

WAGO front-entry rail-mounted terminal blocks of series 279 to 285

## Rail-Mounted Terminal Blocks (Front-Entry) and Multilevel Terminal Blocks



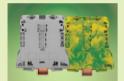


Through, ground (earth) conductor and shield (screen) terminal blocks
– angled type
– horizontal type

0.08 mm<sup>2</sup> to 16 mm<sup>2</sup> / AWG 28 - 6 Series 279 – 284 and 880 2.8 - 2.20

Distribution terminal blocks 10 mm<sup>2</sup>/35 mm<sup>2</sup> / AWG 8/2

Series 284 \_\_\_



High current terminal blocks 6 mm<sup>2</sup> – 35 mm<sup>2</sup> / AWG 8 – 2 25 mm<sup>2</sup> – 95 mm<sup>2</sup> / AWG 4 – 0000 Series 285 \_\_\_\_\_

2.21 2.22 - 2.24 Series 285 \_\_



Multilevel terminal blocks

 Double deck 1.5 mm<sup>2</sup> / AWG 16 Series 279 2.5 mm<sup>2</sup> / AWG 12 4 mm<sup>2</sup> / AWG 12 2.5 mm<sup>2</sup> / AWG 12 Series 280 Series 281 2.29 - 2.332.34 - 2.35 Series 280 Series 281 - Quadruple deck 4 mm² / AWG 12 2.36



Accessories for rail-mounted terminal blocks

- Banana plugs	2.42
- Busbar terminal blocks	11.20 – 11.21
- Comb type jumper bars	2.44
- Insulations stops	2.43
- Staggered jumpers	2.45
- Step-down jumpers for through terminal blocks	2.26 - 2.27
- Test plug modules	2.38 - 2.41
- Wire jumpers	2.45



## Rail-Mounted Terminal Blocks with CAGE CLAMP® Connection - Product Summary -

Series 279 – 285 Through terminal blocks



2-conductor terminal blocks mm<sup>2</sup>/AWG |1.5/16| 2.5/12| 4/12 |6/10|10/8 | 16/6| 35/2 Page 2. 8 10/12 16/17 18 19 20 21



3-conductor terminal blocks mm²/AWG | 1.5/16 | 2.5/12 | 4/12 | 6/10 | 10/8 | 16/6 | Page 2. | 8 | 10 | 16 | 18 | 19 | 20



4-conductor terminal blocks mm<sup>2</sup>/AWG | 1.5/16 | 2.5/12 | 4/12 Page 2. 8 10-12 16

#### Through terminal blocks



2-conductor terminal blocks mm²/AWG | 1.5/16 | 2.5/12 | 4/12 Page 2. 8 10 16



3-conductor terminal blocks mm<sup>2</sup>/AWG | 1.5/16 | 2.5/12 | 4/12 Page 2. 8 10 16



4-conductor terminal blocks mm<sup>2</sup>/AWG | 1.5/16 | 2.5/12 | 4/12 Page 2. 8 11-12 16

#### Series 279 – 282 Through terminal blocks for hazardous environments EEx i and EEx e II



2-conductor terminal blocks mm²/AWG | 1.5/16 | 2.5/12 | 4/12 | 6/10 Page 2. 8 10/12 16/17 18



3-conductor terminal blocks mm²/AWG | 1.5/16 | 2.5/12 | 4/12 | 6/10 Page 2. 8 | 10 | 16 | 18



4-conductor terminal blocks mm²/AWG | 1.5/16 | 2.5/12 | 4/12 Page 2. 8/9 10-12 16

Series 279 – 285 Ground (earth) conductor terminal blocks



2-conductor terminal blocks mm²/AWG | 1.5/16| 2.5/12| 4/12 | 6/10|10/8 | 16/6 | 35/2 Page 2. 8 10/12 16/17 18 19 20 21



3-conductor terminal blocks mm²/AWG | 1.5/16 | 2.5/12 | 4/12 | 6/10 | 10/8 | 16/6 Page 2. 8 10/12 16 18 19 20



4-conductor terminal blocks mm²/AWG | 1.5/16 | 2.5/12 | 4/12 Page 2. 8 10/11 16

#### Series 284 Distribution terminal blocks

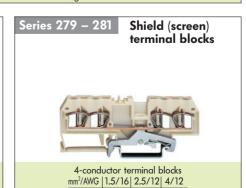


 $\text{mm}^2/\text{AWG}$  | 35/2 and 3x10/3x8 Page 2. 25

#### **Series 279/280 Double potential** terminal blocks and EEx e II double potential terminal blocks



mm<sup>2</sup>/AWG | 1.5/16 | 2.5/12 Page 2. 8 10/12



Page 2. 8 10/11 16



### Series 880 Through terminal blocks without/with shield (screen) contact, Slim-Line, 5 mm/0.197 in wide



2-conductor terminal block mm²/AWG | 4/12 Page 2. | 14



3-conductor terminal block mm²/AWG 4/12 Page 2. 14



4-conductor terminal block mm²/AWG | 4/12 Page 2. 14



2- to 4-conductor terminal blocks 4 mm<sup>2</sup>/AWG 12 with ferrules Page 2.15

## Series 880 Ground (earth) conductor terminal blocks, Slim-Line, 5 mm/0.197 in wide



2-conductor terminal block mm²/AWG | 4/12 Page 2. | 14



3-conductor terminal block

mm²/AWG | 4/12

Page 2. | 14



4-conductor terminal block mm²/AWG | 4/12 Page 2. | 14



2- to 4-conductor terminal blocks 4 mm<sup>2</sup>/AWG 12 with ferrules Page 2.15

## Series 280/281 Through terminal blocks



3-conductor terminal blocks mm²/AWG | 2.5/12 | 4/12 Page 2. | 12 | 17



4-conductor terminal block

mm²/AWG | 2.5/12

Page 2. | 13



3- and 4-conductor terminal blocks

mm²/AWG | 2.5/12

Page 2. | 12 - 13

## Series 280/281 Through terminal blocks for hazardous environments EEx i and EEx e II



Series 280 Shield (screen) terminal blocks



 $\frac{\text{mm}^2/\text{AWG} \mid 2.5/12}{\text{Page 2.} \mid 12}$ 

### Series 280/281 Ground (earth) conductor terminal blocks



3-conductor terminal blocks mm²/AWG | 2.5/12 | 4/12 Page 2. | 12 | 17

## Series 283 Ground (earth) conductor terminal blocks Supply terminal blocks

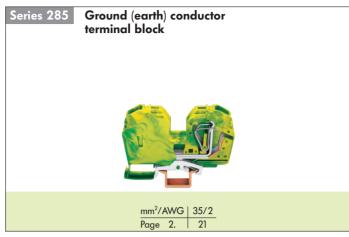


Supply terminal block 0.2 – 16 mm²/AWG 24 – 6 283-609 Accessories end plate 283-320



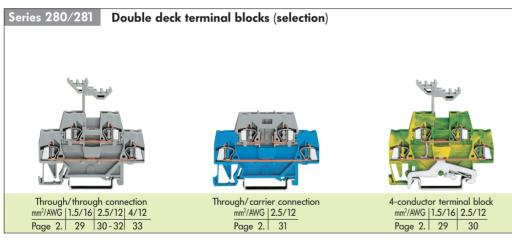
## High Current Rail-Mounted Terminal Blocks and Multilevel Rail-Mounted Terminal Blocks – Product Summary –



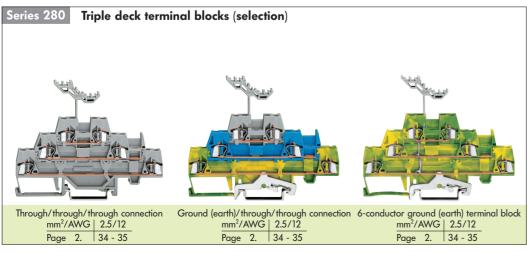


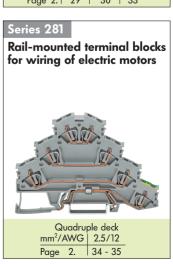










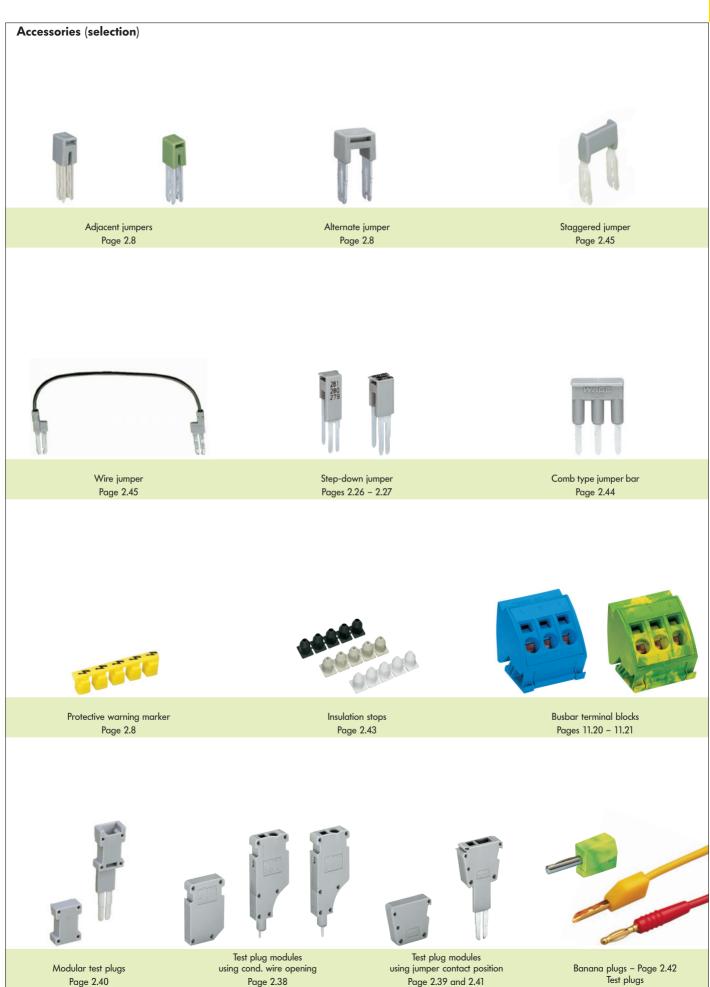


## **Accessories for Terminal Blocks**

Page 2.40

Page 2.38

Page 2.39 and 2.41



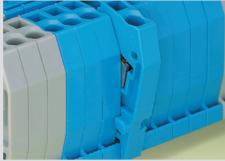


## Rail-mounted Terminal Blocks with CAGE CLAMP® . . . Series 279 to 285 and 880

### Assembly .



By snapping a ground (earth) conductor terminal block onto the carrier rail, a direct electrical connection is automatically made to the rail.



Quick assembly keys prevent reverse mounting

#### Removal



Removal of a terminal block from the assembly

### Commoning



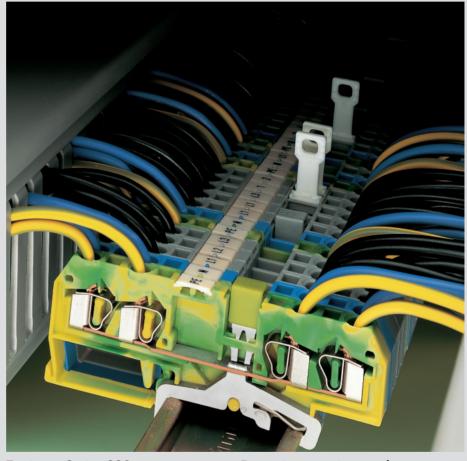
Commoning of ground (earth) cond. term. blocks with through term. bl. is possible in one direction only using adjacent jumpers. In addition to the required marking of these term. blocks, we also recommend the use of the yell.-green adj. jumpers.

#### Commoning

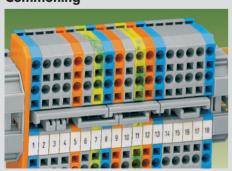


Commoning of terminal blocks of different sizes step down Application notes see page 2.26

## According to EN 60947-7-2 [VDE 0611, part 3] steel carrier rails may not be used for PEN applications.



Commoning



Staggered jumpers for sophisticated wiring jobs. Application notes see page 2.45



**CAGE CLAMP®** clamps the following copper wires:\* solid

\* For aluminum wire see notes in section 15!

Testing - Series 880



The terminal blocks of series 880 have an additional test slot for test plugs 2 mm/0.079 in Ø or 2.3 mm/0.091 in Ø



stranded

Protective warning marker



Protective warning markers inserted into the operating slots



fine stranded, also with tinned single strands

## ... Description and Handling

### **CAGE CLAMP®** connection



**Connection of conductors** 



**Connection of conductors** 

When using conductors with ferrules, it is necessary to use a terminal block one size larger than the nominal cross section of the conductor

### **Testing**



Testing with test plug.
Test plug with CAGE CLAMP®

## **Testing**



Test plug modules with CAGE CLAMP\*. Testing using the conductor wire opening, see page 2.38

### **Testing**



Test plug modules with CAGE CLAMP<sup>®</sup>. Testing using jumper contact position in current bar, see page 2.39

## Marking

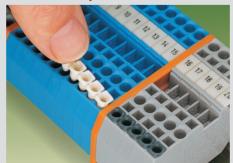


Marking with WMB multi-marking system or WSB quick marking system. For other systems see section 14



fine-stranded wire tip bonded

### Insulation stop



Insertion of insulation stop.
Application notes see page 2.43



fine-stranded wire with crimped ferrule **1** 

### **Testing**



Testing with banana plug 4 mm/0.157 in Ø, using test plug adapter 209-170



fine-stranded wire with crimped pin terminal



# Through/Ground (Earth) Conductor/Shield (Screen) and (Ex) Terminal Blocks 1.5 mm² / AWG 16, Series 279

0.08 - 1.5 mm<sup>2</sup> 800 V/8 kV/3 **0** 18 A

AWG 28 - 16 600 V, 10 A **9** 600 V, 10 A ®

Terminal block width 4 mm / 0.157 in 8 – 9 mm / 0.33 in

\* 🕦 🏽 KEUR CCAKEUR 🕞 🐨 🗥 GL BV LR NV 🛭 🐼

0.08 - 1.5 mm<sup>2</sup> 800 V/8 kV/3 **0** 18 A

AWG 28 - 16 600 V, 10 A **9** 600 V, 10 A ®

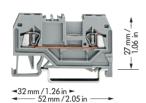
Terminal block width 4 mm / 0.157 in 8 – 9 mm / 0.33 in

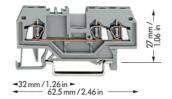
\* 🗫 🏽 KEDA CCAKEDA 📀 🚏 🗥 GL BV LR NV 🛭 🏵 😥

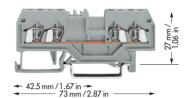
0.08 - **1.5** mm<sup>2</sup> 800 V/8 kV/3 **①**  AWG 28 - 16 600 V, 10 A **9** 600 V, 10 A **9** 

