

**WAGO Rail-Mount Terminal Blocks Classic** 

282 Series

## CAGE CLAMP<sup>®</sup>

# **WAGO Rail-Mount Terminal Blocks Classic**

# Side-Entry Wiring



Page
Through and Ground Conductor Terminal Blocks 279 ... 283 Series 580
0.08 ... 16 mm² (28 ... 6 AWG)



Disconnect/Test Terminal Blocks and Ground Conductor Disconnect 282 Series 584
Terminal Blocks

0.2 ... 6 mm<sup>2</sup> (24 ... 10 AWG)



Fuse Terminal Blocks 0.2 ... 6 mm<sup>2</sup> (24 ... 10 AWG)

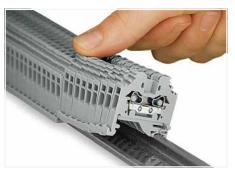


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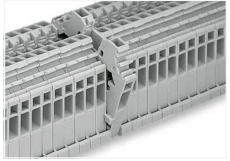


# Rail-Mount Terminal Blocks Classic; Side-Entry Wiring 279 ... 284 Series

# Description and Installation



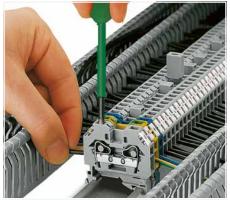
Snapping side-entry rail-mount terminal blocks onto the DIN-rail.



Quick assembly keys prevent reverse mounting.



Removing a terminal block from the assembly.



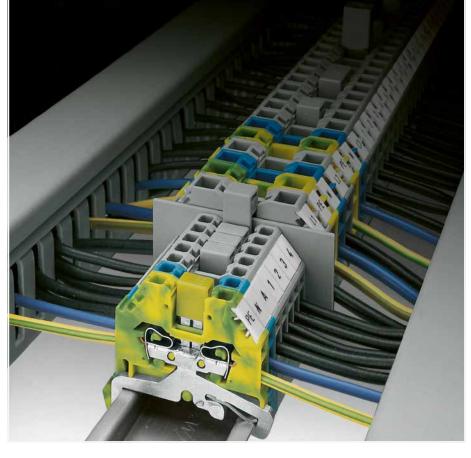
CAGE CLAMP® connection

Inserting a conductor.

With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross section.



Testing with a test plug – Picture shows a test plug adapter (209-170).





Commoning using an adjacent jumper (280-402). Push jumpers down until fully inserted.



Commoning side-entry rail-mount terminal blocks via step-down jumpers.
Push down the step-down jumper until fully inserted.



CAGE CLAMP® terminates the following copper conductors: solid "s"



stranded "st"

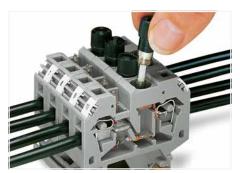


fine-stranded "f-st", also with tinned single strands

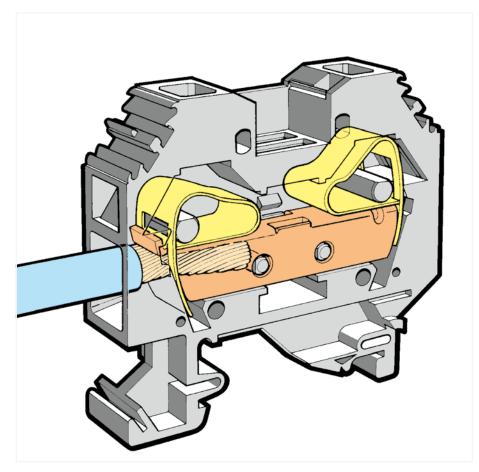
# CAGE CLAMP®



Suitable for all DIN-35 rails



Replacing a fuse.





Shifting the disconnect slide link of a disconnect/test terminal block.



When operating the handles beyond the locked position, the ratchet allows the tool to open and be removed from the terminal block.



