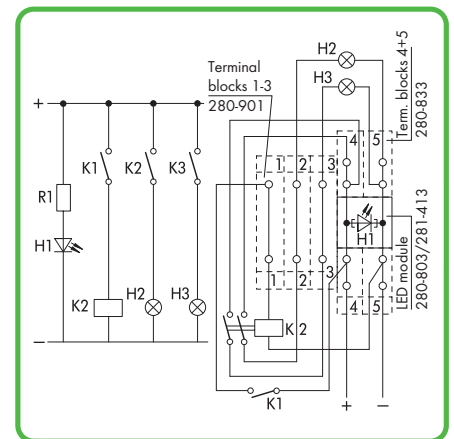
Through terminal blocks, see page 265

Circuit Diagrams

LED module	24 VDC 280-803/281-413	50
	48 VDC 280-803/281-414	50
LED module	24 V AC/DC 280-803/281-415	50
	48 V AC/DC 280-803/281-416	50
Neon indicator module	120 V AC/DC 280-803/281-418	50
	230 V AC/DC 280-803/281-417	50



Multiple outputs with indicator lamp



Control unit