Terminal block width 4 mm / 0.157 in 8 – 9 mm / 0.33 in

\* 🕦 🏽 KEUR CCAKEUR 🕞 🐨 🗥 GL BV LR NV 🛭 😥







	No.	Pack. unit pcs		Item No.	Pack. unit pcs		Item No.	Pack. unit pcs
2-conductor thro	ugh terminal blo	cks	3-conductor thro	ugh terminal bloc	:ks	4-conductor thr	ough terminal b	locks
grey	279-901	100	grey	279-681	100	grey	279-831	100
blue	279-904 🕗	100	blue	279-684 🕗	100	blue	279-834 🕗	100
orange	279-902	100	orange	279-682	100	orange	279-832	100
red	279-903	100	red	279-683	100	red	279-833	100
black	279-905	100	black	279-685	100	black	279-835	100
yellow	279-906	100	yellow	279-686	100	yellow	279-836	100
light grey (Ex)	279-992	100	light grey (Ex)	279-993	100	light grey (Ex)	279-994	100
	und (earth) termin	nal blocks	3-conductor grou	und (earth) termin	al blocks		ound (earth) tern	ninal blocks
green-yellow	279-907	100	green-yellow	279-687	100	green-yellow	279-837	100
green-yellow (Ex)	279-907/999-9	<b>50 1</b> 00	green-yellow (Ex)	279-687/999-9	<b>50 1</b> 00	green-yellow (Ex)	279-837/999	<b>-950</b> 100
· , _			· · ·			4-conductor shi	eld (screen) term	ninal block
						white	279-838	100
Other terminal b	locks with the sa	me shape	Other terminal b	locks with the sa	me shape	Other terminal	blocks with the	same shape
diode	279-915/	page 7.56	diode	279-673/	•	double potential		page 2.9
		1 10	LED	279-674/		diode	279-815/	
					1 0	LED	279-809/	page 7.6
								, p=9
		• • • • • • • • • • • • • • • • • • • •	opriate marking syste		·			
	diate plate, 2 mm	1/0.079 in thick		diate plate, 2 mm	/0.079 in thick			nm / 0.079 in thick
	diate plate, 2 mm orange 27	1/0.079 in thick 19-328 100 (4×25)		diate plate, 2 mm orange 27	/0.079 in thick 9-339 100 (4×25)		orange 2	<b>279-346</b> 100 (4×:
	orange 27 grey 27	9-328 100 (4×25) 19-325 100 (4×25)		orange 27	/0.079 in thick 9-339 100 (4×25) 9-308 100 (4×25)		orange grey	<b>279-346</b> 100 (4 x 2 2 2 7 9 - 3 4 4 100 (4 x 2 2 1 )
End and interme	orange 27 grey 27 light grey 27	1/0.079 in thick 19-328 100 (4×25) 19-325 100 (4×25) 19-330 100 (4×25)	End and interme	orange 27' grey 27' light grey 27'	/0.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25)	End and interm	orange grey light grey	<b>279-346</b> 100 (4×2) <b>279-344</b> 100 (4×2) <b>279-348</b> 100 (4×2)
Accessories S End and interme Separator, oversit	orange 27 grey 27 light grey 27 zed, 2 mm / 0.079 i	1/0.079 in thick 19-328 100 (4×25) 19-325 100 (4×25) 19-330 100 (4×25) 19-330 100 (4×25)	End and interme	diate plate, 2 mm orange 27' grey 27' light grey 27' zed, 2 mm/0.079 in	70.079 in thick 9-339 100 (4 × 25) 9-308 100 (4 × 25) 9-341 100 (4 × 25) n thick		orange grey light grey sized, 2 mm/0.07	<b>279-346</b> 100 (4×2 <b>279-344</b> 100 (4×2 <b>279-348</b> 100 (4×2 9 in thick
End and interme	diate plate, 2 mm orange 27 grey 27 light grey 27 zed, 2 mm/0.079 i orange 27	9-328 100 (4 x 25) 9-325 100 (4 x 25) 9-325 100 (4 x 25) 9-330 100 (4 x 25) n thick 9-329 100 (4 x 25)	End and interme	diate plate, 2 mm orange 27' grey 27' light grey 27' zed, 2 mm/0.079 ir orange 27'	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) in thick 9-340 100 (4×25)	End and interm	orange 2 grey 2 light grey 2 ized, 2 mm/0.079 orange 2	279-346 100 (4 x 2 279-344 100 (4 x 2 279-348 100 (4 x 2 9 in thick 279-347 100 (4 x 2
End and interme	diate plate, 2 mm orange 27 grey 27 light grey 27 zed, 2 mm/0.079 i orange 27 grey 27	9-328 100 (4 x 25) 9-325 100 (4 x 25) 9-330 100 (4 x 25) 19-330 100 (4 x 25) 19-329 100 (4 x 25) 9-326 100 (4 x 25)	End and interme	diate plate, 2 mm orange 27' grey 27' light grey 27' zed, 2 mm / 0.079 ir orange 27' grau 27'	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) in thick 9-340 100 (4×25) 9-309 100 (4×25)	End and interm	grey 2 light grey 2 sized, 2 mm/0.07 orange 2 grey 2	279-346 100 (4×2 279-344 100 (4×2 279-348 100 (4×2 9 in thick 279-347 100 (4×2 279-345 100 (4×2
End and interme  Separator, oversit	diate plate, 2 mm orange 27 grey 27 light grey 27 zed, 2 mm/0.079 i orange 27 grey 27 light grey 27	9-328 100 (4 x 25) 9-325 100 (4 x 25) 9-325 100 (4 x 25) 9-330 100 (4 x 25) n thick 9-329 100 (4 x 25)	End and interme  Separator, oversi	diate plate, 2 mm orange 27' grey 27' light grey 27' zed, 2 mm/0.079 ir orange 27' grau 27' light grey 27'	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) in thick 9-340 100 (4×25)	End and interm	orange grey light grey sized, 2 mm/0.07 orange grey light grey	279-346 100 (4×2 279-344 100 (4×2 279-348 100 (4×2 9 in thick 279-347 100 (4×2 279-345 100 (4×2
End and interme	diate plate, 2 mm orange 27 grey 27 light grey 27 zed, 2 mm/0.079 i orange 27 grey 27 light grey 27 light grey 27 3, 5 pcs/strip	9-328 100 (4 x 25) 9-325 100 (4 x 25) 9-330 100 (4 x 25) 19-330 100 (4 x 25) 19-329 100 (4 x 25) 9-326 100 (4 x 25)	End and interme	diate plate, 2 mm orange 27' grey 27' light grey 27' zed, 2 mm/0.079 ir orange 27' grau 27' light grey 27' 3, 5 pcs/strip	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) in thick 9-340 100 (4×25) 9-309 100 (4×25)	End and interm	orange grey light grey sized, 2 mm/0.07 orange grey light grey 3, 5 pcs/strip	<b>279-346</b> 100 (4×2 <b>279-344</b> 100 (4×2 <b>279-348</b> 100 (4×2
End and interme  Separator, oversit	diate plate, 2 mm orange 27 grey 27 light grey 27 zed, 2 mm/0.079 i orange 27 grey 27 light grey 27 light grey 27 s, 5 pcs/strip white 27	9-328 100 (4 × 25) 9-325 100 (4 × 25) 9-330 100 (4 × 25) 100 (4 × 25)	End and interme  Separator, oversi	diate plate, 2 mm orange 27' grey 27' light grey 27' zed, 2 mm/0.079 ir orange 27' grau 27' light grey 27' 3, 5 pcs/strip white 27'	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) in thick 9-340 100 (4×25) 9-342 100 (4×25) 9-342 100 (4×25)	End and interm	orange grey light grey sized, 2 mm/0.07 orange grey light grey light grey 3, 5 pcs/strip white	279-346 100 (4×2 279-348 100 (4×2 279-348 100 (4×2 9 in thick 279-347 100 (4×2 279-345 100 (4×2 279-349 100 (4×2
End and interme  Separator, oversit	diate plate, 2 mm orange 27 grey 27 light grey 27 zed, 2 mm/0.079 i orange 27 grey 27 light grey 27 light grey 27 s, 5 pcs/strip white 27	9-328 100 (4 x 25) 9-325 100 (4 x 25) 9-330 100 (4 x 25) 19-330 100 (4 x 25) 19-329 100 (4 x 25) 19-326 100 (4 x 25) 19-331 100 (4 x 25) 19-470 200 strips	End and interme  Separator, oversi	diate plate, 2 mm orange 27' grey 27' light grey 27' zed, 2 mm/0.079 ir orange 27' grau 27' light grey 27' 3, 5 pcs/strip white 27'	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) 10 thick 9-340 100 (4×25) 9-309 100 (4×25) 9-342 100 (4×25) 9-470 200 strips	End and interm	orange grey light grey sized, 2 mm/0.07 orange grey light grey light grey 3, 5 pcs/strip white	279-346 100 (4×2 279-348 100 (4×2 279-348 100 (4×2 9 in thick 279-347 100 (4×2 279-345 100 (4×2 279-349 100 (4×2 279-349 200 strip:
Separator, oversit	orange 27 grey 27 light grey 27 zed, 2 mm/0.079 i orange 27 grey 27 light grey 27 light grey 27 light grey 27 sh 5 pcs/strip white 27 dark grey 27	9-328 100 (4 × 25) 9-325 100 (4 × 25) 9-330 100 (4 × 25) 19-330 100 (4 × 25) 19-329 100 (4 × 25) 19-326 100 (4 × 25) 19-331 100 (4 × 25) 19-470 200 strips 19-471 200 strips	Separator, oversi	diate plate, 2 mm orange 27' grey 27' light grey 27' zed, 2 mm/0.079 ir orange 27' grau 27' light grey 27' 3, 5 pcs/strip white 27'	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) 10 thick 9-340 100 (4×25) 9-309 100 (4×25) 9-342 100 (4×25) 9-470 200 strips	End and interm	orange grey light grey sized, 2 mm/0.07 orange grey light grey light grey 3, 5 pcs/strip white dark grey	279-346 100 (4×2 279-348 100 (4×2 279-348 100 (4×2 9 in thick 279-347 100 (4×2 279-345 100 (4×2 279-349 100 (4×2 279-349 200 strip 279-471 200 strip
Separator, oversit	orange 27 grey 27 light grey 27 zed, 2 mm/0.079 i orange 27 grey 27 light grey 27 light grey 27 light grey 27 sh, 5 pcs/strip white 27 dark grey 27 insulated, I <sub>N</sub> 15 A	9-328 100 (4 × 25) 9-325 100 (4 × 25) 9-330 100 (4 × 25) 19-330 100 (4 × 25) 19-329 100 (4 × 25) 19-326 100 (4 × 25) 19-331 100 (4 × 25) 19-470 200 strips 19-471 200 strips	Separator, oversi	orange 27' grey 27' light grey 27' zed, 2 mm/0.079 ir orange 27' grau 27' light grey 27' light grey 27' 3, 5 pcs/strip white 27' dark grey 27' c, insulated, I <sub>N</sub> 15 A	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) 10 thick 9-340 100 (4×25) 9-309 100 (4×25) 9-342 100 (4×25) 9-470 200 strips	Separator, overs	orange grey light grey sized, 2 mm/0.07 orange grey light grey light grey 3, 5 pcs/strip white dark grey dark grey sr, insulated, I <sub>N</sub> 15	279-346 100 (4×2 279-348 100 (4×2 279-348 100 (4×2 9 in thick 279-347 100 (4×2 279-345 100 (4×2 279-349 100 (4×2 279-349 200 strip 279-471 200 strip
Separator, oversit	orange 27 grey 27 light grey 27 zed, 2 mm/0.079 i orange 27 grey 27 light grey 27 light grey 27 light grey 27 dark grey 27 dark grey 27 r, insulated, I <sub>N</sub> 15 A grey 27	1/0.079 in thick 1/9-328 100 (4×25) 1/9-325 100 (4×25) 1/9-330 100 (4×25) 1/9-329 100 (4×25) 1/9-326 100 (4×25) 1/9-326 100 (4×25) 1/9-331 100 (4×25) 1/9-470 200 strips 1/9-471 200 strips	Separator, oversi	orange 27' grey 27' light grey 27' zed, 2 mm/0.079 ir orange 27' grau 27' light grey 27' grau 27' light grey 27' 3, 5 pcs/strip white 27' dark grey 27' r, insulated, I <sub>N</sub> 15 A grey 27'	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) 10 thick 9-340 100 (4×25) 9-340 100 (4×25) 9-342 100 (4×25) 9-470 200 strips 9-471 200 strips	Separator, overs	orange grey light grey sized, 2 mm/0.07 orange grey light grey light grey 3, 5 pcs/strip white dark grey dark grey sr, insulated, I <sub>N</sub> 15 grey	279-346 100 (4×2 279-348 100 (4×2 279-348 100 (4×2 29 in thick 279-347 100 (4×2 279-345 100 (4×2 279-349 100 (4×2 279-349 200 strip 279-471 200 strip A 279-402 200 (8×2
End and interme  Separator, oversit	orange 27 grey 27 light grey 27 zed, 2 mm/0.079 i orange 27 grey 27 light grey 27 light grey 27 light grey 27 dark grey 27 dark grey 27 r, insulated, I <sub>N</sub> 15 A grey 27 yellgreen 27	1/0.079 in thick 1/9-328 100 (4×25) 1/9-325 100 (4×25) 1/9-330 100 (4×25) 1/9-329 100 (4×25) 1/9-326 100 (4×25) 1/9-326 100 (4×25) 1/9-331 100 (4×25) 1/9-470 200 strips 1/9-471 200 strips 1/9-472 200 (8×25) 1/9-422 200 (8×25)	Separator, oversi	orange 27' grey 27' light grey 27' zed, 2 mm/0.079 ir orange 27' grau 27' light grey 27' light grey 27' light grey 27' dark grey 27' r, insulated, I <sub>N</sub> 15 A grey 27' yellgreen 27'	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-342 100 (4×25) 9-470 200 strips 9-471 200 strips 9-402 200 (8×25) 9-422 200 (8×25)	Separator, overs	orange grey light grey grey grey light grey grey light grey grey light grey grey light grey dark grey grey dark grey grey grey dark grey grey grey grey grey grey grey grey	279-346 100 (4×2 279-348 100 (4×2 279-348 100 (4×2 9 in thick 279-347 100 (4×2 279-345 100 (4×2 279-349 100 (4×2 279-349 100 (4×2 279-470 200 strip 279-471 200 strip A 279-402 200 (8×2 279-422 200 (8×2
Separator, oversize Insulation stop	orange 27 grey 27 light grey 27 zed, 2 mm/0.079 i orange 27 grey 27 light grey 27 light grey 27 light grey 27 dark grey 27 dark grey 27 r, insulated, I <sub>N</sub> 15 A grey 27 yellgreen 27	1/0.079 in thick 1/9-328 100 (4×25) 1/9-325 100 (4×25) 1/9-330 100 (4×25) 1/9-329 100 (4×25) 1/9-326 100 (4×25) 1/9-326 100 (4×25) 1/9-331 100 (4×25) 1/9-470 200 strips 1/9-471 200 strips 1/9-472 200 (8×25) 1/9-422 200 (8×25)	Separator, oversi	orange 27' grey 27' light grey 27' zed, 2 mm/0.079 ir orange 27' grau 27' light grey 27' light grey 27' light grey 27' dark grey 27' r, insulated, I <sub>N</sub> 15 A grey 27' yellgreen 27'	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-342 100 (4×25) 9-470 200 strips 9-471 200 strips 9-402 200 (8×25)	Separator, overs  Insulation stop  Adjacent jumps	orange grey light grey grey grey light grey grey light grey grey light grey grey light grey dark grey grey dark grey grey grey dark grey grey grey grey grey grey grey grey	279-346 100 (4×2 279-348 100 (4×2 279-348 100 (4×2 29 in thick 279-347 100 (4×2 279-345 100 (4×2 279-349 100 (4×2 279-470 200 strip 279-471 200 strip A 279-402 200 (8×2 279-422 200 (8×2
Separator, oversized insulation stop & Adjacent jumper	orange 27 grey 27 light grey 27 zed, 2 mm / 0.079 is orange 27 grey 27 grey 27 grey 27 light grey 27 grey 27 dark grey 27 dark grey 27 yellgreen 27 r, insulated, I <sub>N</sub> 15 A grey 27 r, insulated, I <sub>N</sub> 15 A grey 27	1/0.079 in thick 1/9-328 100 (4×25) 1/9-325 100 (4×25) 1/9-330 100 (4×25) 1/9-329 100 (4×25) 1/9-326 100 (4×25) 1/9-331 100 (4×25) 1/9-470 200 strips 1/9-471 200 strips 1/9-472 200 (8×25) 1/9-472 200 (8×25) 1/9-479 100 (4×25)	Separator, oversi	orange 27' grey 27' light grey 27' zed, 2 mm/0.079 ir orange 27' grau 27' light grey 27' light grey 27' light grey 27' dark grey 27' r, insulated, I <sub>N</sub> 15 A grey 27' yellgreen 27'	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-342 100 (4×25) 9-470 200 strips 9-471 200 strips 9-402 200 (8×25) 9-402 200 (8×25) 9-409 100 (4×25)	Separator, overs  Insulation stop  Adjacent jumpe	orange grey light grey sized, 2 mm/0.07 orange grey light grey light grey 3, 5 pcs/strip white dark grey dark grey ser, insulated, I <sub>N</sub> 15 grey yellgreen	279-346 100 (4×: 279-348 100 (4×: 279-348 100 (4×: 9 in thick 279-347 100 (4×: 279-345 100 (4×: 279-349 100 (4×: 279-470 200 strip 279-471 200 strip A 279-402 200 (8×: 279-422 200 (8×: 279-409 100 (4×:
Separator, oversion  Insulation stop  Adjacent jumper	orange 27 grey 27 light grey 27 zed, 2 mm / 0.079 is orange 27 grey 27 grey 27 grey 27 light grey 27 grey 27 dark grey 27 dark grey 27 yellgreen 27 r, insulated, I <sub>N</sub> 15 A grey 27 r, insulated, I <sub>N</sub> 15 A grey 27	17/0.079 in thick 19-328 100 (4×25) 19-325 100 (4×25) 19-330 100 (4×25) 19-329 100 (4×25) 19-326 100 (4×25) 19-331 100 (4×25) 19-470 200 strips 19-470 200 strips 19-471 200 strips 19-402 200 (8×25) 19-409 100 (4×25) 19-409 100 (4×25)	Separator, oversi	orange 27' grey 27' light grey 27' zed, 2 mm/0.079 ir orange 27' grau 27' light grey 27' grau 27' light grey 27' 3, 5 pcs/strip white 27' dark grey 27' r, insulated, I <sub>N</sub> 15 A grey 27' yellgreen 27' r, insulated, I <sub>N</sub> 15 A grey 27'	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-342 100 (4×25) 9-470 200 strips 9-471 200 strips 9-402 200 (8×25) 9-402 200 (8×25) 9-409 100 (4×25) 9-409 100 (4×25)	Separator, overs  Insulation stop  Adjacent jumpe	orange grey light grey light grey grey orange grey light grey light grey grey light grey dark grey strip white dark grey grey grey grey grey grey grey grey	279-346 100 (4 x) 279-344 100 (4 x) 279-348 100 (4 x) 9 in thick 279-347 100 (4 x) 279-345 100 (4 x) 279-349 100 (4 x) 279-470 200 strip 279-471 200 strip A 279-402 200 (8 x) 279-402 100 (4 x)
Separator, oversions linsulation stop (	orange 27 grey 27 light grey 27 light grey 27 grey 27 dark grey 27 dark grey 27 yellgreen 27 r, insulated, I <sub>N</sub> 15 A grey 27 r, insulated, I <sub>N</sub> 15 A grey 27 r, insulated, I <sub>N</sub> 15 A grey 27	17/0.079 in thick 19-328 100 (4×25) 19-325 100 (4×25) 19-330 100 (4×25) 19-330 100 (4×25) 19-329 100 (4×25) 19-326 100 (4×25) 19-331 100 (4×25) 19-470 200 strips 19-470 200 strips 19-470 200 (8×25) 19-402 200 (8×25) 19-409 100 (4×25) 19-409 100 (4×25) 19-409 100 (4×25)	Separator, oversi	orange 27/ grey 27/ light grey 27/ zed, 2 mm/0.079 in orange 27/ grau 27/ light grey 27/ grau 27/ light grey 27/ 3, 5 pcs/strip white 27/ dark grey 27/ r, insulated, I <sub>N</sub> 15 A grey 27/ yellgreen 27/ r, insulated, I <sub>N</sub> 15 A grey 27/ yellgreen 27/	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-342 100 (4×25) 9-470 200 strips 9-471 200 strips 9-402 200 (8×25) 9-402 200 (8×25) 9-409 100 (4×25) 9-409 100 (4×25)	Separator, overs  Insulation stop  Adjacent jumpe	orange grey light grey light grey grey grey light grey grey light grey grey light grey grey shite dark grey grey grey grey grey grey grey grey	279-346 100 (4 x) 279-344 100 (4 x) 279-348 100 (4 x) 9 in thick 279-347 100 (4 x) 279-345 100 (4 x) 279-349 100 (4 x) 279-470 200 strip 279-471 200 strip A 279-402 200 (8 x) A 279-409 100 (4 x) A 279-409 100 (4 x)
Separator, oversions and intermed and interm	orange 27 grey 27 light grey 27 grey 27 grey 27 light grey 27 grey 27 grey 27 grey 27 light grey 27 grey 27 grey 27 dark grey 27 t, insulated, I <sub>N</sub> 15 A grey 27 te jumper 3, insulated, I <sub>N</sub> 24	17/0.079 in thick 19-328 100 (4×25) 19-325 100 (4×25) 19-330 100 (4×25) 19-330 100 (4×25) 19-329 100 (4×25) 19-326 100 (4×25) 19-331 100 (4×25) 19-470 200 strips 19-470 200 strips 19-470 200 (8×25) 19-402 200 (8×25) 19-409 100 (4×25) 19-409 100 (4×25) 19-409 100 (4×25) 19-409 100 (4×25)	Separator, oversi	orange 27/ grey 27/ light grey 27/ zed, 2 mm/0.079 in orange 27/ grau 27/ light grey 27/ grau 27/ light grey 27/ 3, 5 pcs/strip white 27/ dark grey 27/ r, insulated, I <sub>N</sub> 15 A grey 27/ yellgreen 27/ r, insulated, I <sub>N</sub> 15 A grey 27/ yellgreen 27/ r, insulated, I <sub>N</sub> 15 A grey 27/ yellgreen 27/	70.079 in thick 9-339 100 (4×25) 9-308 100 (4×25) 9-341 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-342 100 (4×25) 9-470 200 strips 9-471 200 strips 9-402 200 (8×25) 9-402 200 (8×25) 9-409 100 (4×25) 9-412 200 (8×25) 9-412 200 (8×25) 9-412 200 (8×25)	Separator, overs  Insulation stop  Adjacent jumpe	orange grey light grey light grey grey grey grey grey grey grey grey	279-346 100 (4 × 279-344 100 (4 × 279-348 100 (4 × 9 in thick 279-347 100 (4 × 279-345 100 (4 × 279-345 100 (4 × 279-347 200 strip 279-471 200 strip A 279-402 200 (8 × 279-402 200 (8 × 279-409 100 (4 × 279-409
Separator, oversions  Insulation stop  Adjacent jumper  Alternate jumper	rdiate plate, 2 mm orange 27 grey 27 light grey 27 zed, 2 mm / 0.079 ir orange 27 grey 27 light grey 27 light grey 27 dark grey 27 dark grey 27 r, insulated, I <sub>N</sub> 15 A grey 27	17/0.079 in thick 19-328 100 (4×25) 19-325 100 (4×25) 19-330 100 (4×25) 19-330 100 (4×25) 19-329 100 (4×25) 19-326 100 (4×25) 19-331 100 (4×25) 19-470 200 strips 19-470 200 strips 19-470 200 (8×25) 19-402 200 (8×25) 19-409 100 (4×25) 19-409 100 (4×25) 19-409 100 (4×25) 19-409 100 (4×25)	End and interme  Separator, oversi  Insulation stop  Adjacent jumper  Alternate jumper	orange 27/ grey 27/ light grey 27/ zed, 2 mm/0.079 in orange 27/ grau 27/ light grey 27/ grau 27/ light grey 27/ 3, 5 pcs/strip white 27/ dark grey 27/ r, insulated, I <sub>N</sub> 15 A grey 27/ yellgreen 27/ r, insulated, I <sub>N</sub> 15 A grey 27/ yellgreen 27/ r, insulated, I <sub>N</sub> 15 A grey 27/ yellgreen 27/ r, insulated, I <sub>N</sub> 15 A grey 27/ yellgreen 27/ r, insulated, I <sub>N</sub> 15 A grey 27/ yellgreen 27/ r, insulated, I <sub>N</sub> 15 A grey 27/ yellgreen 27/ r, insulated, I <sub>N</sub> 15 A grey 27/	9-39 100 (4×25) 9-341 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-340 100 (4×25) 9-341 100 (4×25) 9-342 100 (4×25) 9-471 200 strips 9-471 200 strips 9-402 200 (8×25) 9-402 200 (8×25) 9-410 100 (4×25)	Separator, overs  Insulation stop  Adjacent jumps  Push-in type wi	orange grey light grey light grey grey light grey grey light grey grey light grey 3, 5 pcs /strip white dark grey grey grey grey grey grey grey grey	279-346 100 (4x: 279-348 100 (4x: 279-348 100 (4x: 279-347 100 (4x: 279-345 100 (4x: 279-345 100 (4x: 279-345 100 (4x: 279-347 100 (4x: 279-470 200 strip 279-471 200 strip 279-472 200 (8x: 279-402 200 (8x: 279-402 100 (4x: 279-

<sup>\*</sup>For further approvals with corresponding ratings see section 15.