Labeling via WMB Multi Marking System.



fine-stranded, tip-bonded



fine-stranded, with ferrule (gastight crimped)



fine-stranded, with pin terminal (gastight crimped)



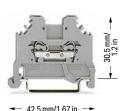
# **Through and Ground Conductor Terminal Block**

1.5 mm<sup>2</sup>; 279 Series and 2.5 mm<sup>2</sup>; 280 Series and 4 mm<sup>2</sup>; 281 Series and 6 mm<sup>2</sup>; 282 Series

Technical Data		
0.08 1.5 mm <sup>2</sup>	28 16 AWG	
	600 V, 10 A <b>RL</b>	
I <sub>N</sub> 18 A	600 V, 15 A@	
Terminal block width: 4 mm / 0.157 inch		
8 9 mm / 0.31 0	35 inch	

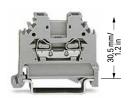
Technical Data		
0.08 2.5 mm <sup>2</sup>	28 12 AWG*	
800 V / 8 kV / 3 1	600 V, 20 A <b>FL</b>	
I <sub>N</sub> 24 A	600 V, 20 A®	
Terminal block width: 5 mm / 0.197 inch		
89 mm / 0.31 0.35 inch		

Technical Data	
0.08 4 mm <sup>2</sup>	28 12 AWG
	600 V, 20 A 👊
I <sub>N</sub> 32 A	600 V, 25 A@
Terminal block width: 6 mm /	
9 10 mm / 0.35	0.39 inch



	,.		
ouah	termina	l block	

2-conductor through terminal block			
Color	Pack. Unit		
gray	279-101	100	
blue	279-104 2	100	



2-conductor through terminal block			
Color	Item No.	Pack. Unit	
gray	280-101	100	
blue	280-104 2	100	

← 42,5 mm/1.67 in →

2-conductor ground to	erminal block	
green-yellow	280-107	100

280-302

280-301

280-322

280-332

280-402

280-409

100 (25)

100 (25)

100 (25)

100 (25)

200 (25)

200 (25)

100 (25)

Accessories: item-specific

End and intermediate plate; 2.5 mm thick orange

gray

Separator; oversized; 2 mm thick

orange

Adjacent jumper; insulated;  $I_N = I_N$  terminal block

Alternate jumper; insulated;  $I_N = I_N$  terminal block

yellow-green 280-422

gray

arav

gray



or through t	erminal block	
	Item No.	Pack. Unit

100

100 (25)

50 (25)

Color	item No.	Pack. UI
gray	281-101	100
blue	281-104 2	100

2-conductor ground terminal block

gray

gray

areen-vellow

Accessories	s; item-specifi	С		
End and intermediate plate; 2.5 mm thick				
	orange	280-302	100 (25)	
100	grav	280-301	100 (25)	

5

Separator; oversized; 2 mm thick				
	orange	280-322	100 (25)	
	gray	280-332	100 (25)	

Adjacent jumper; insulated; I <sub>N</sub> 15 A				
life.	gray	279-402	200 (25)	
11	yellow-green	279-422	200 (25)	
-846				

Alternate ju	mper; insulat	ed; I <sub>N</sub> 15 A		
17	gray	279-409	100 (25)	

-114-			
Alternate ju	mper; insulate	ed; I <sub>N</sub> 15 A	
	gray	279-409	100 (25)
		ated; commons 1 5/1.5 mm² (12/14	

Step-down intermediate plate; 1 mm thick; only for 4, 2.5

Protective warning marker; with black high-voltage

Test plug adapter; 8.3 mm wide; for 4 mm Ø test plug; for

Test plug adapter; 5 mm wide; for 210-137 Test Plug

(2.3 mm Ø); for 1.5 ... 4 mm² terminal blocks

gray

and 1.5 mm² terminal blocks

symbol; for 5 terminal blocks

1.5 ... 10 mm² terminal blocks

gray

yellow

gray

284-414

281-333

279-405

209-170

280-404

50 (25)

100 (25)

100 (25)

50 (25)

100 (25)

St	ep-down	jumper; insul	ated; commons 1	0/6 mm <sup>2</sup>
(8/10 AWG) down to 4/2.5/1.5 mm <sup>2</sup> (12/14/16 AWG);				
I <sub>N</sub>	15 A			
		grav	284-414	50 (25)





Step-down intermediate plate; 1 mm thick; only for 4, 2.5				
and 1.5 mm² terminal blocks				
	gray	281-333	100 (25)	
Protective warning marker; with black high-voltage				

and 1.5 mm <sup>2</sup> terminal block		; only for 4, 2.5		
gray	281-333	100 (25)		
Protective warning marker; with black high-voltage symbol; for 5 terminal blocks				

<b>GENERAL</b>	yellow	280-405	100 (25)
Test plug adap 1.5 10 mm <sup>2</sup>		wide; for 4 mm @ cks	test plug; for
Ţ		209-170	50 (25)
		ride; for 210-137 n² terminal block	

gray

280-404

100 (25)