## Double Potential Terminal Blocks 1.5 mm<sup>2</sup> / AWG 16, Series 279



0.08 - **1.5** mm<sup>2</sup> 800 V/8 kV/3 **①** 

AWG 28 - 16 600 V, 10 A **9** 600 V, 10 A ®

Terminal block width 4 mm / 0.157 in 8 – 9 mm / 0.33 in

\* 91 @ CCAREER N S D 🛡 🗏 GL 🛭 🕾 🚯

0.08 - 1.5 mm<sup>2</sup> 800 V/8 kV/3 **0** 18 A

AWG 28 - 16 600 V, 10 A **%** 600 V, 10 A ®

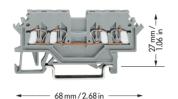
Terminal block width 4 mm / 0.157 in 8 - 9 mm / 0.33 in

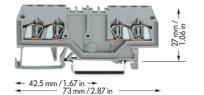
\* 🕦 @ KEUR CCAKEUR 💽 🖫 🗥 BV LR NV 🖟 😥

0.08 - 1.5 mm<sup>2</sup> 800 V/8 kV/3 **①**  AWG 28 - 16 600 V, 10 A **9** 600 V, 10 A ®

Terminal block width 4 mm / 0.157 in 8 – 9 mm / 0.33 in

\* 71 @ KESH CCAKESH (N (S) (D) @ \$\frac{1}{2} \text{ As GL BV LR NV (8) (6) (6)}







	Item No.	Pack. unit pcs			em lo.	Po	ıck. unit :s		ltem No.	Pack. pcs	. unit
4-conductor thro	ough terminal blocks		Double po	otential te	erminal blo	<b>cks,</b> with do	uble mar-	Double pote	ntial terminal blo	<b>cks,</b> with marke	er
grey	279-621	100	ker receptacle in the center of the terminal block			receptacle on the side of the terminal block					
blue	279-604 🕗	100	grey	2	79-826	10	0	grey	279-626	100	0
light grey (Ex)	279-990 🔘	100	light grey	€x 2	79-995 🔾	10	00	light grey (Ex)	279-989	100	0
Other terminal b	olocks with the same	shape									
double potential	279-626										
diode	279-623/	page 7.56	Attention	These do	ouble poter	ntial termin	al blocks	Attention! Th	nese double poter	ntial terminal l	blocks
LED	279-624/	page 7.60	cannot be	commor	ned with ac	ljacent jum	pers!	cannot be co	ommoned with a	djacent jumpe	rs!
	h - 1 - 0 (0	070 : .1.1				(0.070		- 1 11		(0.070 :	.1 • 1
End and interme	ediate plate, 2 mm/0.		End and i	ntermedi	ate plate, 2			End and inte	ermediate plate, 2		
	- C	317 100 (4×25)			orange		100 (4 x 25)		orange	<b>279-317</b> 100	•
	0 /	316 100 (4×25)			grey		100 (4 x 25)		grey	<b>279-316</b> 100	
	<u> </u>	18 100 (4×25)			<u> </u>	279-348	100 (4 x 25)	_	light grey		0 (4 x 25)
Separator, oversi	ized, 2 mm / 0.079 in th		<b>Separator,</b> oversized, 2 mm/0.079 in thick orange <b>279-347</b> 100 (4×25)			Separator, oversized, 2 mm/0.079 in thick					
	ŭ .	<b>27</b> 100 (4×25)			orange				orange	<b>279-327</b> 100	
	0 ,	37 100 (4×25)		)	grey		100 (4 x 25)		grey	<b>279-337</b> 100	•
	0 0 7	38 100 (4×25)			light grey	279-349	100 (4 x 25)		light grey	<b>279-338</b> 100	0 (4 x 25)
Insulation stop	-, ,		Insulation	stop <b>6</b> ,	5 pcs/strip			Insulation st	op 3, 5 pcs/strip		
A444		70 200 strips		<b>L</b>	white	279-470		-048B	white	<b>279-470</b> 200	
66669	dark grey 279-4	71 200 strips	909	) ga	dark grey	279-471	200 strips	6666	dark grey	<b>279-471</b> 200	0 strips
Adjacent jumper	r, insulated, I <sub>N</sub> 15 A		Comb type jumper bar 3, insulated,				Comb type jumper bar 3, insulated,				
lite.	0 ,	<b>02</b> 200 (8 x 25)	(500)		$I_N = I_N$ of t	erminal bloc	ck	WILL	$I_N = I_N$ of t	terminal block	
	yellgreen 279-4	22 200 (8 x 25)	, iii		2-way	279-482	200 (8 x 25)	TO U	2-way	<b>279-482</b> 200	$0 (8 \times 25)$
UA)					3-way	279-483	200 (8 x 25)		3-way	<b>279-483</b> 200	$0 (8 \times 25)$
Alternate jumpe	<b>r,</b> insulated, I <sub>N</sub> 15 A		Alternate	comb typ	pe jumper l			Alternate co	mb type jumper l		
	grey <b>279-4</b>	<b>09</b> 100 (4×25)	1	I		erminal bloc			$I_N = I_N$ of t	terminal block	
					2-way	279-492	200 (8 x 25)		2-way	<b>279-492</b> 200	0 (8 x 25)
Push-in type win	re jumper 3, insulated		Operating	g tool, ins	ulated			Operating to	ool, insulated		
	L = 60 mm <b>249-1</b>	<b>25</b> 10			2-way	279-432	1		2-way	279-432	1
<u></u>	L = 110 mm <b>249-1</b>	<b>26</b> 10			3-way	279-433	1		3-way	279-433	1
T T	L = 250 mm <b>249-1</b>	<b>27</b> 10									
Protective warni	<b>ng marker,</b> for 5 term	inal blocks,							<u> </u>		

yellow 279-415 100 (4×25)

Test plug adapter, suitable f. term. bl. 1.5 mm² - 4 mm²,
5 mm / 0.197 in wide
280-404 100 (4×25)
or. test plug 210-137 (2.3 mm ∅)

Test plug adapter, suitable f. term. bl. 1.5 mm² - 10 mm²,
8 mm / 0.315 in wide
209-170 50 (2×25)
for test plug 4 mm / 0.157 in ∅

Comp type jumper bar (see right column)

fits into screwdriver slot

Double potential terminal blocks are space savers. Two independent through terminal blocks are placed in one insulated housing on one level. The width of the housing is only 4 mm/0.157 in. Compared to standard through terminal blocks, the width is only 2 mm/0.079 in for a total height of only 27 mm/1.063 in from the upper edge of the carrier rail. Input and output contacts of one circuit are placed on the same side of the terminal block. Both circuits can be individually marked according to input and output.

- 800 V = rated voltage 8 kV = rated surge voltage 3 = pollution degree (see also section 15)
- Suitable for EEx i applications
- Suitable for EEx e II applications 0.2 - 1.5 mm<sup>2</sup> AWG 24 - 16 550 V~, 15 A (see also section 13) EEx e/EEx i separator see page 2.13
- 3 See application notes on pages 2.38 – 2.45



# Through/Ground (Earth) Conductor/Shield (Screen) and (Ex) Terminal Blocks 2.5 mm² / AWG 12, Series 280

0.08 - **2.5** mm<sup>2</sup> 800 V/8 kV/3 **0** 24 A

AWG 28 - 12 600 V, 20 A **9** 600 V, 25 A ®

Terminal block width 5 mm / 0.197 in  $\boxed{\phantom{0}}$  8 - 9 mm / 0.33 in

\* 🗫 🍕 KEEB (CAKEEB 🕦 🛈 🕾 📽 🗥 GL BV LR NV 🛭 🏵 😥

0.08 **- 2.5** mm<sup>2</sup> 800 V/8 kV/3 **①**  AWG 28 - 12 600 V, 20 A **A** 600 V, 25 A ®

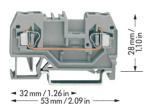
Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in

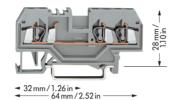
\* 👊 🍪 KEUR CCAKEUR 🛈 🚭 🕸 GL BV LR NV 🛭 😥

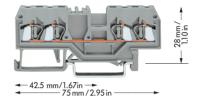
0.08 **− 2.5** mm<sup>2</sup> 800 V/8 kV/3 **①**  AWG 28 - 12 600 V, 20 A **N** 600 V, 25 A ®

Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in

\* 🕦 🍕 KEER CCAKEER 🕞 🐨 🗥 GL BV LR NV 🛭 😥







	Item No.	Pack. unit pcs		Item No.	Pack. unit pcs		Item- No.	Pa pc	ckunit s
2-conductor thro	ugh terminal blo	ocks	3-conductor thro	ugh terminal blo	cks	4-conductor thro	ugh terminal	blocks	
grey	280-901	100	grey	280-681	100	grey	280-833		100
blue	280-904 🕗	100	blue	280-684 2	100	blue	280-834 🕗		100
orange	280-902	100	orange	280-650	100	orange	280-835		100
red	280-903	100	red	280-653	100	red	280-830		100
black	280-905	100	black	280-671	100	black	280-831		100
yellow	280-906	100	yellow	280-672	100	yellow	280-832		100
light grey 🕸	280-992	100	light grey (Ex)	280-993 🔘	100	light grey ⟨Ex⟩	280-994		100
2-conductor grou	und (earth) termi	inal blocks	3-conductor gro	und (earth) termin	nal blocks	4-conductor gro	und (earth) te	rminal bloc	ks
green-yellow	280-907	100	green-yellow	280-687	100	green-yellow	280-837		100
green-yellow (Ex)	280-907/999-	<b>950 1</b> 00	green-yellow (Ex)	280-687/999-9	<b>50 1</b> 00	green-yellow (Ex)	280-837/99	9-950 🕕	100
		_				4-conductor shie	eld (screen) tei	rminal bloc	k
						white	280-838		100
Other terminal b	locks with the s	ame shape	Other terminal b	locks with the sa	me shape	Other terminal b	locks with the	e same sha	pe
disconnect	280-912	page 7.10	disconnect	280-683	page 7.10	double potential	280-826		page 2.1
carrier term. block	280-916	page 7.35	carrier term. block	280-610	page 7.35	disconnect	280-836		page 7.1
diode	280-915/	page 7.57	diode	280-673/	page 7.57	disc., test a. meas.	280-829		page 7.1
						carrier term. block	280-816		page 7.3
						diode	280-815/		page 7.5
						LED	280-809/		page 7.6
spacer	280-902/056-	000	spacer	280-650/056-0	00	spacer	280-835/05	6-000	
	diate plate, 2.5	mm/0.098 in thick	opriate marking syste	diate plate, 2.5 m	nm/0.098 in thick	n 14)  End and interme	diate plate, 2		
Accessories S			· · · · ·		· · · · · · · · · · · · · · · · · · ·		diate plate, 2	1.5 mm/0.098	8 in thick
	diate plate, 2.5 r	mm/0.098 in thick 80-309 100 (4×25)	· · · · ·	diate plate, 2.5 m orange 28	nm/0.098 in thick 60-326 100 (4×25)		orange	280-315	100 (4×
	diate plate, 2.5 rorange 2 grey 2	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25)	· · · · ·	diate plate, 2.5 m orange 28 grey 28	nm/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25)		orange grey	280-315 280-314	100 (4 x : 100 (4 x :
End and interme	diate plate, 2.5 r orange 2 grey 2 light grey 2	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25)	End and interme	diate plate, 2.5 m orange 28 grey 28 light grey 28	m/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25)	End and interme	orange grey light grey	280-315 280-314 280-352	100 (4 x : 100 (4 x :
	diate plate, 2.5 r orange 2 grey 2 light grey 2 zed, 2 mm / 0.079	nm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) in thick	· · · · ·	diate plate, 2.5 m orange 28 grey 28 light grey 28 zed, 2 mm/0.079 i	nm/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10 n thick		grey light grey zed, 2 mm/0.0	280-315 280-314 280-352 079 in thick	100 (4 x : 100 (4 x : 100 (4 x :
End and interme	diate plate, 2.5 r orange 2 grey 2 light grey 2 zed, 2 mm / 0.079 orange 2	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) in thick 80-311 100 (4×25)	End and interme	diate plate, 2.5 m orange 28 grey 28 light grey 28 zed, 2 mm/0.079 i orange 28	m/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25)	End and interme	orange grey light grey zed, 2 mm/0.0 orange	280-315 280-314 280-352 079 in thick 280-335	100 (4 x 1 100 (4 x 1 100 (4 x 1 100 (4 x 1
End and interme	diate plate, 2.5 orange 2 grey 2 light grey 2 zed, 2 mm / 0.079 orange 2 grey 2	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) in thick 80-311 100 (4×25) 80-310 100 (4×25)	End and interme	diate plate, 2.5 m orange 28 grey 28 light grey 28 zed, 2 mm/0.079 i orange 28 grey 28	m/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-344 100 (4×25)	End and interme	orange grey light grey zed, 2 mm/0.0 orange grey	280-315 280-314 280-352 79 in thick 280-335 280-334	100 (4 x 2 100 (4 x 2 100 (4 x 2 100 (4 x 2 100 (4 x 2
End and interme  Separator, oversit	orange 2: grey 2: light grey 2: zed, 2 mm / 0.079 orange 2: grey 2: light grey 2:	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) in thick 80-311 100 (4×25)	End and interme  Separator, oversi	diate plate, 2.5 m orange 28 grey 28 light grey 28 zed, 2 mm/0.079 i orange 28 grey 28 light grey 28	m/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25)	End and intermed Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey	280-315 280-314 280-352 079 in thick 280-335	100 (4 x 2 100 (4 x 2 100 (4 x 2 100 (4 x 2 100 (4 x 2
End and interme	diate plate, 2.5 a orange 2 grey 2 light grey 2 zed, 2 mm/0.079 orange 2 grey 2 light grey 2 light grey 2, 5 pcs/strip	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) in thick 80-311 100 (4×25) 80-310 100 (4×25) 80-357 100 (4×25)	End and interme	diate plate, 2.5 m orange 28 grey 28 light grey 28 zed, 2 mm/0.079 i orange 28 grey 28 light grey 28	m/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-344 100 (4×25) 10-359 100 (4×25)	End and interme	orange grey light grey zed, 2 mm/0.0 orange grey light grey 3, 5 pcs/strip	280-315 280-314 280-352 079 in thick 280-335 280-334 280-353	100 (4 × 2 100 (4 × 2
End and interme  Separator, oversit	orange 2 grey 2 light grey 2 zed, 2 mm/0.079 orange 2 grey 2 light grey 2 grey 2 light grey 2 light grey 2 white 2	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) in thick 80-311 100 (4×25) 80-310 100 (4×25) 80-357 100 (4×25) 80-470 200 strips	End and interme  Separator, oversi	diate plate, 2.5 m orange 28 grey 28 light grey 28 zed, 2 mm/0.079 i orange 28 grey 28 light grey 28 3, 5 pcs/strip white 28	m/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-346 100 (4×25) 10-349 100 (4×25) 10-470 200 strips	End and intermed Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey 3, 5 pcs/strip white	280-315 280-314 280-352 779 in thick 280-335 280-334 280-353	100 (4 x 2 100 (4 x 2 200 strips
End and interme  Separator, oversit	orange 2 grey 2 light grey 2 zed, 2 mm/0.079 orange 2 grey 2 light grey 2 grey 2 light grey 2	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) in thick 80-311 100 (4×25) 80-310 100 (4×25) 80-357 100 (4×25) 80-470 200 strips 80-471 200 strips	End and interme  Separator, oversi	orange 28 grey 28 light grey 28 grey 28 system / 0.079 is orange 28 grey 28 light grey 28 light grey 28 system / 5 pcs / strip white 28 light grey 28	m/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-344 100 (4×25) 10-359 100 (4×25) 10-470 200 strips 10-471 200 strips	End and intermed Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey 3, 5 pcs/strip white light grey	280-315 280-314 280-352 079 in thick 280-335 280-334 280-353 280-470 280-471	100 (4 x 2 100 (4 x 2 200 strip:
Separator, oversit	orange 2 grey 2 light grey 2 zed, 2 mm/0.079 orange 2 grey 2 light grey 2 dark grey 2	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) in thick 80-311 100 (4×25) 80-310 100 (4×25) 80-357 100 (4×25) 80-470 200 strips 80-471 200 strips 80-472 200 strips	Separator, oversi	orange 28 grey 28 light grey 28 grey 28 gred, 2 mm/0.079 i orange 28 grey 28 light grey 28 dark grey 28	m/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-344 100 (4×25) 10-359 100 (4×25) 10-470 200 strips 10-471 200 strips 10-472 200 strips	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey light grey white light grey dark grey	280-315 280-314 280-352 79 in thick 280-335 280-334 280-353 280-470 280-471 280-472	100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 200 strip 200 strip 200 strip 200 strip
End and interme  Separator, oversit	orange 2 grey 2 light grey 2 zed, 2 mm/0.079 orange 2 grey 2 light grey 2 grey 2 light grey 2 dark grey 2 r, insulated, I <sub>N</sub> 24 A	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) in thick 80-311 100 (4×25) 80-310 100 (4×25) 80-357 100 (4×25) 80-470 200 strips 80-471 200 strips 80-472 200 strips A, ⟨∑x⟩ 23 A	Separator, oversi	orange 28 grey 28 light grey 28 grey 28 zed, 2 mm/0.079 orange 28 grey 28 light grey 28 chark grey 28 chark grey 24 chark grey 2	m/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-346 100 (4×25) 10-346 100 (4×25) 10-349 100 (4×25) 10-470 200 strips 10-471 200 strips 10-472 200 strips	End and intermed Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey 3, 5 pcs/strip white light grey dark grey t, insulated, l <sub>N</sub> 2	280-315 280-314 280-352 79 in thick 280-335 280-334 280-353 280-470 280-471 280-472 24 A, (£) 20	100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 200 strip 200 strip 0 A
Separator, oversit	orange 2 grey 2 light grey 2 zed, 2 mm/0.079 orange 2 grey 2 light grey 2 dark grey 2 r, insulated, I <sub>N</sub> 24 A grey 2	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) in thick 80-311 100 (4×25) 80-310 100 (4×25) 80-357 100 (4×25) 80-470 200 strips 80-471 200 strips 80-472 200 strips A, ⟨x⟩ 23 A 80-402 200 (8×25)	Separator, oversi	orange 28 grey 28 light grey 28 grey 28 grey 28 grey 28 grey 28 light grey 28 c, insulated, I <sub>N</sub> 24 A grey 28	m/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-346 100 (4×25) 10-346 100 (4×25) 10-349 100 (4×25) 10-470 200 strips 10-471 200 strips 10-472 200 strips	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey light grey white light grey dark grey r, insulated, I <sub>N</sub> 2 grey	280-315 280-314 280-352 79 in thick 280-335 280-334 280-353 280-470 280-471 280-472 24 A, ( 2) 20 280-402	100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 200 strip 200 strip 200 strip 0 A 200 (8×2
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Separator, oversit	orange 2: grey 2: light grey 2: grey 2: light grey 2: grey 2: light grey 2: dark grey 2: r, insulated, l <sub>N</sub> 24 / grey 2: yell-green 2:	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) in thick 80-311 100 (4×25) 80-310 100 (4×25) 80-357 100 (4×25) 80-470 200 strips 80-471 200 strips 80-472 200 strips 4, (x) 23 A 80-402 200 (8×25) 80-422 200 (8×25)	Separator, oversi	orange 28 grey 28 light grey 28 grey 28 zed, 2 mm/0.079 i orange 28 grey 28 light grey 28 light grey 28 light grey 28 light grey 28 dark grey 28 r, insulated, I <sub>N</sub> 24 A grey 28 yellgreen 28	nm/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-346 100 (4×25) 10-349 100 (4×25) 10-359 100 (4×25) 10-470 200 strips 10-471 200 strips 10-472 200 strips 10-402 200 (8×25) 10-422 200 (8×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey j, 5 pcs/strip white light grey dark grey dark grey r, insulated, I <sub>N</sub> 2 grey yellgreen	280-315 280-314 280-352 79 in thick 280-335 280-334 280-353 280-470 280-471 280-472 24 A, ( 20 280-402 280-422	100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 200 strip 200 strip 200 strip 200 strip 200 (8×2)
Separator, oversions of the separator oversions oversions oversions of the separator oversions	orange 2: grey 2: light grey 2: grey 2: light grey 2: grey 2: light grey 2: dark grey 2: r, insulated, l <sub>N</sub> 24 / grey 2: yell-green 2:	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) 80-311 100 (4×25) 80-310 100 (4×25) 80-317 100 (4×25) 80-470 200 strips 80-471 200 strips 80-472 200 strips 80-472 200 (8×25) 80-422 200 (8×25) 80-422 200 (8×25)	Separator, oversi  Insulation stop	orange 28 grey 28 light grey 28 grey 28 zed, 2 mm/0.079 i orange 28 grey 28 light grey 28 light grey 28 light grey 28 light grey 28 dark grey 28 r, insulated, I <sub>N</sub> 24 A grey 28 yellgreen 28	nm/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-344 100 (4×25) 10-359 100 (4×25) 10-470 200 strips 10-471 200 strips 10-472 200 strips 10-402 200 (8×25) 10-422 200 (8×25) 10-422 200 (8×25) 10-422 200 (8×25) 10-422 200 (8×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey j, 5 pcs/strip white light grey dark grey dark grey r, insulated, I <sub>N</sub> 2 grey yellgreen	280-315 280-314 280-352 79 in thick 280-335 280-334 280-353 280-470 280-471 280-472 24 A, ( 2) 20 280-402 280-422	100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 200 strip 200 strip 200 strip 200 strip 200 (8×2)
Separator, oversions of the separator oversions oversions oversions of the separator oversions	orange 2: grey 2: light grey 2: gred, 2 mm /0.079 orange 2: grey 2: light grey 2: light grey 2: light grey 2: light grey 2: dark grey 2: grey 2: r, insulated, I <sub>N</sub> 24 / grey 2: yellgreen 2: grey 3: insulated, I <sub>N</sub> 34 / grey 4: grey 2: yellgreen 4:	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) 80-311 100 (4×25) 80-310 100 (4×25) 80-317 100 (4×25) 80-470 200 strips 80-471 200 strips 80-472 200 strips 80-472 200 (8×25) 80-422 200 (8×25) 80-422 200 (8×25)	Separator, oversi  Insulation stop	orange 28 grey 28 light grey 28 grey 28 zed, 2 mm/0.079 i orange 28 grey 28 light grey 28 light grey 28 light grey 28 dark grey 28 r, insulated, I <sub>N</sub> 24 A grey 28 yellgreen 28	nm/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-344 100 (4×25) 10-359 100 (4×25) 10-470 200 strips 10-471 200 strips 10-472 200 strips 10-402 200 (8×25) 10-422 200 (8×25) 10-422 200 (8×25) 10-422 200 (8×25) 10-422 200 (8×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey light grey white light grey dark grey dark grey yellgreen er ③, insulated width 5 mm	280-315 280-314 280-352 79 in thick 280-335 280-334 280-353 280-470 280-471 280-472 24 A, ( 2) 20 280-402 280-422	100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (8×: 100
Separator, oversions of the separator oversions oversions oversions of the separator oversions	orange 2: grey 2: light grey 2: gred, 2 mm /0.079 orange 2: grey 2: light grey 2: dark grey 2: yellgreen 2: grey 2: yellgreen 2: yi insulated, I <sub>N</sub> 24 / grey 2: yellgreen 2: yellgreen 2:	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) 80-356 100 (4×25) in thick 80-311 100 (4×25) 80-311 100 (4×25) 80-357 100 (4×25) 80-470 200 strips 80-471 200 strips 80-472 200 strips A, ⟨⟨x⟩ 23 A 80-402 200 (8×25) 80-422 200 (8×25) 24 A, ⟨⟨x⟩ 23 A	Separator, oversi  Insulation stop	orange 28 grey 28 light grey 28 grey 28 grey 28 gred, 2 mm/0.079 if orange 28 grey 28 grey 28 grey 28 light grey 28 light grey 28 dark grey 28 grey 28 grey 28 insulated, I <sub>N</sub> 24 A grey 28 grey 28 grey 28 grinsulated, I <sub>N</sub> 24 A grey 28	nm/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-346 100 (4×25) 10-347 100 (4×25) 10-470 200 strips 10-471 200 strips 10-472 200 strips 10-472 200 (8×25) 10-422 200 (8×25) 10-422 200 (8×25) 10-452 100 (4×25) 10-452 100 (4×25) 10-453 100 (4×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey light grey white light grey dark grey dark grey yellgreen er ③, insulated width 5 mm from 1 to 2	280-315 280-314 280-352 79 in thick 280-335 280-334 280-353 280-470 280-471 280-472 24 A, (x) 20 280-402 280-402	100 (4×: 100
Separator, oversions of the separator oversions oversions oversions of the separator oversions	orange 2: grey 2: light grey 2: gred, 2 mm / 0.079 orange 2: grey 2: light grey 2: light grey 2: light grey 2: dark grey 2: grey 2: yellgreen 2: orange 2: yellgreen 2: orange 3: grey 2: yellgreen 2: orange 4: grey 2: grey 2: yellgreen 2: orange 4: grey 2: grey 2: yellgreen 3: orange 4: orange 5: orange 4: orange 5: orange 5: orange 5: orange 5: orange 5: orange 6:	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) 80-356 100 (4×25) 80-311 100 (4×25) 80-311 100 (4×25) 80-357 100 (4×25) 80-470 200 strips 80-471 200 strips 80-472 200 strips A, ⟨⟨x⟩ 23 A 80-402 200 (8×25) 80-422 200 (8×25) 24 A, ⟨⟨x⟩ 23 A .197 in 80-452 100 (4×25)	Separator, oversi  Insulation stop	orange 28 grey 28 light grey 28 grey 28 grey 28 gred, 2 mm/0.079 if orange 28 grey 28 grey 28 grey 28 light grey 28 light grey 28 dark grey 28 grey 28 grey 28 insulated, I <sub>N</sub> 24 A grey 28 grey 28 grey 28 grinsulated, I <sub>N</sub> 24 A grey 28	nm/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-346 100 (4×25) 10-349 100 (4×25) 10-470 200 strips 10-471 200 strips 10-472 200 strips 10-472 200 (8×25) 10-402 200 (8×25) 10-422 200 (8×25) 10-452 100 (4×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey light grey white light grey dark grey dark grey yellgreen er 3, insulated width 5 mm from 1 to 2 from 1 to 3	280-315 280-314 280-352 79 in thick 280-335 280-334 280-353 280-470 280-471 280-472 24 A, (**) 20 280-402 280-402 280-422	100 (4×10
Separator, oversions of the separator oversions oversions oversions of the separator oversions	orange 2: grey 2: light grey 2: gred, 2 mm / 0.079 orange 2: grey 2: light grey 2: light grey 2: light grey 2: dark grey 2: yellgreen 2: yellgreen 2: from 1 to 2 7: from 1 to 4 7:	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) 80-311 100 (4×25) 80-311 100 (4×25) 80-357 100 (4×25) 80-470 200 strips 80-471 200 strips 80-472 200 strips 80-472 200 (8×25) 80-422 200 (8×25) 80-422 100 (8×25) 80-452 100 (4×25) 80-452 100 (4×25)	Separator, oversi  Insulation stop	orange 28 grey 28 light grey 28 grey 28 zed, 2 mm/0.079 i orange 28 grey 28 grey 28 light grey 28 light grey 28 light grey 28 light grey 28 dark grey 28 r, insulated, I <sub>N</sub> 24 A grey 28 yellgreen 28 er 3, insulated, I <sub>N</sub> width 5 mm/0. from 1 to 2 78 from 1 to 3 78 from 1 to 4 78	nm/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-346 100 (4×25) 10-347 100 (4×25) 10-470 200 strips 10-471 200 strips 10-472 200 strips 10-472 200 (8×25) 10-422 200 (8×25) 10-422 200 (8×25) 10-452 100 (4×25) 10-452 100 (4×25) 10-453 100 (4×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey light grey white light grey dark grey dark grey yellgreen er 3, insulated width 5 mm from 1 to 2 from 1 to 3 from 1 to 4	280-315 280-314 280-352 79 in thick 280-335 280-334 280-353 280-470 280-471 280-472 24 A, (x) 20 280-402 280-402 280-422 280-422 280-422 280-422 280-423 70.197 in T80-452 780-453	100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×: 100 (4×:
Separator, oversions of the separator oversions oversions oversions of the separator oversions	orange 2: grey 2: light grey 2: gred, 2 mm / 0.079 orange 2: grey 2: light grey 2: light grey 2: light grey 2: dark grey 2: yellgreen 2: yellgreen 2: from 1 to 2 7: from 1 to 4 7:	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) 80-311 100 (4×25) 80-311 100 (4×25) 80-317 100 (4×25) 80-357 100 (4×25) 80-470 200 strips 80-471 200 strips 80-472 200 strips 80-472 200 (8×25) 80-422 200 (8×25) 80-422 100 (4×25) 80-452 100 (4×25) 80-453 100 (4×25) 80-454 100 (4×25)	Separator, oversi  Insulation stop	orange 28 grey 28 light grey 28 grey 28 zed, 2 mm/0.079 i orange 28 grey 28 grey 28 light grey 28 light grey 28 light grey 28 light grey 28 dark grey 28 r, insulated, I <sub>N</sub> 24 A grey 28 yellgreen 28 er 3, insulated, I <sub>N</sub> width 5 mm/0. from 1 to 2 78 from 1 to 3 78 from 1 to 4 78	nm/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-346 100 (4×25) 10-344 100 (4×25) 10-470 200 strips 10-471 200 strips 10-472 200 strips 10-472 200 (8×25) 10-422 200 (8×25) 10-422 200 (8×25) 10-452 100 (4×25) 10-453 100 (4×25) 10-454 100 (4×25) 10-454 100 (4×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey light grey white light grey dark grey dark grey yellgreen er 3, insulated width 5 mm from 1 to 2 from 1 to 3 from 1 to 4	280-315 280-314 280-352 79 in thick 280-335 280-334 280-353 280-470 280-471 280-472 24 A, (a) 20 280-402 280-402 280-422 280-422 280-422 280-422 280-422 280-422 280-422 280-422 280-422	100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 100 (4×2) 200 strip 200 strip 200 strip 200 strip 200 (8×2) 200 (8×2) 200 (8×2) 200 (4×2) 100 (4×2) 100 (4×2)
Separator, oversions of the separator oversions oversions oversions of the separator oversions	orange 2: grey 2: light grey 2: zed, 2 mm /0.079 orange 2: grey 2: light grey 2: light grey 2: light grey 2: light grey 2: dark grey 2: dark grey 2: yellgreen 2: er 3, insulated, I <sub>N</sub> 24 / grey 2: yellgreen 2: er 3, insulated, I <sub>N</sub> 24 / from 1 to 2 7 from 1 to 3 7 from 1 to 4 7 from 1 to 5 7	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) 80-311 100 (4×25) 80-311 100 (4×25) 80-317 100 (4×25) 80-357 100 (4×25) 80-470 200 strips 80-471 200 strips 80-472 200 strips 80-472 200 (8×25) 80-422 200 (8×25) 80-422 100 (4×25) 80-452 100 (4×25) 80-453 100 (4×25) 80-454 100 (4×25)	Separator, oversi  Insulation stop	orange 28 grey 28 light grey 28 grey 28 grey 28 light grey 28 grey 28 grey 28 grey 28 grey 28 light grey 28 light grey 28 dark grey 28 grey 28 grey 28 dark grey 28 grey 28 grey 28 grey 28 dark grey 28 grey 30 grey 28 grey 30 grey	nm/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-358 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-346 100 (4×25) 10-344 100 (4×25) 10-470 200 strips 10-471 200 strips 10-472 200 strips 10-472 200 (8×25) 10-402 200 (8×25) 10-422 200 (8×25) 10-452 100 (4×25) 10-453 100 (4×25) 10-454 100 (4×25) 10-454 100 (4×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey light grey shite light grey dark grey dark grey yellgreen er 3, insulated width 5 mm from 1 to 2 from 1 to 3 from 1 to 4 from 1 to 5	280-315 280-314 280-352 79 in thick 280-335 280-334 280-353 280-470 280-471 280-472 24 A, (a) 20 280-402 280-402 280-422 280-422 280-422 280-422 280-422 280-422 280-422 280-422 280-422	100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 200 strip 200 strip 200 strip 200 strip 200 (8×2 200 (8×2 200 (8×2 200 (4×2 100 (4×2 50 (2×2
Separator, oversions and intermed and intermed separator, oversions and intermed separator separat	orange 2: grey 2: light grey 2: grey 2: light grey 2: grey 2: light grey 2: light grey 2: light grey 2: light grey 2: dark grey 2: dark grey 2: yellgreen 2: er 3, insulated, I <sub>N</sub> 24 / grey 2 yellgreen 2: er 3, insulated, I <sub>N</sub> 24 / from 1 to 2 7 from 1 to 3 7 from 1 to 4 7 from 1 to 5 7	mm/0.098 in thick 80-309 100 (4×25) 80-308 100 (4×25) 80-356 100 (4×25) 80-311 100 (4×25) 80-311 100 (4×25) 80-310 100 (4×25) 80-357 100 (4×25) 80-470 200 strips 80-471 200 strips 80-472 200 strips 80-472 200 (8×25) 80-422 200 (8×25) 24 A, ⟨⟨⟨x⟩⟩ 23 A .197 in 80-452 100 (4×25) 80-453 100 (4×25) 80-454 100 (4×25) 80-455 50 (2×25) :	Separator, oversi  Insulation stop  Adjacent jumper	orange 28 grey 28 light grey 28 grey 28 light grey 28 grey 28 grey 28 grey 28 grey 28 grey 28 light grey 28 light grey 28 dark grey 28 grey 28 grey 28 dark grey 28 grey 28 grey 28 grey 28 for insulated, I <sub>N</sub> 24 A grey 28 grey 38 g	nm/0.098 in thick 10-326 100 (4×25) 10-324 100 (4×25) 10-328 100 (4×25) 10-358 100 (4×25) 10-346 100 (4×25) 10-346 100 (4×25) 10-347 100 (4×25) 10-470 200 strips 10-471 200 strips 10-472 200 strips 10-472 200 (8×25) 10-402 200 (8×25) 10-422 200 (8×25) 10-452 100 (4×25) 10-453 100 (4×25) 10-454 100 (4×25) 10-455 50 (2×25) 10-455 50 (2×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey light grey shite light grey dark grey yellgreen er 3, insulated, l <sub>N</sub> 2 grey yellgreen from 1 to 2 from 1 to 3 from 1 to 4 from 1 to 5 : from 1 to 8	280-315 280-314 280-352 79 in thick 280-335 280-334 280-353 280-471 280-471 280-472 24 A, (a) 20 280-402 280-402 280-402 280-422 380-452 780-453 780-455 : 780-458	100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 100 (4×2 200 strips 200 strips 200 strips 200 (8×2 200 (8×2 200 (8×2 200 (4×2 100 (4×2 50 (2×2 50 (2×2 50 (2×2

<sup>\*</sup>For further approvals with corresponding ratings see section 15.

## **Double Potential Terminal Blocks** 2.5 mm<sup>2</sup> / AWG 12, Series 280



Pack, unit

pcs

0.08 **– 2.5** mm<sup>2</sup> 800 V/8 kV/3 **①** 

AWG 28 - 12 600 V, 20 A **%** 600 V, 25 A ®

Terminal block width 5 mm / 0.197 in ■ 8 – 9 mm / 0.33 in

Item

\* 🗫 🎕 KEDA CCAKEDA 🕑 🚏 🗥 GL BV LR NV 🛭 🕸

0.08 **− 2.5** mm<sup>2</sup> 800 V/8 kV/3 **①** 

AWG 28 - 12 600 V, 15 A **9** 600 V, 15 A ®

Terminal block width 5 mm / 0.197 in □ 8 – 9 mm / 0.33 in

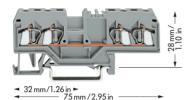
\* 🗫 🎕 KEDA CCAKEDA 📀 🐨 GL BV LR NV 🛭 😥

0.08 **– 2.5 mm²** 800 V/8 kV/3 **①** 

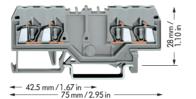
AWG 28 - 12 600 V, 15 A **%** 600 V, 20 A ®

Terminal block width 5 mm / 0.197 in □ 8 – 9 mm / 0.33 in

\* 🗫 🏽 KEDA CCAKEDA 🛈 🕞 🐨 GL BV LR NV 🕄 🖘



Pack, unit





	No.	ocs. om
4-conductor thro	ugh terminal blocks	
grey	280-633	100
blue	280-634 🕗	100
orange	280-603	100
light grey 🖘	280-999 🔘	100
4-conductor grou	und (earth) terminal blo	ocks
green-yellow	280-677 🕕	100
green-yellow (Ex)	280-677/999-950	100
4-conductor shie	ld (screen) terminal blo	ck
white	280-678 🔘	100
Other terminal b	locks with the same sh	ape
double potential	280-826	page 2.11
disconnect	280-685	page 7.11
disc., test a. meas.	280-649	page 7.11
carrier term. block	280-686	page 7.35
diode	280-655/	page 7.57
LED	280-658/	page 7.61

	ltem	Pack. unit
	No.	pcs
Double potention	ıl terminal bloc	ks, with double mar-
ker receptacle in	the center of the	terminal block
grey	280-826	100
light grey (Ex)	280-995	100

Attention! These double potential terminal blocks cannot be commoned with adjacent jumpers!

receptacle on the side of the terminal block 280-626 100 arev light grey (Ex) 280-989 100 Attention! These double potential terminal blocks

Item No.

Double potential terminal blocks, with marker

cannot be commoned with adjacent jumpers!



- 800 V = rated voltage 8 kV = rated surge voltage 3 = pollution degree (see also section 15)
- Suitable for EEx i applications
- Ex Suitable for EEx e II applications AWG 24 - 12 0.2 - 2.5 mm<sup>2</sup> 550 V~, 20 A (see also section 13) When using staggered jumpers the max. rated voltage will be reduced to 275 V. EEx e/EEx i separator see page 2.13
- 3 See application notes

			4	12/11		on pages 2.38 -		
			Terminal block marki either with WSB or V					
End and intermed	iate plate, 2	2.5 mm/0.098 in thick	End and intermediate plate, 2.5 mm/0.098 in thick			End and intermediate plate, 2.5 mm/0.098 in thick		
	orange	<b>280-315</b> 100 (4×25)		orange	280-315 100 (4×25)		orange	<b>280-317</b> 100 (4×25)
	grey	<b>280-314</b> 100 (4×25)		grey	<b>280-314</b> 100 (4×25)	* 1 3000 1	grey	<b>280-316</b> 100 (4 x 25)
	light grey	<b>280-352</b> 100 (4×25)		light grey	<b>280-352</b> 100 (4×25)		light grey	<b>280-364</b> 100 (4×25)
Separator, oversized, 2 mm/0.079 in thick			Separator, oversize	ed, 2 mm/0.0	179 in thick	Separator, oversize	ed, 2 mm/0.0	)79 in thick
	orange	<b>280-335</b> 100 (4×25)		orange	<b>280-335</b> 100 (4 x 25)		orange	<b>280-327</b> 100 (4 x 25)
	grey	<b>280-334</b> 100 (4×25)		grey	<b>280-334</b> 100 (4×25)		grey	<b>280-337</b> 100 (4 x 25)
	light grey	<b>280-353</b> 100 (4×25)		light grey	<b>280-353</b> 100 (4 x 25)		light grey	<b>280-365</b> 100 (4×25)
Insulation stop 🔞	5 pcs/strip		Insulation stop 😉,	5 pcs/strip		Insulation stop <b>3</b> ,	5 pcs/strip	
	white	<b>280-470</b> 200 strips	-0000 a	white	<b>280-470</b> 200 strips	~0000 a	white	<b>280-470</b> 200 strips
0000000	light grey	<b>280-471</b> 200 strips	299000	light grey	<b>280-471</b> 200 strips	29900	light grey	<b>280-471</b> 200 strips
0000	dark grey	<b>280-472</b> 200 strips	099	dark grey	<b>280-472</b> 200 strips	000	dark grey	<b>280-472</b> 200 strips
Adjacent jumper, insulated, I <sub>N</sub> 24 A, (£) 20 A								
Adjacent jumper,	insulated, I <sub>N</sub> 2		Comb type jumpe			Comb type jumper		
Adjacent jumper,	grey	<b>280-402</b> 200 (8×25)	(Walter)	$I_N = I_N$ of t	erminal block	(Wales	$I_N = I_N$ of t	terminal block
Adjacent jumper,	grey		Comb type jumpe		erminal block <b>280-482</b> 200 (8 x 25)	Comb type jumper	$I_N = I_N \text{ of } t$ 2-way	terminal block <b>280-482</b> 200 (8 x 25)
	grey yellgreen	<b>280-402</b> 200 (8×25) <b>280-422</b> 200 (8×25)	TVO HE	$I_N = I_N \text{ of t}$ 2-way 3-way	erminal block <b>280-482</b> 200 (8×25) <b>280-483</b> 200 (8×25)		$I_N = I_N \text{ of } t$ 2-way 3-way	<b>280-482</b> 200 (8 × 25) <b>280-483</b> 200 (8 × 25)
	grey yellgreen  3, insulated	280-402 200 (8×25) 280-422 200 (8×25) i, I <sub>N</sub> 24 A, (x) 20 A	(Walter)	$I_N = I_N \text{ of t}$ 2-way 3-way	<b>280-482</b> 200 (8 × 25) <b>280-483</b> 200 (8 × 25) <b>280-483</b> 200 (8 × 25)	(Wales	$I_N = I_N \text{ of } t$ 2-way 3-way	280-482 200 (8 x 25) 280-483 200 (8 x 25) Dar, insulated,
	grey yellgreen  3, insulated width 5 mm	280-402 200 (8×25) 280-422 200 (8×25) I, I <sub>N</sub> 24 A, ⟨Ex⟩ 20 A 1/0.197 in	TVO HE	$I_N = I_N \text{ of t}$ 2-way 3-way	erminal block  280-482 200 (8 × 25)  280-483 200 (8 × 25)  par, insulated, erminal block		$I_N = I_N \text{ of } t$ 2-way 3-way  pe jumper $I_N = I_N \text{ of } t$	280-482 200 (8 x 25) 280-483 200 (8 x 25) bar, insulated, terminal block
	grey yellgreen  3, insulated width 5 mm from 1 to 2	280-402 200 (8×25) 280-422 200 (8×25) 4, I <sub>N</sub> 24 A,  \$\overline{\xx}\$ 20 A 1/0.197 in 1780-452 100 (4×25)	TVO HE	$I_N = I_N \text{ of t}$ 2-way 3-way	<b>280-482</b> 200 (8 × 25) <b>280-483</b> 200 (8 × 25) <b>280-483</b> 200 (8 × 25)		$I_N = I_N \text{ of } t$ 2-way 3-way	280-482 200 (8 x 25) 280-483 200 (8 x 25) Dar, insulated,
	grey yellgreen  3, insulated width 5 mm from 1 to 2 from 1 to 3	280-402 200 (8×25) 280-422 200 (8×25) 4, I <sub>N</sub> 24 A,  \$\overline{\xi}\$ 20 A and 0.197 in	Alternate comb ty	$I_N = I_N$ of the second sec	erminal block  280-482 200 (8 × 25)  280-483 200 (8 × 25)  par, insulated, erminal block	Alternate comb ty	$I_N = I_N \text{ of } t$ 2-way 3-way <b>pe jumper I</b> $I_N = I_N \text{ of } t$ 2-way	280-482 200 (8 x 25) 280-483 200 (8 x 25) bar, insulated, terminal block
	grey yellgreen  3, insulated width 5 mm from 1 to 2 from 1 to 3 from 1 to 4	280-402 200 (8×25) 280-422 200 (8×25) 4, I <sub>N</sub> 24 A, (£x) 20 A 1/0.197 in 1780-452 100 (4×25) 1780-453 100 (4×25) 1780-454 100 (4×25)	TVO HE	$I_N = I_N$ of the second sec	erminal block  280-482 200 (8 x 25)  280-483 200 (8 x 25)  bar, insulated, erminal block  280-492 200 (8 x 25)		$I_N = I_N \text{ of } t$ 2-way 3-way <b>pe jumper I</b> $I_N = I_N \text{ of } t$ 2-way	280-482 200 (8×25) 280-483 200 (8×25) 280-483 200 (8×25) car, insulated, terminal block 280-492 200 (8×25)
	grey yellgreen  3, insulated width 5 mm from 1 to 2 from 1 to 3 from 1 to 4	280-402 200 (8×25) 280-422 200 (8×25) 4, I <sub>N</sub> 24 A,  \$\overline{\xi}\$ 20 A and 0.197 in	Alternate comb ty	$I_N = I_N$ of the 2-way 3-way $I_N = I_N$ of the 2-way $I_N = I_N$ of the 2-way $I_N = I_N$ and $I_N = I_N$ of the 2-way $I_N = I_N$ of the 2-wa	erminal block  280-482 200 (8 x 25)  280-483 200 (8 x 25)  par, insulated, erminal block  280-492 200 (8 x 25)	Alternate comb ty	$I_N = I_N$ of the 2-way 3-way pe jumper $I_N = I_N$ of the 2-way sulated 2-way	280-482 200 (8×25) 280-483 200 (8×25) 280-483 200 (8×25) 280-492 200 (8×25) 280-492 200 (8×25)
	grey yellgreen 3, insulated width 5 mm from 1 to 2 from 1 to 3 from 1 to 4 from 1 to 5	280-402 200 (8×25) 280-422 200 (8×25) 4, I <sub>N</sub> 24 A, (£x) 20 A 1/0.197 in 1780-452 100 (4×25) 1780-453 100 (4×25) 1780-454 100 (4×25) 1780-455 50 (2×25) 1780-455 50 (2×25)	Alternate comb ty	$I_N = I_N$ of the 2-way 3-way $I_N = I_N$ of the 1-way $I_N = I_N$ of the 2-way sulated	erminal block  280-482 200 (8 x 25)  280-483 200 (8 x 25)  bar, insulated, erminal block  280-492 200 (8 x 25)	Alternate comb ty	$I_N = I_N$ of the second second $I_N = I_N$ of the second second $I_N = I_N$ of the second	280-482 200 (8×25) 280-483 200 (8×25) 280-483 200 (8×25) car, insulated, terminal block 280-492 200 (8×25)
Staggered jumper	grey yellgreen  3, insulated width 5 mm from 1 to 2 from 1 to 3 from 1 to 4 from 1 to 5 from 1 to 8	280-402 200 (8 x 25) 280-422 200 (8 x 25) 4, I <sub>N</sub> 24 A, (£x) 20 A 1/0.197 in 780-452 100 (4 x 25) 780-453 100 (4 x 25) 780-454 100 (4 x 25) 780-455 50 (2 x 25) : 1780-458 50 (2 x 25)	Alternate comb ty	$I_N = I_N$ of the 2-way 3-way $I_N = I_N$ of the 2-way $I_N = I_N$ of the 2-way $I_N = I_N$ and $I_N = I_N$ of the 2-way $I_N = I_N$ of the 2-wa	erminal block  280-482 200 (8 x 25)  280-483 200 (8 x 25)  par, insulated, erminal block  280-492 200 (8 x 25)	Alternate comb ty	$I_N = I_N$ of the 2-way 3-way pe jumper $I_N = I_N$ of the 2-way sulated 2-way	280-482 200 (8×25) 280-483 200 (8×25) 280-483 200 (8×25) 280-492 200 (8×25) 280-492 200 (8×25)
Staggered jumper	grey yellgreen  3, insulated width 5 mm from 1 to 2 from 1 to 3 from 1 to 4 from 1 to 5 from 1 to 8 marker, co	280-402 200 (8×25) 280-422 200 (8×25) 4, I <sub>N</sub> 24 A, (£x) 20 A 1/0.197 in 780-452 100 (4×25) 780-453 100 (4×25) 780-454 100 (4×25) 780-455 50 (2×25) : 1780-458 50 (2×25) pmp type jumper bar,	Alternate comb ty	$I_N = I_N$ of the 2-way 3-way $I_N = I_N$ of the 2-way $I_N = I_N$ of the 2-way $I_N = I_N$ and $I_N = I_N$ of the 2-way $I_N = I_N$ of the 2-wa	erminal block  280-482 200 (8 x 25)  280-483 200 (8 x 25)  par, insulated, erminal block  280-492 200 (8 x 25)	Alternate comb ty	$I_N = I_N$ of the 2-way 3-way pe jumper $I_N = I_N$ of the 2-way sulated 2-way	280-482 200 (8×25) 280-483 200 (8×25) 280-483 200 (8×25) 280-492 200 (8×25) 280-492 200 (8×25)



# Through/Ground (Earth) Conductor/Shield (Screen) and (Ex) Terminal Blocks 2.5 mm² / AWG 12, Series 280

0.08 - 2.5 mm<sup>2</sup> 800 V/8 kV/3 **0** 24 A

AWG 28 - 12 600 V, 20 A **RU** 600 V, 25 A ®

Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in

\* 🕦 🏽 KEUA CCAKEUA 🛈 🕾 🗣 🛣 GL BV LR NV 🖟 😥

0.08 - 2.5 mm<sup>2</sup> 800 V/8 kV/3 **①** 24 A

AWG 28 - 12 600 V, 15 A **9** 600 V, 15 A ®

Terminal block width 5 mm / 0.197 in ■ 8 - 9 mm / 0.33 in

\* **91 ©** REER CCAREER (D) S P & A GL BV LR NV (8 &

0.08 - **2.5** mm<sup>2</sup> 800 V/8 kV/3 **①** 24 A AWG 28 - 12 600 V, 20 A **9** 600 V, 25 A ®

Terminal block width 5 mm / 0.197 in 8 = 9 mm / 0.33 in

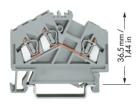
\* 71 @ CCAREER NO (10) @ (20) AS GL BV LR NV (10) (20)











**←** 50.5 mm / 1.99 in **←** 

	Item No.	Pack. unit		Item No.	Pack. unit		Item No.	Pack. unit
2-conductor thro	ugh terminal block	s	4-conductor thr	ough terminal blo	cks	3-conductor thre	ough terminal b	locks
grey	280-601	100	grey	280-621	100	grey	280-641	100
blue	280-602 🕗	100	blue	280-604 🕗	100	blue	280-651 2	100
						orange	280-654	100
light grey (Ex)	280-691 🔾	100	light grey (Ex)	280-990 🔾	100	light grey 🖘	280-998 🔾	100
2-conductor grou	und (earth) termina	l blocks				3-conductor gro		ninal blocks
green-yellow	280-607 🛑	100				green-yellow	280-637 🛑	100
green-yellow (Ex)	280-607/999-950	<b>)</b> ( 100				green-yellow (Ex)		
						3-conductor ship	, , _	
						white	280-640	100
	locks with the sam	•		blocks with the sa	•	Other terminal l		•
disconnect	280-612	page 7.11	double potential		page 2.11	spacer	280-654/056	-000
carrier term. block		page 7.35	disconnect	280-622	page 7.11			
term. bl. f. pl. mod.		W4, vol. 3	disc., test a. meas		page 7.11			
diode	280-613/	page 7.57	carrier term. bloc		page 7.35			
variable transistor	280-615/	page 7.58	term. bl. f. pl. mod		W4, vol. 3			
			diode LED	280-623/ 280-624/				
			LED	200-024/	. page 7.60			
Accessories S	Series 280	Appr	opriate marking syst	em WMB/WSB	WFB (see section	n 14)		
End and interme	diate plate, 2.5 mm		End and interm	ediate plate, 2.5 m		End and interme	-	mm/0.098 in thick
		-331 100 (4 x 25)			<b>0-317</b> 100 (4×25)			280-313 100 (4×2
		-330 100 (4×25)		0 ,	<b>0-316</b> 100 (4 × 25)			280-312 100 (4×2
Sangrator oversi	light grey <b>280</b> - zed, 2 mm / 0.079 in t	-362 100 (4 x 25)	Congretor Over	light grey 28 sized, 2 mm/0.079 i	0-364 100 (4 x 25)	Separator, overs	<u> </u>	280-354 100 (4 x 2
<b>Separator,</b> Oversize	•	-328 100 (4×25)	<b>Separator,</b> Overs	·	<b>0-327</b> 100 (4×25)	<b>Separation</b> , overs		280-318 100 (4×2
		-338 100 (4×25)			<b>0-327</b> 100 (4×25)			280-348 100 (4×2
		-363 100 (4×25)		0 ,	<b>0-365</b> 100 (4×25)	1		280-355 100 (4×2
Insulation stop			Insulation stop			Insulation stop	<u> </u>	
		- <b>470</b> 200 strips			<b>0-470</b> 200 strips			<b>280-470</b> 200 strips
000000	light grey 280-	-471 200 strips	000000	light grey 28	<b>0-471</b> 200 strips	000000	light grey	280-471 200 strips
099	dark grey 280-	<b>-472</b> 200 strips	099	dark grey 28	<b>0-472</b> 200 strips	0999		<b>280-472</b> 200 strips
Adjacent jumper	, insulated, I <sub>N</sub> 24 A, 〈	€x 23 A	Adjacent jumpe	er, insulated, I <sub>N</sub> 24 A	, €x 22 A	Adjacent jumpe	r, insulated, I <sub>N</sub> 24	A, €x 23 A
lib.	grey <b>280</b> -	- <b>402</b> 200 (8 x 25)	lite .	grey 28	<b>0-402</b> 200 (8 x 25)	lite .	0 /	<b>280-402</b> 200 (8×2
	yellgreen 280-	- <b>422</b> 200 (8 × 25)		yellgreen 28	<b>0-422</b> 200 (8 × 25)		yellgreen	<b>280-422</b> 200 (8×2
Staggered jumpe	er <b>3</b> , insulated, I <sub>N</sub> 24	A, (Ex) 23 A	Staggered jump	er <b>3</b> , insulated, I <sub>N</sub>	24 A, 🕸 22 A	Staggered jump	er <b>3</b> , insulated,	I <sub>N</sub> 24 A, ⟨Ex⟩ 23 A
	width 5 mm / 0.197			width 5 mm / 0.			width 5 mm /	
	from 1 to 2 <b>780</b> -				<b>0-452</b> 100 (4×25)			<b>780-452</b> 100 (4×2
	from 1 to 3 <b>780</b> -				<b>0-453</b> 100 (4×25)			<b>780-453</b> 100 (4×2
	from 1 to 4 <b>780</b> -				<b>0-454</b> 100 (4×25)			<b>780-454</b> 100 (4×2
	from 1 to 5 <b>780</b> -		11		<b>0-455</b> 50 (2 × 25)			<b>780-455</b> 50 (2 x 2
*	: : :		4	:	:	4	:	:
D:	from 1 to 8 <b>780</b> -		D:		0-458 50 (2×25)	D:		780-458 50 (2×2
	ng marker, comp ty			ing marker, comp			•	np type jumper bo
rest plug adapte	r, etc. (see right pa	ge)	rest plug adapt	er, etc. (see right p	age)	test plug adapte	er, etc. (see righ	t page)

<sup>\*</sup> For further approvals with corresponding ratings see section 15.



 $0.08 - 2.5 \text{ mm}^2$ 800 V/8 kV/3 **①** 

AWG 28 - 12 600 V, 20 A **%** 600 V, 25 A ®

Terminal block width 5 mm / 0.197 in □ 8 – 9 mm / 0.33 in

\* 🗫 🍪 KEDA CCAKEDA 🛈 🚭 🕸 GL BV LR NV 🖗 🖘

### **Accessories Series 280**



- 50,5 mm / 1.99 in

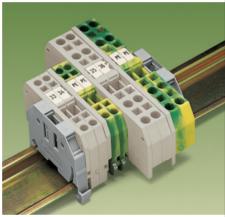
	Item No.	Pack. unit pcs
4-conductor th	rough terminal bloc	:ks
grey	280-646	100
blue	280-656 🕗	100
orange	280-946	100
light grey 🖘	280-996 🔘	100

Attention! These terminal blocks cannot be commoned with adjacent jumpers!

- 1 800 V = rated voltage 8 kV = rated surge voltage 3 = pollution degree (see also section 15)
- Suitable for EEx i applications
- (Ex) Suitable for EEx e II applications 0.2 - 2.5 mm<sup>2</sup> 550 V~, 20 A AWG 24 - 12 (see also section 13)

When using staggered jumpers the max. rated voltage will be reduced to 275 V.

See application notes on pages 2.38 - 2.45



In order to meet the air and creepage distances specified for EExe applications it is necessary to insert an end or intermediate plate between a through and a ground (earth) conductor terminal block.

ltem No.	Pack. unit pcs
Insulation stop 3, 5 pcs/strip	

white 280-470 200 strips light grey 280-471 200 strips dark grey 280-472 200 strips

Adjacent jumper, insulated, I<sub>N</sub> 24 A, (Ex) 20 A

280-402 200 (8 x 25) grey yell.-green 280-422 200 (8 x 25)

Alternate jumper, insulated, I<sub>N</sub> 24 A, (Ex) 20 A 280-409 100 (4 x 25) grey

**Staggered jumper 3,** insulated, I<sub>N</sub> 24 A, (Ex) 20 A



width 5 mm / 0.197 in from 1 to 2 780-452 100 (4 x 25) from 1 to 3 780-453 100 (4 x 25)

from 1 to 4 780-454 100 (4 x 25) from 1 to 5 780-455 50 (2 x 25)

from 1 to 8 780-458 50 (2 x 25)

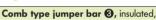


Push-in type wire jumper 1, insulated, IN 9 A L = 60 mm **249-125**L = 110 mm **249-126**L = 250 mm **249-127**

Protective warning marker, for 5 terminal blocks, fits into screwdriver slot



yellow 280-415 100 (4×25)





 $I_N = I_N$  of terminal block 2-way 280-482 200 (8 x 25)

3-way 280-483 200 (8 x 25) Alternate comb type jumper bar, insulated,

3-way



 $I_N = I_N$  of terminal block 280-492 200 (8 x 25)

2-way



280-432 2-way

End and intermediate plate, 2.5 mm/0.098 in thick



orange 280-313 100 (4x25 grey 280-312 100 (4×25) light grey 280-354 100 (4×25)

**Separator**, oversized, 2.5 mm/0.098 in thick



280-318 100 (4x25) oranae 280-348 100 (4×25) grey 280-355 100 (4×25) light grey

Insulation stop 3, 5 pcs/strip

280-470 200 strips white light grey 280-471 200 strips dark grey 280-472 200 strips

Comb type jumper bar 3, insulated,



 $I_N = I_N$  of terminal block 2-way 280-482 200 (8 x 25) 280-483 200 (8 x 25) 3-way

Alternate comb type jumper bar, insulated,



 $I_N = I_N$  of terminal block 2-way 280-492 200 (8 x 25)

280-432

**280-433** 1

1

Operating tool, insulated

2-way 3-way

Test plug module,

testing using conductor entry holes see page 2.38

EEx e/EEx i separator, 3 mm/0.118 in thick, orange



90 mm wide 209-190 50 (2 x 25) 110 mm w. **209-191** 50 (2×25)





## Separator for EEx e/EEx i applications

According to EN 50020 a minimum distance of 50 mm must be kept between live parts of EEx e and EEx i circuits. When mounting EEx e and EEx i rail-mounted terminal blocks together on a common rail WAGO offers a space saving solution to the problem by using the EEx e/EEx i separators.