2-conductor through terminal block				
Color	Item No.	Pack. Unit		
gray	281-101	100		
blue	281-104 2	100		

- 42,5 mm/1.67 in →

9.00 70.			
Accessories;	item-specif	ic	
End and inter	mediate plat	te; 3 mm thick	
	orange	281-302	100 (25)

201-107

A 5	orarigo	201 002	100 (20)	
	gray	281-301	100 (25)	
Separator; o	oversized; 2 mr	n thick		
	orange	281-322	100 (25)	

281-332

Adjacent jump	oer; insulated; I <sub>N</sub>	= I <sub>N</sub> terminal bl	ock
113	gray	281-402	200 (25)
11	yellow-green	281-422	200 (25)

I	yellow-green	281-422	200 (25)	
Alternate jumper; insulated; $I_N = I_N$ terminal block				
See .	gray	281-409	100 (25)	

Step-down jumper; insulated; commons 10/6 mm² (8/10 AWG) down to 4/2.5/1.5 mm<sup>2</sup> (12/14/16 AWG); I<sub>N</sub> 15 A

Step-down intermediate plate; 1 mm thick; only for 4, 2.5 and 1.5 mm² terminal blocks

284-414

281-333 100 (25) gray

Step-down jumper; insulated; commons 10/6 mm<sup>2</sup> (8/10 AWG) down to 6/4 mm² (10/12 AWG);  $\rm I_N$  30 A 284-413

Step-down jumper; insulated; commons 16 mm² (6 AWG) down to 4 mm² (12 AWG);  $I_N$  32 A 283-414 50 (25)

Protective warning marker; with black high-voltage symbol; for 5 terminal blocks 100 (25) yellow 281-405

580



## CAGE CLAMP®

#### **Technical Data**

0.2 ... 6 mm<sup>2</sup> 24 ... 10 AWG 800 V / 8 kV / 3 **1** 600 V, 30 A**7**\(\mathbf{X}\) 1<sub>N</sub> 41 A 600 V, 10 A@

Terminal block width: 8 mm / 0.315 inch

 $\blacksquare$  12 ... 13 mm / 0.47 ... 0.51 inch



**←** 46,5 mm/1.83 in —

2-conductor through terminal block			
Color	Item No.	Pack. Unit	
gray	282-101	50	
blue	282-104 2	50	

2-conductor ground terminal block			
green-yellow 282-107 50			

Accessories; item-specific		
	End and intermediate plate; 4 mm thick	

	orange	282-302	100 (25)
6	gray	282-301	100 (25)

Separator; oversized; 2 mm thick
----------------------------------

orange	282-322	100 (25)
gray	282-332	100 (25)

Adiacent	iumper: i	insulated;	In 41 A	١

life:	gray	282-402	100 (25)
11	yellow-green	282-422	100 (25)
-848-1			

282-409

100 (25)

#### Alternate jumper; insulated; I<sub>N</sub> 41 A



Step-down jumper; insulated; commons 10/6 mm<sup>2</sup> (8/10 AWG) down to 6/4 mm<sup>2</sup> (10/12 AWG); I<sub>N</sub> 30 A



Step-down cover plate; 1 mm thick

gray	284-333	100 (25)
orange	284-343	100 (25)

Protective warning marker; with black high-voltage symbol; for 5 terminal blocks



yellow 282-405 100 (25)

Test plug adapter; 8.3 mm wide; for 4 mm Ø test plug; for  $1.5 \dots 10 \text{ mm}^2$  terminal blocks



B-type test plug module; snaps together; 8 mm wide



gray

709-310

100 (25)

#### \*12 AWG: THHN, THWN

- 800 V = rated voltage
   8 kV = rated impulse voltage
   3 = pollution degree
   (see Section 15)
- 2 Terminal blocks with a blue insulated housing are suitable for Ex i applications.

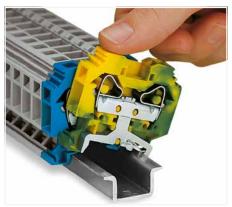
See application notes for: Step-down jumper, page 541 Test plug module, page 381 Marking, from page 640

Approvals and corresponding ratings, visit www.wago.com

DIN-Rail	Item No.	Current [A]	Acc. to mm²/AWGCu
DIN 35 x 7.5 (steel)	110.	1/4	
slotted	210-112	76	16/6
unslotted	210-113	76	16/6
DIN 35 x 15 (steel)			
1.5 mm thick	210-114	125	35/2
2.3 mm thick	210-118	125	35/2
DIN 35 x 7.5 (AI)			
unslotted	210-196	76	16/6
DIN 35 x 15 (Cu)			
2.3 mm thick	210-198	309	150/6/0
Current applies to r	ails of 1 m/3'3"	length	

When using standard DIN-rails as ground conductor busbars, please refer to the maximum current capacities listed above.