Suitable for series 279 to 282. 209-190 for 2-conductor terminal blocks. 209-191 for 2-, 3-, 4-conductor terminal blocks.





testing using jumper contact slots or conductor entry holes

280-433

Test plug, with cable 500 mm/17.7"



2 mm Ø, red 210-136 50 (5 x 10) 2.3 mm Ø, yel. **210-137** 50 (5 x 10)

Test plug adapter, suitable f. term. bl. 1.5 mm<sup>2</sup> – 4 mm<sup>2</sup>, 5 mm / 0.197 in wide



for test plug 210-137 (2.3 mm Ø)

Test plug adapter, suitable f. term. bl. 1.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, 8 mm / 0.315 in wide



209-170 50 (2 x 25) for test plug 4 mm/0.157 in  $\varnothing$ 

Test plug, 6 mm/0.236 in wide, with CAGE CLAMP® for



0.08 mm<sup>2</sup> - 2.5 mm<sup>2</sup>/AWG 28 - 14 I<sub>N</sub> 24 A 281-407 100 (4×25)

Banana plugs, 4 mm/0.157 in Ø, color mixed see page 2.42



# Through and Ground (Earth) Conductor Terminal Blocks, Terminal Block Width 5 mm / 0.197 in, 4 mm<sup>2</sup> / AWG 12 Series 880

0.08 - 4 mm<sup>2</sup>\*\* 800 V/8 kV/3 **①** 25 A

AWG 28 - 12

Terminal block width 5 mm / 0.197 in  $\boxed{\phantom{0}}$  8 - 9 mm / 0.33 in

\* c SNL us KEMA CCAKEMA GL BV LR

0.08 - 4 mm<sup>2\*\*</sup> 800 V/8 kV/3 **0** 25 A

AWG 28 – 12

Terminal block width 5 mm / 0.197 in ■ 8 - 9 mm / 0.33 in

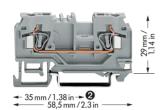
\* calus Kema CCAKEMA GL BV LR

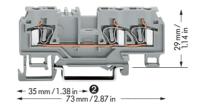
0.08 - 4 mm<sup>2</sup>\*\* 800 V/8 kV/3 **0** 20 A

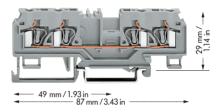
AWG 28 - 12

Terminal block width 5 mm / 0.197 in  $\boxed{\phantom{0}}$  8 - 9 mm / 0.33 in

\* .91...







	Item No.	Pack. unit pcs		ltem No.	Pack. unit pcs		ltem No.	Pack. unit pcs
Through terminal	block without/with	shield (screen)	Through terminal	block without/wi	ith shield (screen)	Through terminal	block without/w	ith shield (screer
contact and test s	lot for test plug		contact and test s	lot for test plug		contact and test	slot for test plug	
Ø 2 mm / 0.079 i	in and Ø 2.3 mm/	0.091 in,	Ø 2 mm/0.079 i	in and Ø 2.3 mm	/ 0.091 in,	Ø 2 mm / 0.079	in and Ø 2.3 mm	/ 0.091 in,
for DIN 35 rail			for DIN 35 rail			for DIN 35 rail		
2-conductor throu	gh terminal blocks	without shield	3-conductor throu	ugh terminal bloc	ks without shield	4-conductor thro	ugh terminal bloc	ks without shie
(screen) contact			(screen) contact			(screen) contact		
grey	880-901	100	grey	880-681	100	grey	880-831	100
blue	880-904 3	100	blue	880-684 🕙	100	blue	880-834 ③	100
orange	880-902	100	orange	880-682	100	orange	880-832	100
						, and the second		
2-conductor throu	gh terminal blocks	with shield	3-conductor throu	ugh terminal bloc	ks with shield			
(screen) contact –	please contact factor	ry	(screen) contact –	please contact fac	tory			
2-conductor grou	nd (earth) terminal	block	3-conductor grou	nd (earth) termin	al block	4-conductor grou	und (earth) termin	al block
green-yellow	880-907	100	green-yellow	880-687	100	green-yellow	880-837	100
							_	
Accessories S	eries 880	Appropric	ite marking system <b>W</b>	MB/WSB oder	Mini-WSB (see se	ection 14)		
End and intermed	diate plate, 2.5 mm/	0.098 in thick	End and intermed	diate plate, 2.5 mr	m/0.098 in thick	End and interme	<b>diate plate,</b> 2.5 m	m/0.098 in thick
		328 100 (4×25)			<b>)-339</b> 100 (4×25)			<b>0-346</b> 100 (4×2
* ( )	grey 880-3	325 100 (4×25)		grey 880	0-308 100 (4×25)	* (1224)	grey 88	<b>0-344</b> 100 (4×2
	0 ,	• •		0 ,	, ,		0 ,	•
Separator, oversiz	ed, 2 mm/0.079 in th	nick	Separator, oversize	ed, 2 mm/0.079 in	thick	Separator, oversize	zed, 2 mm/0.079 ir	n thick
	orange 880-3	329 100 (4×25)		orange 880	<b>)-340</b> 100 (4×25)		orange 88	<b>0-347</b> 100 (4×2
	grey 880-3	326 100 (4×25)		grey 880	<b>0-309</b> 100 (4×25)		grey 88	0-345 100 (4×2
Insulation stop 4	, 5 pcs/strip		Insulation stop 4	, 5 pcs/strip		Insulation stop <b>4</b>	, 5 pcs/strip	
	white <b>280-</b> 4	<b>470</b> 200 strips	- 0	1	<b>0-470</b> 200 strips	A.B	white 28	<b>0-470</b> 200 strips
	WITHE ZOO-	TI O ZOO SILIPS	- AAN .	white 280	7-4/0 ZUU SIIIPS	- AND		
00000		471 200 strips	4444		0-471 200 strips	000000		
99909	light grey 280-4	<b>471</b> 200 strips	00000	light grey 280	<b>)-471</b> 200 strips	00000	light grey 28	<b>0-471</b> 200 strips
Adjacent jumper,	light grey 280-4 dark grey 280-4	<b>471</b> 200 strips	Adjacent jumper,	light grey 280 dark grey 280		Adjacent jumper	light grey 28 dark grey 28	<b>0-471</b> 200 strips
Adjacent jumper,	light grey 280-4 dark grey 280-4 insulated, I <sub>N</sub> 24 A	<b>471</b> 200 strips <b>472</b> 200 strips	Adjacent jumper,	light grey 280 dark grey 280 insulated, I <sub>N</sub> 24 A	<b>0-471</b> 200 strips <b>0-472</b> 200 strips	Adjacent jumper	light grey 28 dark grey 28, insulated, I <sub>N</sub> 24 A	<b>0-471</b> 200 strips <b>0-472</b> 200 strips
Adjacent jumper,	light grey 280-4 dark grey 280-4 insulated, I <sub>N</sub> 24 A grey 280-4	<b>471</b> 200 strips <b>472</b> 200 strips <b>402</b> 200 (8 x 25)	Adjacent jumper,	light grey 280 dark grey 280 insulated, I <sub>N</sub> 24 A grey 280	0-471 200 strips 0-472 200 strips 0-402 200 (8 x 25)	Adjacent jumper	light grey 28 dark grey 28, insulated, I <sub>N</sub> 24 A grey 28	0-471 200 strips 0-472 200 strips 0-402 200 (8 x 2
Adjacent jumper,	light grey 280-4 dark grey 280-4 insulated, I <sub>N</sub> 24 A	<b>471</b> 200 strips <b>472</b> 200 strips <b>402</b> 200 (8 x 25)	Adjacent jumper,	light grey 280 dark grey 280 insulated, I <sub>N</sub> 24 A grey 280	<b>0-471</b> 200 strips <b>0-472</b> 200 strips	Adjacent jumper	light grey 28 dark grey 28, insulated, I <sub>N</sub> 24 A grey 28	0-471 200 strips 0-472 200 strips 0-402 200 (8 x 2
	light grey 280-4 dark grey 280-4 insulated, I <sub>N</sub> 24 A grey 280-4 yellgreen 280-4	<b>471</b> 200 strips <b>472</b> 200 strips <b>402</b> 200 (8×25) <b>422</b> 200 (8×25)		light grey 280 dark grey 280 insulated, I <sub>N</sub> 24 A grey 280 yellgreen 280	0-471 200 strips 0-472 200 strips 0-402 200 (8×25) 0-422 200 (8×25)	F	light grey 28 dark grey 28 , insulated, I <sub>N</sub> 24 A grey 28 yellgreen 28	0-471 200 strips 0-472 200 strips 0-402 200 (8×2 0-422 200 (8×2
	light grey 280-4 dark grey 280-4 insulated, I <sub>N</sub> 24 A grey 280-4	471 200 strips 472 200 strips 402 200 (8 × 25) 422 200 (8 × 25)	Adjacent jumper, Staggered jumper	light grey 280 dark grey 280 insulated, I <sub>N</sub> 24 A grey 280 yellgreen 280	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 25) 0-422 200 (8 × 25) A	Adjacent jumper	light grey 28 dark grey 28 , insulated, I <sub>N</sub> 24 A grey 28 yellgreen 28	<b>0-471</b> 200 strips <b>0-472</b> 200 strips <b>0-402</b> 200 (8 × 2 <b>0-422</b> 200 (8 × 2
	light grey 280-4 dark grey 280-4 insulated, I <sub>N</sub> 24 A grey 280-4 yellgreen 280-4  (3, insulated, I <sub>N</sub> 24 A	471 200 strips 472 200 strips 402 200 (8×25) 422 200 (8×25) in		light grey 280 dark grey 280 insulated, I <sub>N</sub> 24 A grey 280 yellgreen 280 4, insulated, I <sub>N</sub> 24 width 5 mm /0.19	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 25) 0-422 200 (8 × 25) A	F	light grey 28 dark grey 28, insulated, I <sub>N</sub> 24 A grey 28 yellgreen 28 width 5 mm/0.1	0-471 200 strips 0-472 200 strips 0-402 200 (8×2 0-422 200 (8×2 4 A 97 in
	light grey 280-4 dark grey 280-4 insulated, $I_N$ 24 A grey 280-4 yellgreen 280-4 $\P$ , insulated, $I_N$ 24 A width 5 mm / 0.197	471 200 strips 472 200 strips 402 200 (8×25) 422 200 (8×25) in 452 100 (4×25)		light grey 280 dark grey 280 insulated, I <sub>N</sub> 24 A grey 280 yellgreen 280  4, insulated, I <sub>N</sub> 24 width 5 mm / 0.19 from 1 to 2 780	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 25) 0-422 200 (8 × 25) A	F	light grey 28 dark grey 28, insulated, I <sub>N</sub> 24 A grey 28 yellgreen 28 width 5 mm / 0.1 from 1 to 2 78	0-471 200 strips 0-472 200 strips 0-402 200 (8×2 0-422 200 (8×2 4 A 97 in 0-452 100 (4×2
	light grey dark grey 280-4 insulated, $I_N$ 24 A grey 280-4 yellgreen 280-4 $\P$ , insulated, $I_N$ 24 A width 5 mm /0.197 from 1 to 2 780-4	471 200 strips 472 200 strips 402 200 (8×25) 422 200 (8×25) in 452 100 (4×25) 453 100 (4×25)		light grey 280 dark grey 280 insulated, I <sub>N</sub> 24 A grey 280 yellgreen 280 4, insulated, I <sub>N</sub> 24 width 5 mm / 0.15 from 1 to 2 780 from 1 to 3 780	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 25) 0-422 200 (8 × 25) A 0-452 100 (4 × 25)	F	light grey 28: dark grey 28: , insulated, I <sub>N</sub> 24 A grey 28: yellgreen 28:  3, insulated, I <sub>N</sub> 24 width 5 mm / 0.1 from 1 to 2 78: from 1 to 3 78:	<b>0-471</b> 200 strips <b>0-472</b> 200 strips <b>0-402</b> 200 (8×2 <b>0-422</b> 200 (8×2
	light grey 280-4 dark grey 280-4 insulated, I <sub>N</sub> 24 A grey 280-4 yellgreen 280-4  4, insulated, I <sub>N</sub> 24 A width 5 mm /0.197 from 1 to 2 780-4 from 1 to 3 780-4	471 200 strips 472 200 strips 402 200 (8×25) 422 200 (8×25) in 452 100 (4×25) 453 100 (4×25) 454 100 (4×25)		light grey 280 dark grey 280 insulated, I <sub>N</sub> 24 A grey 280 yellgreen 280 4, insulated, I <sub>N</sub> 24 width 5 mm / 0.15 from 1 to 2 780 from 1 to 4 780	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 25) 0-422 200 (8 × 25) A 0-452 100 (4 × 25) 0-453 100 (4 × 25)	F	light grey   28   dark grey   28   , insulated,   N 24 A   grey   28   yellgreen   28   24   dark 5 mm / 0.1   from 1 to 2   78   from 1 to 3   78   from 1 to 4   78	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 2 0-422 200 (8 × 2 4 A 97 in 0-452 100 (4 × 2 0-453 100 (4 × 2
	light grey 280-4 dark grey 280-4 insulated, I <sub>N</sub> 24 A grey 280-4 yellgreen 280-4  4, insulated, I <sub>N</sub> 24 A width 5 mm /0.197 from 1 to 2 780-4 from 1 to 3 780-4 from 1 to 4 780-4	471 200 strips 472 200 strips 402 200 (8×25) 422 200 (8×25) in 452 100 (4×25) 453 100 (4×25) 454 100 (4×25)		dark grey 280 dark grey 280 insulated, I <sub>N</sub> 24 A grey 280 yellgreen 280  4. insulated, I <sub>N</sub> 24 width 5 mm / 0.15 from 1 to 2 780 from 1 to 4 780 from 1 to 5 780	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 25) 0-422 200 (8 × 25) A 0-452 100 (4 × 25) 0-453 100 (4 × 25) 0-454 100 (4 × 25)	F	light grey   28   dark grey   28   , insulated,   N 24 A   grey   28   yellgreen   28   24   dark 5 mm / 0.1   from 1 to 2   78   from 1 to 3   78   from 1 to 4   78	0-471 200 strips 0-472 200 strips 0-402 200 (8×2 0-422 200 (8×2 4 A 97 in 0-452 100 (4×2 0-453 100 (4×2
	light grey dark grey 280-4 grey 24 A width 5 mm / 0.197 from 1 to 2 780-4 from 1 to 3 780-4 from 1 to 5 780-4 grey 1 to 5 780-	471 200 strips 472 200 strips 402 200 (8×25) 422 200 (8×25) in 452 100 (4×25) 453 100 (4×25) 454 100 (4×25) 455 50 (2×25)		light grey 280 dark grey 280 insulated, I <sub>N</sub> 24 A grey 280 yellgreen 280  4, insulated, I <sub>N</sub> 24 width 5 mm / 0.19 from 1 to 2 780 from 1 to 4 780 from 1 to 5 780 in the second	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 25) 0-422 200 (8 × 25) A 077 in 0-452 100 (4 × 25) 0-453 100 (4 × 25) 0-454 100 (4 × 25) 0-455 50 (2 × 25) :	F	light grey 28 dark grey 28, insulated, I <sub>N</sub> 24 A grey 28 yellgreen 28 width 5 mm / 0.1 from 1 to 2 78 from 1 to 3 78 from 1 to 5 78 insulated 5 insu	0-471 200 strips 0-472 200 strips 0-402 200 (8×2 0-422 200 (8×2 4 A 97 in 0-452 100 (4×2 0-453 100 (4×2 0-454 100 (4×2 :
Staggered jumper	light grey dark grey 280-4 insulated, I <sub>N</sub> 24 A grey 280-4 yellgreen 280-4  4, insulated, I <sub>N</sub> 24 A width 5 mm /0.197 from 1 to 2 780-4 from 1 to 3 780-4 from 1 to 5 780-4 ir from 1 to 5 780-4 ir from 1 to 8 780-4	471 200 strips 472 200 strips 402 200 (8×25) 422 200 (8×25) 452 100 (4×25) 453 100 (4×25) 454 100 (4×25) 455 50 (2×25) 458 50 (2×25)	Staggered jumper	light grey 280   dark grey 280   insulated, I <sub>N</sub> 24 A   grey 280   yellgreen 280	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 25) 0-422 200 (8 × 25) 0-422 200 (8 × 25) 0-452 100 (4 × 25) 0-453 100 (4 × 25) 0-454 100 (4 × 25) 0-455 50 (2 × 25) 0-458 50 (2 × 25)	Staggered jumper	light grey 28 dark grey 28, insulated, I <sub>N</sub> 24 A grey 28 yellgreen 28 width 5 mm / 0.1 from 1 to 2 78 from 1 to 4 78 from 1 to 5 78 from 1 to 5 78 from 1 to 8 78	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 2 0-422 200 (8 × 2 4 A 97 in 0-452 100 (4 × 2 0-453 100 (4 × 2 0-454 100 (4 × 2 0-455 50 (2 × 2 :
Staggered jumper	light grey dark grey 280-4 insulated, I <sub>N</sub> 24 A grey 280-4 yellgreen 280-4  4, insulated, I <sub>N</sub> 24 A width 5 mm / 0.197 from 1 to 2 780-4 from 1 to 3 780-4 from 1 to 5 780-4 : from 1 to 8 780-4	471 200 strips 472 200 strips 402 200 (8×25) 422 200 (8×25) in 452 100 (4×25) 453 100 (4×25) 454 100 (4×25) 455 50 (2×25) 458 50 (2×25) d, I <sub>N</sub> 9 A		dark grey 280 dark grey 280 insulated, I <sub>N</sub> 24 A grey 280 yellgreen 280 4, insulated, I <sub>N</sub> 24 width 5 mm / 0.19 from 1 to 2 780 from 1 to 3 780 from 1 to 5 780 : from 1 to 8 780 insulated, I <sub>N</sub> 24 insulated, I <sub>N</sub> 24 insulated, I <sub>N</sub> 24 insulated, I <sub>N</sub> 24 insulated, I <sub>N</sub> 28 insu	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 25) 0-422 200 (8 × 25) 0-422 200 (8 × 25) A 0-452 100 (4 × 25) 0-453 100 (4 × 25) 0-454 100 (4 × 25) 0-455 50 (2 × 25) 0-458 50 (2 × 25) otted, I <sub>N</sub> 9 A	Staggered jumper	light grey   28   dark green   28	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 2 0-422 200 (8 × 2 4 A 97 in 0-452 100 (4 × 2 0-453 100 (4 × 2 0-454 100 (4 × 2 0-455 50 (2 × 2 cted, I <sub>N</sub> 9 A
Staggered jumper	light grey 280-4 dark grey 280-4 insulated, I <sub>N</sub> 24 A grey 280-4 yellgreen 280-4  4, insulated, I <sub>N</sub> 24 A width 5 mm /0.197 from 1 to 2 780-4 from 1 to 3 780-4 from 1 to 5 780-4 : : from 1 to 8 780-4 : jumper 4, insulate L = 60 mm 249-1	471 200 strips 472 200 strips 402 200 (8×25) 422 200 (8×25) 452 100 (4×25) 453 100 (4×25) 454 100 (4×25) 455 50 (2×25) 458 50 (2×25) 45, N 9 A 125 10	Staggered jumper	light grey 280   dark grey 280   dark grey 280   insulated,   N 24 A   grey 280   yellgreen 280	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 25) 0-422 200 (8 × 25) 0-422 200 (8 × 25) A 0-452 100 (4 × 25) 0-453 100 (4 × 25) 0-454 100 (4 × 25) 0-455 50 (2 × 25) 0-458 50 (2 × 25) 0-458 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Staggered jumper	light grey   28   dark green   28	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 2 0-422 200 (8 × 2 4 A 97 in 0-452 100 (4 × 2 0-453 100 (4 × 2 0-454 100 (4 × 2 0-455 50 (2 × 2 cted, I <sub>N</sub> 9 A 9-125 10
Staggered jumper	light grey 280-4 dark grey 280-4 insulated, I <sub>N</sub> 24 A grey 280-4 yellgreen 280-4  4, insulated, I <sub>N</sub> 24 A width 5 mm /0.197 from 1 to 2 780-4 from 1 to 3 780-4 from 1 to 5 780-4 : : from 1 to 8 780-4 : jumper 4, insulate L = 60 mm 249-1 L = 110 mm 249-1	471 200 strips 472 200 strips 402 200 (8×25) 422 200 (8×25) 452 100 (4×25) 453 100 (4×25) 454 100 (4×25) 455 50 (2×25) 458 50 (2×25) 458 50 (2×25) 459 10 10	Staggered jumper	light grey 280   dark grey 280   dark grey 280   insulated,   N 24 A grey 280   yellgreen 280   yellgreen 280   dark grey 280   yellgreen 280   dark grey 280   dark g	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 25) 0-422 200 (8 × 25) 0-422 200 (8 × 25) A 0-452 100 (4 × 25) 0-453 100 (4 × 25) 0-454 100 (4 × 25) 0-455 50 (2 × 25) 0-458 50 (2 × 25) 0-458 50 (2 × 25) 0-459 10 0-125 10	Staggered jumper	light grey   28   dark gree   28   dar	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 2 0-422 200 (8 × 2 4 A 97 in 0-452 100 (4 × 2 0-453 100 (4 × 2 0-454 100 (4 × 2 0-455 50 (2 × 2 co-456 50 (2 × 2 coted, I <sub>N</sub> 9 A 9-125 10 9-126 10
Staggered jumper	light grey 280-4 dark grey 280-4 insulated, I <sub>N</sub> 24 A grey 280-4 yellgreen 280-4  4, insulated, I <sub>N</sub> 24 A width 5 mm /0.197 from 1 to 2 780-4 from 1 to 3 780-4 from 1 to 5 780-4 : : from 1 to 8 780-4 : jumper 4, insulate L = 60 mm 249-1	471 200 strips 472 200 strips 402 200 (8×25) 422 200 (8×25) 452 100 (4×25) 453 100 (4×25) 454 100 (4×25) 455 50 (2×25) 458 50 (2×25) 459 400 400 400 400 400 400 400 400 400 40	Staggered jumper	light grey   280   dark grey   280   dark grey   280   dark grey   280   yellgreen   280   yellgreen   280   dark grey   280   yellgreen   280   dark grey   280   dark green   dar	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 25) 0-422 200 (8 × 25) 0-422 200 (8 × 25) 0-452 100 (4 × 25) 0-453 100 (4 × 25) 0-454 100 (4 × 25) 0-455 50 (2 × 25) 0-458 50 (2 × 25) 0-458 50 (2 × 25) 0-459 10 0-125 10 0-126 10	Staggered jumper	light grey   28   dark gree   28   dar	0-471 200 strips 0-472 200 strips 0-402 200 (8 × 2 0-422 200 (8 × 2 4 A 97 in 0-452 100 (4 × 2 0-453 100 (4 × 2 0-454 100 (4 × 2 0-455 50 (2 × 2 cted, I <sub>N</sub> 9 A 9-125 10 9-126 10 9-127 10

<sup>\*</sup>For further approvals with corresponding ratings see section 15.