Steel DIN-rails are not suited for PEN (ground and N-conductor) applications per EN 60947-7-2 (VDE 0611, Part 3).



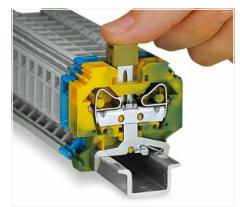
Snapping a terminal block onto the DIN-rail.

Ground conductor terminal blocks snap onto the rail in the same way as through terminal blocks, but automatically make a direct electrical connection to the rail.

After mounting, sliding the blocks on the rail is not possible.



Removing a terminal block from the DIN-rail. When mounting on the rail, ensure that open sides of terminal blocks face in the same direction. Both mounting feet and removal slots are on the same side for all terminal blocks, making it possible to visually ensure blocks are facing in same direction.



Push jumper down until fully inserted.
Commoning ground conductor terminal blocks with through terminal blocks is possible in one direction only (via rear side of terminal block) using adjacent jumpers.
Recommends using yellow-green adjacent jumpers in addition to the required marking of these blocks.





# **Through and Ground Conductor Terminal Block** 10 mm<sup>2</sup>; 284 Series and 16 mm<sup>2</sup>; 283 Series

Technical Data			
	24 8 AWG		
	600 V, 50 A <b>93</b>		
I <sub>N</sub> 57 A	600 V, 65 A®		
Terminal block width: 10 mm / 0.394 inch			
1213 mm / 0.47 0.51 inch			

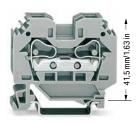
**Technical Data** 0.2 ... 16 mm<sup>2</sup> 24 ... 6 AWG 800 V / 8 kV / 3 1 600 V, 65 A 🗫  $I_N 76 A$ 600 V, 90 A@ Terminal block width: 12 mm / 0.472 inch



1 800 V = rated voltage 8 kV = rated impulse voltage 3 = pollution degree (see Section 15)

> See application notes for: Step-down jumper, page 541 Test plug module, page 381 Marking, from page 640

Approvals and corresponding ratings, visit www.wago.com



2-conductor through terminal block			
Color	Item No.	Pack. Unit	
gray	284-101	50	
blue	284-104 2	50	

2-conductor ground terminal block				
	green-yellow	284-107	50	

Accessories; item-specific			
End and intermediate plate; 2.5 mm thick			
	orange	284-302	100 (25)
	gray	284-301	100 (25)

Separator; oversized; 2 mm thick				
	orange	284-322	100 (25)	
	gray	284-332	100 (25)	
·				

Adjacent jumper; insulated; I <sub>N</sub> 57 A			
lik.	gray	284-402	100 (25)
11	yellow-green	284-422	100 (25)
-308-			

Alternate jumper; insulated; I <sub>N</sub> 57 A				
17	gray	284-409	50 (25)	

		ated; commons 10 mm² (10/12 AWG)	
9	gray	284-413	50 (25)

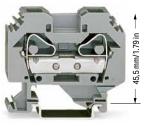
Step-down cover plate; 1 mm thick				
	gray	284-333	100 (25)	
	orange	284-343	100 (25)	
Protective warning marker: with black high-voltage				

symbol; for 5	terminal blocks	Ŭ	Ŭ
	yellow	284-405	50 (25)

The same of the sa
Test plug adapter; 8.3 mm wide; for 4 mm Ø test plug; for

1.5 10 mm² terminal blocks		
0	209-170	50 (25)

B-type test	plug module	; snaps together; 8	mm wide
F	gray	709-310	100 (25)



2-conductor through terminal block			
Color	Item No.	Pack. Unit	
gray	283-101	50	
blue	283-104 2	50	

58 mm/2.28 in

2-conductor ground terminal block				
green-yellow	283-107	50		
Accessories; item-specific				

,		, opco	•		
End and intermediate plate; 4 mm thick					
4		orange	283-302	50 (25)	
		gray	283-301	50 (25)	

Separator; oversized; 2 mm thick				
	orange	283-322	50 (25)	
	gray	283-332	50 (25)	

Adjacent jumper; insulated; I <sub>N</sub> 70 A					
17	gray	283-402	50 (25)		
	yellow-green	283-422	50 (25)		
-344					

Alternate ju	mper; insulat	ed; I <sub>N</sub> 76 A		
	gray	283-409	50 (25)	

Step-down jumper; insulated; commons 16 mm<sup>2</sup> (6 AWG) down to 4 mm<sup>2</sup> (12 AWG); I<sub>N</sub> 32 A

		-71 11 -		
10	gray	283-414	50 (25)	
100				

	Step-down cover plate; 1 mm thick					
	-	gray	283-333	100 (25)		
	orange	283-335	100 (25)			

symbol; for 5		cks	i-voitage
	vellow	283-405	50 (25)

Symbol, for 5	terrilliai biock	.5	
1000	yellow	283-405	50 (25)

	nm² terminal bl	n wide; for 4 mm ocks	Ø test plu	g; ro
P	gray	283-404	25	



Step-down jumpers common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point.

Step-down jumpers are simply pushed down for full insertion, similar to adjacent jumpers. Commoning may be  $\frac{1}{2} \int_{\mathbb{R}^{n}} \frac{1}{2} \int_{\mathbb{R}^{n}} \frac{1}$ made in either direction using the special thin end plate to cover the open side. Additional through terminal blocks having a smaller cross-section may be commoned using adjacent jumpers.

In this case, pay attention that:

The total current of the outgoing circuits does not exceed the nominal current of the step-down jumper.

The standard or special thin cover plate is installed on the open side of the larger block.

# Step-Down Jumper; for Side-Entry Through Terminal Blocks Installation





Side-entry terminal blocks cannot be commoned with front-entry terminal blocks via step-down jumpers. For commoning front-entry terminal blocks via stepdown jumpers, see page 286.

Step-down jumper; insulated; commons 10/6 mm $^2$  (8/10 AWG) down to 4/2.5/1.5 mm $^2$  (12/14/16 AWG);

Color	Item No.	Pack. Unit
gray	284-414	50 (25)

Step-down jumper; insulated; commons 10/6 mm<sup>2</sup>

(8/ 10 AWG) down to 6/4 mm² (10/ 12 AWG); I <sub>N</sub> 30 A				
gray	284-413	50 (25)		

Accessories; item-specific					
Step-down cover plate; 1 mm thick					
gray 284-333 100 (25)					
	orange	284-343	100 (25)		

Step-down intermediate plate; 1 mm thick; only for 4, 2.5

and 1.5 mm<sup>2</sup> terminal blocks 281-333 100 (25) gray



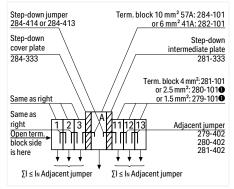
Step-down jumper; insulated; commons 16 mm <sup>2</sup> (6 AWG)
down to 4 mm <sup>2</sup> (12 AWG): I <sub>N</sub> 32 A

Color	Item No.	Pack. Unit
gray	283-414	50 (25)



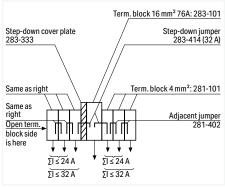


Commoning from 6 mm<sup>2</sup>/10 AWG (282 Series) to 1.5 mm<sup>2</sup>/16 AWG (279 Series) rail-mount terminal blocks via step-down jumpers.



Assembly example: Commoning from 10/6 mm<sup>2</sup> (8/10 AWG) to 4/2.5/1.5 mm<sup>2</sup> (12/14/16 AWG) rail-mount terminal blocks via step-down jumper (284-414).

① Commoning with step-down jumpers from 10 mm² (284-101) to 2.5 mm2 (280-101) or 1.5 mm2 (279-101) terminal blocks via the terminal block rear side is not possible (see example: terminal block A to 11).



Assembly example: Commoning from 16 mm<sup>2</sup>/6 AWG to 4 mm<sup>2</sup>/12 AWG rail-mount terminal blocks via step-down jumper (283-414).



Commoning from 16 mm<sup>2</sup>/6 AWG (283 Series) to 4 mm<sup>2</sup>/12 AWG (281 Series) rail-mount terminal blocks via step-down jumpers.

# Disconnect/Test Terminal Block 6 mm<sup>2</sup>; 282 Series

#### 

I<sub>N</sub> 41 A 300 V, 40 A**®**Terminal block width: 8 mm / 0.315 inch
■ 21 ... 13 mm / 0.47 ... 0.51 inch

#### 

□ 12 ... 13 mm / 0.47 ... 0.51 inch

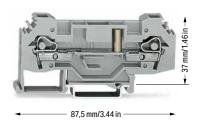


Disconnect/test terminal block; with 4 mm Ø test sockets			
Color Item No. Pack. Unit			
gray	282-131	25	



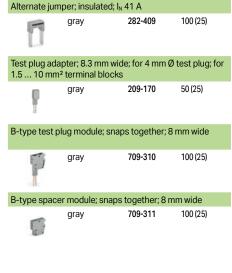
Through terminal block		
Color	Item No.	Pack. Unit
gray	282-133	25

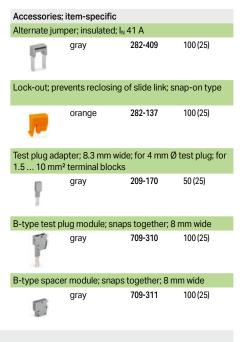
Accessories; item-specific



Disconnect/test terminal block; without test sockets		
Color	Item No.	Pack. Unit
gray	282-135	25

Accessorie	s; item-specifi	С	
Alternate jumper; insulated; I <sub>N</sub> 41 A			
	gray	282-409	100 (25)
Lock-out; p	revents reclosi	ng of slide link; s	snap-on type
10	orange	282-137	100 (25)
	lapter; 8.3 mm n² terminal blo	wide; for 4 mm ( cks	Ø test plug; for
Į.	gray	209-170	50 (25)
B-type test	plug module; s	naps together;	3 mm wide
P	gray	709-310	100 (25)





## Accessories; 282 Series

gray

End and intermediate plate; 4 mm thick							
	gray	282-315	50 (25)				
	orange	282-314	50 (25)				
Protective warning marker; with black high-voltage							

B-type spacer module; snaps together; 8 mm wide

709-311

symbol; for 5 terminal blocks

symbol; for 5	terminai biocks		
1000	yellow	282-405	100 (25)

Adjacent jumper; insulated; I <sub>N</sub> 41 A					
G	gray	282-402	100 (25)		

Appropriate marking system: WMB

## CAGE CLAMP®

 Technical Data

 0.2 ... 6 mm²
 24 ... 10 AWG

Terminal block width: 16 mm / 0.63 inch 22 ... 13 mm / 0.47 ... 0.51 inch



▼ 87,5 mm/3.44 in — ▶

Ground conductor disconnect terminal block; gray				
Color Item No. Pack. U				
O 24 V	282-140	12		
48 V	282-141	12		
○ 120 V	282-138	12		
O 230 V	282-139	12		

### Accessories; item-specific

orange

Lock-out; prevents reclosing of slide link; snap-on type

282-137

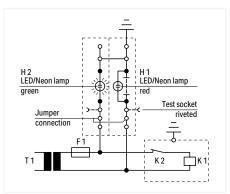
100 (25)



400 V = rated voltage
 6 kV = rated impulse voltage
 3 = pollution degree
 (see Section 15)

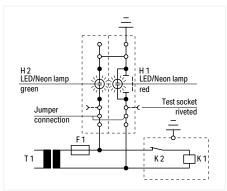
See application notes for: Test plug module, page 381 Marking, from page 640

Approvals and corresponding ratings, visit www.wago.com

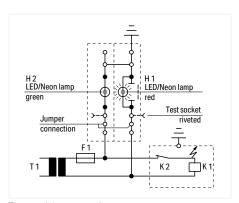


#### Operation

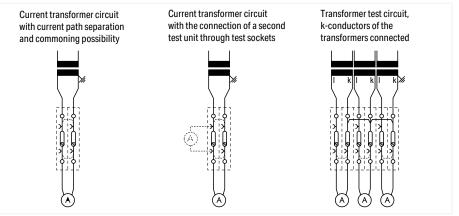
Slide link closed, auxiliary circuit grounded, green LED/neon lamp illuminates.



Test condition – no grounding Slide link open, auxiliary circuit not grounded.



Test condition – grounding Slide link open, auxiliary circuit not grounded, red LED/neon lamp illuminates.



IEC 60204/DIN VDE 0113 "Safety of machinery – Electrical equipment of machines – Part 1: General requirements," Section 9.4.3.1:

Ground faults on control circuits must not cause unintentional starting, hazardous movements, or prevent stopping of the machine.

In order to fulfill this requirement, a connection to the protective bonding circuit must be provided in accordance with Section 8.2 and the devices must be connected as described in Section 9.1.4. Control circuits fed from a transformer and not connected to the protective bonding circuit must be provided with an insulation monitoring device (e.g., residual current device), which either indicates a ground fault or interrupts the circuit automatically after a ground fault. In the case of electronic circuits, the connection of one side of the control circuit to the protective bonding circuit in accordance with Section 9.1.4 can prevent unintentional operation. When this does not help, or if due to other reasons that electronic circuits cannot be connected to the protective bonding circuit, other measures must be taken to achieve the same level of safety.

Multipole control switches that interrupt all live conductors must be used where the control circuit is directly connected between the phase conductors of the supply or between a phase conductor and a neutral conductor, which is either not grounded or grounded through a high impedance. This is required for starting or stopping machine functions, which can cause a hazardous situation including: damaging the machine or halting work in progress in the event of unintentional starting or failure to stop.

# Fuse Terminal Block 6 mm<sup>2</sup>: 282 Series

#### **Technical Data**

Terminal block width: 13 mm / 0.512 inch

2 12 ... 13 mm / 0.47 ... 0.51 inch



2-conductor fuse terminal block; for 5 x 20 mm miniature metric fuse; without blown fuse indication

Color	Item No.	Pack. Unit
gray	282-122	40

**Technical Data** 

0.2 ... 6 mm<sup>2</sup> 24 ... 10 AWG

500 V / 6 kV / 3 1

 $\rm I_N$  10 A \$250 V, 10 A  $\rm @$  Terminal block width: 13 mm / 0.512 inch

2 12 ... 13 mm / 0.47 ... 0.51 inch



2-conductor fuse terminal block; for glass cartridge fuse  $\frac{1}{4}$  x  $\frac{1}{4}$ ; without blown fuse indication

Color	Item No.	Pack. Unit
gray	282-120	40

2-conductor fuse terminal block; for glass cartridge fuse 1/4" x 11/4"; without blown fuse indication

gray 282-128 40

**Technical Data** 

Terminal block width: 13 mm / 0.512 inch
12 ... 13 mm / 0.47 ... 0.51 inch



2-conductor fuse terminal block; for 5 x 25 mm miniature metric fuse; without blown fuse indication

Color	Item No.	Pack. Unit		
□ grav	282-126	40		

#### Accessories; item-specific

Glass cartridge fuse; without indicator; 5 x 20 mm; 6.3 A / 250 V; medium-acting



282-451

100

#### Accessories; item-specific

Glass cartridge fuse; without indicator;  $\frac{1}{4}$ " x 1", 10 A / 240 V; per BS 1362



282-458 200 (10)

Glass cartridge fuse; without indicator;  $\mbox{\em 4}''$  x 1 $\mbox{\em 4}''$ ; 10 A / 250 V; medium-acting



282-457 200 (100)

Glass cartridge fuse; without indicator; 1/4" x 11/4"; very fast-acting



282-454 200 (10)

## Accessories; item-specific

Glass cartridge fuse; with indicator;  $5 \times 25$  mm; 6.3 A / 250 V; medium-acting

282-452



Glass cartridge fuse; with indicator;  $5 \times 25$  mm, 10 A / 450 V; fast-acting



282-453 200 (10)

200 (10)



### Accessories: 282 Series

## End and intermediate plate; 4 mm thick

	orange	282-312	50 (25)
	gray	282-311	50 (25)

# Protective warning marker; with black high-voltage symbol; for 5 terminal blocks



#### Adjacent jumper; insulated; I<sub>N</sub> 41 A

ujacent jui	riper, irisulate	u, in + i A	
17	gray	282-402	100 (25)

# Test plug adapter; 8.3 mm wide; for 4 mm $\emptyset$ test plug; for 1.5 ... 10 mm<sup>2</sup> terminal blocks



**209-170** 50 (25)

25)

### Appropriate marking system: WMB

# Test plug adapter; 6 mm wide; with CAGE CLAMP®; for 0.08 ... 2.5 mm²



Operating pliers; for 281, 282, 283, 284 Series side-entry rail-mounted terminal blocks

210-141