<sup>\*\*</sup> Max. diameter of insulation: 4.4 mm / 0.173 in

## Through and Ground (Earth) Conductor Terminal Blocks f. Special Cables, Terminal Block Width 5 mm / 0.197 in, 4 mm<sup>2</sup> / AWG 12 Series 880

(AWG 12 with ferrule item no. 216-206)



 $0.08 - 4 \text{ mm}^2$ 800 V/8 kV/3 **①** 

AWG 28 - 12

c**91**2us **0** 

Terminal block width 5 mm / 0.197 in □ 8 – 9 mm / 0.33 in

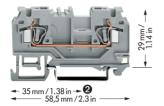
 $0.08 - 4 \text{ mm}^2$ 800 V/8 kV/3 **①** 

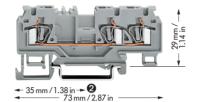
AWG 28 - 12 c**91**2us **0** 

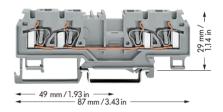
Terminal block width 5 mm / 0,197 in □ 8 – 9 mm / 0.33 in

 $0.08 - 4 \text{ mm}^2$ 800 V/8 kV/3 **①**  AWG 28 - 12 c**71**2us **()** 

Terminal block width 5 mm / 0.197 in ■ 8 – 9 mm / 0.33 in







	ltem No.	Pack. unit pcs		ltem No.	Pack. unit pcs		ltem No.	Pack. unit pcs
Through terr	minal block withou	ut/with shield (screen)	Through terminal block without/with shield (screen)			Through terminal block without/with shield (scree		
contact and	test slot for test p	lug	contact and te	st slot for test pl	ıg	contact and te	est slot for test pl	ug
Ø 2 mm / 0.079 in and Ø 2.3 mm / 0.091 in,			Ø 2 mm / 0.07	79 in and Ø 2.3	mm / 0.091 in,	Ø 2 mm / 0.0	79 in and Ø 2.3	mm / 0.091 in,
for DIN 35 rd	ail		for DIN 35 rail			for DIN 35 rail		
2-conductor through terminal blocks without shield			3-conductor th	nrough terminal l	olocks without shield	4-conductor t	hrough terminal l	olocks without shield
(screen) con	tact		(screen) contac	ct		(screen) contact		
grey	880-901/99	<b>9-940</b> 100	grey	880-681/999	<b>9-940 1</b> 00	grey	880-831/999	<b>9-940 1</b> 00
blue	880-904/99	<b>9-940 3</b> 100	blue	880-684/999	<b>9-940 ③</b> 100	blue	880-834/999	<b>9-940 ③</b> 100
orange	880-902/99	<b>9-940 1</b> 00	orange	880-682/999	<b>?-940 1</b> 00	orange	880-832/999	<b>9-940 0</b> 100
2-conductor	through terminal	blocks with shield	3-conductor th	nrough terminal l	olocks with shield			
(screen) con	tact – please contac	ct factory	(screen) contac	ct – please contact	factory			
2-conductor	ground (earth) te	rminal block	3-conductor g	round (earth) ter	minal block	4-conductor g	round (earth) ter	minal block
green-yellow	880-907/99	<b>9-940 1</b> 00	green-yellow	880-687/999	<b>?-940 (</b> ) 100	green-yellow	880-837/999	<b>9-940</b> 🕕 100

Insulation stop, 5 pc



cs/strip				
white	0.08 - 0.2 mm <sup>2</sup> <b>5</b>	/ AWG 28 - 24	769-470	200 strips
light grey	0.25 - 0.5 mm <sup>2</sup>	/ AWG 22 - 20	769-471	200 strips
dark grey	0.75 - 1 mm <sup>2</sup>	/ AWG 18	769-472	200 strips

**5** 0.2 mm<sup>2</sup> /AWG 24 "s" (0.14 mm<sup>2</sup> /AWG 26 "f-str")

### **Features**

- 2-, 3- or 4-conductor terminal blocks, 5 mm / 0.197 in wide
- Cross section of the conductor up to 4 mm<sup>2</sup>/AWG 12 (acc. to VDE 0281) or 2.5 mm<sup>2</sup>/AWG 14 with rubber-insulated conductors having a diameter up to  $4.4\ \text{mm}\,/\,0.173$  in
- Shield (screen) connection, solder contact/quick-connect contact 6.3 (2 x 2.8) mm
- Test plug, red, 2 mm/0.079 in Ø
- Test plug, yellow, 2.3 mm/0.091 in Ø
- Marking with WMB/WSB system
- Marking with miniature WSB system on both sides
- Commoning with standard WAGO jumper system





- **1** 800 V = rated voltage 8 kV = rated surge voltage 3 = pollution degree c91 us 600 V/20 A with shield (screen) contact 400 V/6 kV/3
- 6**93** us 300 V/10 A (see also section 15) 2 Dimensions with shield (screen) contact
- 2-conductor terminal blocks **4**5 mm / 1.77 in −
- 79 mm / 3.11 in 3-conductor terminal blocks
- 45 mm / 1.77 in -- 92.5 mm / 3.64 in
- 3 Suitable for EEx i applications
- 4 See application notes on pages 2.38 2.45



Using a cable AWG 12 with ferrule Item No. 216-206

# Through/Ground (Earth) Conductor/Shield (Screen) and (Ex) Terminal Blocks 4 mm² / AWG 12, Series 281

0.08 - 4 mm<sup>2</sup> 800 V/8 kV/3 **①** 32 A AWG 28 - 12 600 V, 20 A **9** 600 V, 15 A ®

Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in

\* **9.1 ⑥** KEER CCAKEER **№ ⑩ ② ③ ③ ③** A GL BV LR NV **③ ③ ② ②** 

0.08 - 4 mm<sup>2</sup> 800 V/8 kV/3 **0**  AWG 28 - 12 600 V, 20 A **9** 600 V, 15 A ®

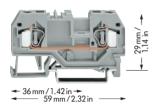
Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in

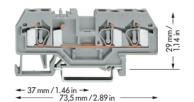
\* 🗫 @ KEUR CCAKEUR 🕟 🛈 🕾 🐨 🗥 GL BV LR NV 🛭 🏵 😥

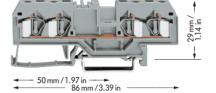
0.08 - 4 mm<sup>2</sup> 800 V/8 kV/3 **①** 26 A AWG 28 - 12 600 V, 20 A **%** 600 V, 15 A ®

Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in

\* 🕦 🔊 🚳 KEER CCAKEER 🐿 🛈 🚭 🐨 🗥 GL BV LR NV 🖗 😥







	Item No.	Pack. unit pcs		Item No.	Pack. unit pcs		Item No.	Pack. unit pcs
2-conductor thro	ugh terminal blocks		3-conductor thro	ugh terminal blocks		4-conductor thro	ugh terminal	blocks
grey	281-901	50	grey	281-681	50	grey	281-652	50
blue	281-904 🕗	50	blue	281-684 2	50	blue	281-654 2	50
orange	281-902	50	orange	281-678	50	orange	281-653	50
red	281-903	50	red	281-679	50	red	281-663	50
black	281-905	50	black	281-685	50	black	281-664	50
yellow	281-906	50	yellow	281-686	50	yellow	281-668	50
light grey 🖘	281-992 🔘	50	light grey 🖘	281-993 🔘	50	light grey 🐼	281-994	50
2-conductor grou	und (earth) terminal b	olocks	3-conductor grou	und (earth) terminal b	locks	4-conductor grou	und (earth) tei	rminal blocks
green-yellow	281-907 🛑	50	green-yellow	281-687 🛑	50	green-yellow	281-657	50
green-yellow (Ex)	281-907/999-950	50	green-yellow (Ex)	281-687/999-950	50	green-yellow (Ex)	281-657/99	<b>9-950 (</b> ) 50
						4-conductor shie	ld (screen) ter	minal block
						white	281-658 🔘	50
Other terminal b	locks with the same	shape	Other terminal b	locks with the same s	hape	Other terminal b	locks with the	e same shape
disconnect	281-912	page 7.12	disconnect	281-683	page 7.12	disconnect	281-659	page 7.12
carrier term. block	281-916	page 7.34	carrier term. block	281-610	page 7.34	disc., test a. meas.	281-666	page 7.10
diode	281-915/	page 7.58	diode	281-673/	page 7.58	carrier term. block	281-656	page 7.34
						diode	281-665/	page 7.58
Accessories S  End and interme	diate plate, 2.5 mm/0		1 0 7	m WMB/WSB/W diate plate, 2.5 mm/0.	<u> </u>		diate plate, 2	.5 mm/0.098 in thick
	diate plate, 2.5 mm/0		1 0 7	diate plate, 2.5 mm/0.	<u> </u>		diate plate, 2 orange	
	diate plate, 2.5 mm/0 orange 281-3	0.098 in thick	1 0 7	diate plate, 2.5 mm/0. orange 281-32	.098 in thick		•	<b>281-335</b> 100 (4×2
	diate plate, 2.5 mm/0 orange 281-3 grey 281-3	0.098 in thick 29 100 (4×25)	1 0 7	diate plate, 2.5 mm/0. orange 281-32 grey 281-32	098 in thick 26 100 (4×25)		orange	281-335 100 (4×2 281-334 100 (4×2
End and interme	diate plate, 2.5 mm/0 orange 281-3 grey 281-3	0.098 in thick 29 100 (4×25) 28 100 (4×25) 49 100 (4×25)	End and interme	diate plate, 2.5 mm/0. orange 281-32 grey 281-32	098 in thick 26 100 (4×25) 24 100 (4×25) 55 100 (4×25)		orange grey light grey	<b>281-335</b> 100 (4×2 <b>281-334</b> 100 (4×2 <b>281-345</b> 100 (4×2 79 in thick
End and interme	diate plate, 2.5 mm/0 orange 281-3 grey 281-3 light grey 281-3 zed, 2 mm/0.079 in thi orange 281-3	0.098 in thick 29 100 (4×25) 28 100 (4×25) 49 100 (4×25) ck 31 100 (4×25)	End and interme	orange 281-32 grey 281-32 light grey 281-35 zed, 2 mm / 0.079 in thic orange 281-34	098 in thick 26 100 (4×25) 24 100 (4×25) 55 100 (4×25) k	End and interme	orange grey light grey	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 179 in thick 281-339 100 (4×2
End and interme	diate plate, 2.5 mm/0 orange 281-3 grey 281-3 light grey 281-3 zed, 2 mm/0.079 in thi orange 281-3 grey 281-3	0.098 in thick 29 100 (4×25) 28 100 (4×25) 49 100 (4×25) ck 31 100 (4×25) 30 100 (4×25)	End and interme	diate plate, 2.5 mm/0. orange 281-32 grey 281-32 light grey 281-35 zed, 2 mm/0.079 in thic orange 281-34 grey 281-34	098 in thick 26 100 (4×25) 24 100 (4×25) 55 100 (4×25) k 46 100 (4×25) 44 100 (4×25)	End and interme	orange grey light grey zed, 2 mm/0.0 orange grey	281-335 100 (4 x 2 281-334 100 (4 x 2 281-345 100 (4 x 2 179 in thick 281-339 100 (4 x 2 281-338 100 (4 x 2
End and intermed  Separator, oversize	diate plate, 2.5 mm/0 orange 281-3 grey 281-3 light grey 281-3 zed, 2 mm/0.079 in thi orange 281-3 grey 281-3 light grey 281-3	0.098 in thick 29 100 (4×25) 28 100 (4×25) 49 100 (4×25) ck 31 100 (4×25)	End and intermed  Separator, oversize	diate plate, 2.5 mm/0. orange 281-32 grey 281-32 light grey 281-35 zed, 2 mm/0.079 in thic orange 281-34 grey 281-34 light grey 281-35	098 in thick 26 100 (4×25) 24 100 (4×25) 55 100 (4×25) k	End and interme  Separator, oversit	orange grey light grey zed, 2 mm/0.0 orange grey light grey	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 79 in thick 281-339 100 (4×2 281-338 100 (4×2
End and interme	diate plate, 2.5 mm/0 orange 281-3: grey 281-3: light grey 281-3: zed, 2 mm/0.079 in thi orange 281-3: grey 281-3: light grey 281-3: 3, 5 pcs/strip	0.098 in thick 29 100 (4×25) 28 100 (4×25) 49 100 (4×25) ck 31 100 (4×25) 30 100 (4×25) 50 100 (4×25)	End and interme	diate plate, 2.5 mm/0. orange 281-32 grey 281-32 light grey 281-35 zed, 2 mm/0.079 in thic orange 281-34 grey 281-34 light grey 281-35	098 in thick 26 100 (4×25) 24 100 (4×25) 55 100 (4×25) k 46 100 (4×25) 44 100 (4×25) 66 100 (4×25)	End and interme	orange grey light grey zed, 2 mm/0.0 orange grey light grey 3, 5 pcs/strip	281-335 100 (4 x 2 281-334 100 (4 x 2 281-345 100 (4 x 2 179 in thick 281-339 100 (4 x 2 281-338 100 (4 x 2 281-347 100 (4 x 2
End and intermed  Separator, oversize	diate plate, 2.5 mm/0 orange 281-3 grey 281-3 light grey 281-3 zed, 2 mm/0.079 in thi orange 281-3 grey 281-3 light grey 281-3 5 pcs/strip white 281-4	0.098 in thick 29 100 (4×25) 28 100 (4×25) 49 100 (4×25) ck 31 100 (4×25) 30 100 (4×25) 50 100 (4×25) 70 200 strips	End and intermed  Separator, oversize	diate plate, 2.5 mm/0. orange 281-32 grey 281-32 light grey 281-35 zed, 2 mm/0.079 in thic orange 281-34 grey 281-34 light grey 281-35 ), 5 pcs/strip white 281-47	098 in thick 26 100 (4×25) 24 100 (4×25) 55 100 (4×25) 8 16 100 (4×25) 14 100 (4×25) 16 100 (4×25) 17 200 strips	End and interme  Separator, oversit	orange grey light grey zed, 2 mm/0.0 orange grey light grey 3, 5 pcs/strip white	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 179 in thick 281-339 100 (4×2 281-338 100 (4×2 281-347 100 (4×2 281-347 200 strips
End and intermed  Separator, oversize	diate plate, 2.5 mm/0 orange 281-3 grey 281-3 light grey 281-3 zed, 2 mm/0.079 in thi orange 281-3 grey 281-3 light grey 281-3 5 pcs/strip white 281-4 light grey 281-4	0.098 in thick 29 100 (4×25) 28 100 (4×25) 49 100 (4×25) ck 31 100 (4×25) 30 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips	End and intermed  Separator, oversize	diate plate, 2.5 mm/0. orange 281-32 grey 281-32 light grey 281-35 zed, 2 mm/0.079 in thic orange 281-34 grey 281-34 light grey 281-35 ), 5 pcs/strip white 281-47 light grey 281-47	098 in thick 26 100 (4×25) 24 100 (4×25) 55 100 (4×25) 84 100 (4×25) 14 100 (4×25) 16 100 (4×25) 17 200 strips 17 200 strips	End and interme  Separator, oversit	orange grey light grey zed, 2 mm/0.0 orange grey light grey 3, 5 pcs/strip white light grey	281-335 100 (4 x 2 281-334 100 (4 x 2 281-345 100 (4 x 2 179 in thick 281-339 100 (4 x 2 281-338 100 (4 x 2 281-347 100 (4 x 2 281-470 200 strips 281-471 200 strips
Separator, oversize Insulation stop	diate plate, 2.5 mm/0 orange 281-3 grey 281-3 light grey 281-3 zed, 2 mm/0.079 in thi orange 281-3 grey 281-3 light grey 281-3 y.5 pcs/strip white 281-4 light grey 281-4 dark grey 281-4	0.098 in thick 29 100 (4×25) 28 100 (4×25) 49 100 (4×25) ck 31 100 (4×25) 30 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips 72 200 strips	End and intermed  Separator, oversize  Insulation stop 6	diate plate, 2.5 mm/0. orange 281-32 grey 281-32 light grey 281-35 zed, 2 mm/0.079 in thic orange 281-34 grey 281-34 light grey 281-35 ), 5 pcs/strip white 281-47 light grey dark grey 281-47	098 in thick 26 100 (4×25) 24 100 (4×25) 35 100 (4×25) 36 100 (4×25) 44 100 (4×25) 46 100 (4×25) 47 200 strips 47 200 strips 47 200 strips	Separator, oversit	orange grey light grey zed, 2 mm/0.0 orange grey light grey 3, 5 pcs/strip white light grey dark grey	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 279 in thick 281-339 100 (4×2 281-338 100 (4×2 281-347 100 (4×2 281-347 200 strips 281-471 200 strips 281-472 200 strips
Separator, oversize Insulation stop	diate plate, 2.5 mm/0 orange 281-3 grey 281-3 light grey 281-3 zed, 2 mm/0.079 in thi orange 281-3 grey 281-3 light grey 281-3 light grey 281-4 light grey 281-4 dark grey 281-4; insulated, I <sub>N</sub> 32 A, &x	0.098 in thick 29 100 (4×25) 28 100 (4×25) 49 100 (4×25) ck 31 100 (4×25) 30 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips 72 200 strips 72 200 strips	End and intermed  Separator, oversize  Insulation stop 6	diate plate, 2.5 mm/0. orange 281-32 grey 281-35 ted, 2 mm/0.079 in thic orange 281-34 grey 281-34 light grey 281-35 ), 5 pcs/strip white 281-47 light grey 281-47 dark grey 281-47 , insulated, I <sub>N</sub> 32 A, (£x)	098 in thick 26 100 (4×25) 24 100 (4×25) 35 100 (4×25) 36 100 (4×25) 44 100 (4×25) 46 100 (4×25) 47 200 strips 47 200 strips 47 200 strips 48 200 strips 49 200 strips 40 200 strips 40 200 strips 41 200 strips 42 200 strips 43 200 strips 44 200 strips 45 200 strips 46 200 strips 46 200 strips 47 200 strips 48 200 strips 40 stri	End and interme  Separator, oversit	orange grey light grey zed, 2 mm/0.0 orange grey light grey 3, 5 pcs/strip white light grey dark grey	281-335 100 (4 x 2 281-334 100 (4 x 2 281-345 100 (4 x 2 179 in thick 281-339 100 (4 x 2 281-338 100 (4 x 2 281-347 100 (4 x 2 281-470 200 strips 281-471 200 strips 281-472 200 strips 12 A, ( x 2 6 A
Separator, oversize Insulation stop	diate plate, 2.5 mm/0 orange 281-3; grey 281-3; light grey 281-3; zed, 2 mm/0.079 in thi orange 281-3; grey 281-3; light grey 281-3; job possible 281-4; light grey 281-4; dark grey 281-4; insulated, I <sub>N</sub> 32 A, Exgrey 281-4	0.098 in thick 29 100 (4×25) 28 100 (4×25) 49 100 (4×25) 64 31 100 (4×25) 30 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips 72 200 strips	End and intermed  Separator, oversize  Insulation stop 6	orange 281-32 grey 281-32 light grey 281-35 zed, 2 mm / 0.079 in thic orange 281-34 grey 281-34 light grey 281-35 ), 5 pcs / strip white 281-47 light grey 281-47 dark grey 281-47 , insulated, I <sub>N</sub> 32 A, (£x) grey 281-40	098 in thick 26 100 (4×25) 24 100 (4×25) 35 100 (4×25) 36 100 (4×25) 44 100 (4×25) 46 100 (4×25) 47 100 (4×25) 48 100 (4×25) 49 200 strips 40 200 strips 40 200 strips 40 200 strips 40 200 strips 40 200 strips	Separator, oversit	orange grey light grey zed, 2 mm/0.0 orange grey light grey j, 5 pcs/strip white light grey dark grey tinsulated, I <sub>N</sub> 3 grey	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 279 in thick 281-339 100 (4×2 281-338 100 (4×2 281-347 100 (4×2 281-470 200 strips 281-471 200 strips 281-472 200 strips
Separator, oversize Insulation stop	diate plate, 2.5 mm/0 orange 281-3 grey 281-3 light grey 281-3 zed, 2 mm/0.079 in thi orange 281-3 grey 281-3 light grey 281-3 light grey 281-4 light grey 281-4 dark grey 281-4; insulated, I <sub>N</sub> 32 A, &x	0.098 in thick 29 100 (4×25) 28 100 (4×25) 49 100 (4×25) 64 31 100 (4×25) 30 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips 72 200 strips	End and intermed  Separator, oversize  Insulation stop 6	diate plate, 2.5 mm/0. orange 281-32 grey 281-35 zed, 2 mm/0.079 in thic orange 281-34 grey 281-34 light grey 281-35 3, 5 pcs/strip white 281-47 light grey 281-47 dark grey 281-47 , insulated, I <sub>N</sub> 32 A, &	098 in thick 26 100 (4×25) 24 100 (4×25) 35 100 (4×25) 36 100 (4×25) 44 100 (4×25) 46 100 (4×25) 47 100 (4×25) 48 100 (4×25) 49 200 strips 40 200 strips 40 200 strips 40 200 strips 40 200 strips 40 200 strips	Separator, oversit	orange grey light grey zed, 2 mm/0.0 orange grey light grey j, 5 pcs/strip white light grey dark grey tinsulated, I <sub>N</sub> 3 grey	281-335 100 (4 x 2 281-334 100 (4 x 2 281-345 100 (4 x 2 279 in thick 281-339 100 (4 x 2 281-338 100 (4 x 2 281-347 100 (4 x 2 281-470 200 strips 281-471 200 strips 281-472 200 strips 291-472 200 strips
Separator, oversize Insulation stop 6	orange 281-3: grey 281-3: light grey 281-3: grey 281-3: gred, 2 mm / 0.079 in thi orange 281-3: light grey 281-3: light grey 281-3: light grey 281-4: light grey 281-4: dark grey 281-4: r, insulated, I <sub>N</sub> 32 A, & grey 281-4: yellgreen 281-4:	29 100 (4×25) 28 100 (4×25) 28 100 (4×25) 49 100 (4×25) 6k 31 100 (4×25) 30 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips 72 200 strips 72 200 (8×25) 22 200 (8×25) A, ⟨£x⟩ 26 A	Separator, oversize Insulation stop	diate plate, 2.5 mm/0. orange 281-32 grey 281-35 light grey 281-35 zed, 2 mm/0.079 in thic orange 281-34 light grey 281-34 light grey 281-35 j, 5 pcs/strip white 281-47 light grey 281-47 dark grey 281-47 , insulated, I <sub>N</sub> 32 A, & grey 281-40 yellgreen 281-42	098 in thick 26 100 (4×25) 24 100 (4×25) 35 100 (4×25) 36 100 (4×25) 36 100 (4×25) 36 100 (4×25) 37 200 strips 37 200 strips 38 20 200 (8×25) 39 200 (8×25) 30 200 (8×25) 30 200 (8×25) 31 200 (8×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey j, 5 pcs/strip white light grey dark grey dark grey tinsulated, I <sub>N</sub> 3 grey yellgreen	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 279 in thick 281-339 100 (4×2 281-338 100 (4×2 281-347 100 (4×2 281-470 200 strips 281-471 200 strips 281-472 200 strips 281-472 200 (8×2 281-402 200 (8×2 281-422 200 (8×2
Separator, oversize Insulation stop 6	orange 281-3: grey 281-3: light grey 281-3: grey 281-3: gred, 2 mm / 0.079 in thi orange 281-3: light grey 281-3: light grey 281-3: light grey 281-4: light grey 281-4: dark grey 281-4: r, insulated, I <sub>N</sub> 32 A, & grey 281-4: yellgreen 281-4: er 3, insulated, I <sub>N</sub> 32 A width 6 mm / 0.236	29 100 (4×25) 28 100 (4×25) 49 100 (4×25) 49 100 (4×25) 6k 31 100 (4×25) 30 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips 72 200 strips 72 200 (8×25) 22 200 (8×25) A, ⟨£x⟩ 26 A in	Separator, oversize Insulation stop	orange 281-32 grey 281-35 light grey 281-35 zed, 2 mm / 0.079 in thic orange 281-34 grey 281-34 light grey 281-35 J, 5 pcs/strip white 281-47 light grey 281-47 dark grey 281-47 , insulated, I <sub>N</sub> 32 A, (Express 281-42 yellgreen 281-42 er (S), insulated, I <sub>N</sub> 32 A, width 6 mm / 0.236 in	098 in thick 26 100 (4×25) 24 100 (4×25) 35 100 (4×25) 36 100 (4×25) 36 100 (4×25) 36 100 (4×25) 37 200 strips 37 200 strips 38 200 (8×25) 39 200 (8×25) 30 200 (8×25) 30 200 (8×25) 31 200 (8×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey 3, 5 pcs/strip white light grey dark grey dark grey yellgreen er 3, insulated width 6 mm	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 279 in thick 281-339 100 (4×2 281-338 100 (4×2 281-347 100 (4×2 281-471 200 strips 281-471 200 strips 281-472 200 strips 281-472 200 (8×2 281-402 200 (8×2 281-422 200 (8×2 281-422 200 (8×2 281-422 300 (8×2 281-422 300 (8×2 281-422 300 (8×2 281-422 300 (8×2 281-422 300 (8×2 281-422 300 (8×2 281-422 300 (8×2
Separator, oversize Insulation stop 6	orange 281-3: grey 281-3: grey 281-3: gred, 2 mm / 0.079 in thi orange 281-3: grey 281-3: grey 281-3: light grey 281-3: light grey 281-4: light grey 281-4: dark grey 281-4: r, insulated, I <sub>N</sub> 32 A, & grey 281-4: yellgreen 281-4: er 3, insulated, I <sub>N</sub> 32 A width 6 mm / 0.236 from 1 to 2 781-4	29 100 (4×25) 28 100 (4×25) 49 100 (4×25) 49 100 (4×25) 6k 31 100 (4×25) 30 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips 72 200 strips 72 200 (8×25) 22 200 (8×25) 24 A, (£x) 26 A in 52 100 (4×25)	Separator, oversize Insulation stop	orange 281-32 grey 281-35 light grey 281-35 ced, 2 mm / 0.079 in thic orange 281-34 grey 281-34 light grey 281-35 J. 5 pcs / strip white 281-47 light grey 281-47 dark grey 281-47 , insulated, I <sub>N</sub> 32 A, (Example) grey 281-40 yellgreen 281-42 er (3), insulated, I <sub>N</sub> 32 A width 6 mm / 0.236 i from 1 to 2 781-45	098 in thick 26 100 (4×25) 24 100 (4×25) 35 100 (4×25) 36 100 (4×25) 36 100 (4×25) 36 100 (4×25) 37 200 strips 37 200 strips 38 200 (8×25) 39 200 (8×25) 30 200 (8×25) 30 200 (8×25) 31 200 (4×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey j, 5 pcs/strip white light grey dark grey dark grey yellgreen er 3, insulated width 6 mm from 1 to 2	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 279 in thick 281-339 100 (4×2 281-338 100 (4×2 281-347 100 (4×2 281-347 200 strips 281-471 200 strips 281-472 200 strips 281-472 200 (8×2 281-402 200 (8×2 281-422 200 (8×2 281-422 100 (4×2 281-452 100 (4×2
Separator, oversize Insulation stop 6	orange 281-3: grey 281-3: light grey 281-3: grey 281-3: gred, 2 mm /0.079 in thi orange 281-3: grey 281-3: light grey 281-3: light grey 281-3: light grey 281-4: light grey 281-4: dark grey 281-4: yellgreen 281-4: er 3, insulated, I <sub>N</sub> 32 A, Ex grey 281-4: yellgreen 281-4: width 6 mm/0.236 from 1 to 2 781-4: from 1 to 3 781-4:	29 100 (4×25) 28 100 (4×25) 49 100 (4×25) 49 100 (4×25) 30 100 (4×25) 30 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips 72 200 strips 72 200 (8×25) 22 200 (8×25) 24 A, (x) 26 A in 52 100 (4×25) 53 100 (4×25)	Separator, oversize Insulation stop	diate plate, 2.5 mm/0. orange 281-32 grey 281-35 light grey 281-35 gred, 2 mm/0.079 in thic orange 281-34 light grey 281-35 light grey 281-35 light grey 281-47 light grey 281-47 dark grey 281-47 dark grey 281-47 yellgreen 281-42 er 3, insulated, I <sub>N</sub> 32 A, width 6 mm/0.236 i from 1 to 2 781-45 from 1 to 3 781-45	098 in thick 26 100 (4×25) 24 100 (4×25) 35 100 (4×25) 36 100 (4×25) 36 100 (4×25) 36 100 (4×25) 37 200 strips 37 200 strips 38 200 (8×25) 39 200 (8×25) 30 200 (8×25) 30 200 (4×25) 31 200 (4×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey j, 5 pcs/strip white light grey dark grey dark grey yellgreen er 3, insulated width 6 mm from 1 to 2 from 1 to 3	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 279 in thick 281-339 100 (4×2 281-338 100 (4×2 281-347 100 (4×2 281-347 200 strips 281-471 200 strips 281-472 200 strips 281-472 200 (8×2 281-402 200 (8×2 281-422 200 (8×2 281-425 100 (4×2 781-453 100 (4×2 781-453 100 (4×2
Separator, oversize Insulation stop 6	orange 281-3: grey 281-3: light grey 281-3: gred, 2 mm/0.079 in thi orange 281-3: grey 281-3: grey 281-3: light grey 281-3: light grey 281-4: light grey 281-4: dark grey 281-4: grey 281-4: yellgreen 281-4: er ③, insulated, I <sub>N</sub> 32 A, Ex, grey 281-4: yellgreen 281-4: hight grey 281-4: grey 281-4: grey 281-4: grey 281-4: hight grey 281-4: grey 281-4: grey 281-4: hight grey 281-4: grey 281-4: hight grey	29 100 (4×25) 28 100 (4×25) 49 100 (4×25) 49 100 (4×25) 30 100 (4×25) 50 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips 72 200 strips 72 200 (8×25) 22 200 (8×25) 24 26 A 25 100 (4×25) 30 100 (4×25) 31 100 (4×25) 32 100 (4×25) 33 100 (4×25) 34 100 (4×25)	Separator, oversize Insulation stop	diate plate, 2.5 mm/0. orange 281-32 grey 281-35 light grey 281-35 gred, 2 mm/0.079 in thic orange 281-34 light grey 281-34 light grey 281-35 light grey 281-47 light grey 281-47 dark grey 281-47 dark grey 281-47 yellgreen 281-42 er 3, insulated, I <sub>N</sub> 32 A,  width 6 mm/0.236 i from 1 to 2 781-45 from 1 to 3 781-45 from 1 to 4 781-45	098 in thick 26 100 (4×25) 24 100 (4×25) 35 100 (4×25) 36 100 (4×25) 36 100 (4×25) 36 100 (4×25) 37 200 strips 37 200 strips 38 200 (8×25) 39 200 (8×25) 30 200 (4×25) 31 100 (4×25) 31 100 (4×25) 31 100 (4×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey j, 5 pcs/strip white light grey dark grey dark grey yellgreen er (3), insulated width 6 mm from 1 to 2 from 1 to 3 from 1 to 4	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 279 in thick 281-339 100 (4×2 281-338 100 (4×2 281-347 100 (4×2 281-347 200 strips 281-471 200 strips 281-472 200 strips 281-472 200 (8×2 281-402 200 (8×2 281-422 200 (8×2 281-425 200 (4×2 281-453 100 (4×2 781-454 100 (4×2 781-454 100 (4×2
Separator, oversize Insulation stop 6	orange 281-3: grey 281-3: light grey 281-3: zed, 2 mm/0.079 in thi orange 281-3: grey 281-3: grey 281-3: light grey 281-3: light grey 281-3: light grey 281-4: light grey 281-4: dark grey 281-4: r, insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: yellgreen 281-4: er (3), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (3), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (4), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: grey 281-4: ref (5), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (6), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (7), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (8), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (8), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (8), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (1), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (1), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref	29 100 (4×25) 28 100 (4×25) 49 100 (4×25) 49 100 (4×25) ck 31 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips 72 200 strips 72 200 (8×25) 22 200 (8×25) 24 200 (8×25) 25 100 (4×25) 3 100 (4×25) 3 100 (4×25) 3 100 (4×25) 5 5 5 0 (2×25)	Separator, oversize Insulation stop	diate plate, 2.5 mm/0. orange 281-32 grey 281-32 light grey 281-35 gred, 2 mm/0.079 in thic orange 281-34 light grey 281-35 light grey 281-35 jo 5 pcs/strip white 281-47 light grey 281-47 dark grey 281-47 dark grey 281-47 yellgreen 281-42 grey 281-46 yellgreen 281-42 from 1 to 2 781-45 from 1 to 4 781-45 from 1 to 5 781-45	098 in thick 26 100 (4×25) 24 100 (4×25) 35 100 (4×25) 36 100 (4×25) 36 100 (4×25) 36 100 (4×25) 37 200 strips 37 200 strips 38 200 (8×25) 39 200 (8×25) 30 200 (4×25) 31 100 (4×25) 31 100 (4×25) 32 100 (4×25) 33 100 (4×25) 34 100 (4×25) 35 50 (2×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey j, 5 pcs/strip white light grey dark grey dark grey yellgreen er 3, insulated width 6 mm from 1 to 2 from 1 to 3 from 1 to 4 from 1 to 5	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 279 in thick 281-339 100 (4×2 281-338 100 (4×2 281-347 100 (4×2 281-347 100 (4×2 281-471 200 strips 281-471 200 strips 281-472 200 strips 281-472 200 (8×2 281-422 200 (8×2 281-422 200 (8×2 281-425 100 (4×2 781-454 100 (4×2 781-455 50 (2×2 781-455 50 (2×2
Separator, oversize Insulation stop 6	orange 281-3: grey 281-3: light grey 281-3: gred, 2 mm/0.079 in thi orange 281-3: grey 281-3: grey 281-3: light grey 281-3: light grey 281-4: light grey 281-4: dark grey 281-4: grey 281-4: yellgreen 281-4: er ③, insulated, I <sub>N</sub> 32 A, Ex, grey 281-4: yellgreen 281-4: hight grey 281-4: grey 281-4: grey 281-4: grey 281-4: hight grey 281-4: grey 281-4: grey 281-4: hight grey 281-4: grey 281-4: hight grey	29 100 (4×25) 28 100 (4×25) 49 100 (4×25) 49 100 (4×25) ck 31 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips 72 200 strips 72 200 (8×25) 22 200 (8×25) 24 200 (8×25) 25 100 (4×25) 3 100 (4×25) 3 100 (4×25) 3 100 (4×25) 5 5 5 0 (2×25)	Separator, oversize Insulation stop	diate plate, 2.5 mm/0. orange 281-32 grey 281-35 light grey 281-35 gred, 2 mm/0.079 in thic orange 281-34 light grey 281-34 light grey 281-35 light grey 281-47 light grey 281-47 dark grey 281-47 dark grey 281-47 yellgreen 281-42 er 3, insulated, I <sub>N</sub> 32 A,  width 6 mm/0.236 i from 1 to 2 781-45 from 1 to 3 781-45 from 1 to 4 781-45	098 in thick 26 100 (4×25) 24 100 (4×25) 35 100 (4×25) 36 100 (4×25) 36 100 (4×25) 36 100 (4×25) 37 200 strips 37 200 strips 38 200 (8×25) 39 200 (8×25) 30 200 (4×25) 31 100 (4×25) 31 100 (4×25) 32 100 (4×25) 33 100 (4×25) 34 100 (4×25) 35 50 (2×25)	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey j, 5 pcs/strip white light grey dark grey dark grey yellgreen er 3, insulated width 6 mm from 1 to 2 from 1 to 3 from 1 to 4 from 1 to 5	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 279 in thick 281-339 100 (4×2 281-338 100 (4×2 281-347 100 (4×2 281-347 100 (4×2 281-471 200 strips 281-471 200 strips 281-472 200 strips 281-472 200 (8×2 281-422 200 (8×2 281-422 200 (8×2 281-425 100 (4×2 781-454 100 (4×2 781-455 50 (2×2 781-455 50 (2×2
Separator, oversize  Insulation stop &  Adjacent jumper  Staggered jumper	orange 281-3: grey 281-3: light grey 281-3: zed, 2 mm/0.079 in thi orange 281-3: grey 281-3: grey 281-3: light grey 281-3: light grey 281-3: light grey 281-4: light grey 281-4: dark grey 281-4: r, insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: yellgreen 281-4: er (3), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (3), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (4), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: grey 281-4: ref (5), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (6), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (7), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (8), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (8), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (8), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (9), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (1), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref (1), insulated, I <sub>N</sub> 32 A, E <sub>N</sub> grey 281-4: ref	29 100 (4×25) 28 100 (4×25) 49 100 (4×25) de 31 100 (4×25) do 30 100 (4×25) 50 100 (4×25) 70 200 strips 71 200 strips 72 200 strips 72 200 strips 72 200 (8×25) 22 200 (8×25) 24 200 (8×25) 25 100 (4×25) 3 100 (4×25) 3 100 (4×25) 5 5 100 (4×25) 5 5 50 (2×25) 6 50 (2×25) 6 imper bar,	End and intermed  Separator, oversize  Insulation stop (  Adjacent jumper)  Staggered jumper  Protective warning	diate plate, 2.5 mm/0. orange 281-32 grey 281-32 light grey 281-35 gred, 2 mm/0.079 in thic orange 281-34 light grey 281-35 light grey 281-35 jo 5 pcs/strip white 281-47 light grey 281-47 dark grey 281-47 dark grey 281-47 yellgreen 281-42 grey 281-46 yellgreen 281-42 from 1 to 2 781-45 from 1 to 4 781-45 from 1 to 5 781-45	26 100 (4×25) 26 100 (4×25) 27 100 (4×25) 28 100 (4×25) 29 100 (4×25) 20 100 (4×25) 20 200 strips 20 200 strips 20 200 (8×25) 20 20 20 20 20 20 20 20 20 20 20 20 20 2	Separator, oversi	orange grey light grey zed, 2 mm/0.0 orange grey light grey 3, 5 pcs/strip white light grey dark grey dark grey yellgreen er 3, insulated width 6 mm from 1 to 2 from 1 to 3 from 1 to 5 from 1 to 6	281-335 100 (4×2 281-334 100 (4×2 281-345 100 (4×2 279 in thick 281-339 100 (4×2 281-338 100 (4×2 281-347 100 (4×2 281-470 200 strips 281-471 200 strips 281-472 200 strips 12 A,  20 A 281-402 200 (8×2 281-422 200 (8×2 281-425 200 (4×2 781-454 100 (4×2 781-455 50 (2×2 781-456 50 (2×2 281-456 50 (2×2)

<sup>\*</sup>For further approvals with corresponding ratings see section 15.



Pack. unit

pcs

281-470 200 strips

281-402 200 (8 x 25)

281-409 100 (4 x 25)

light grey **281-471** 200 strips dark grey **281-472** 200 strips

yell.-green 281-422 200 (8 x 25)

from 1 to 2 **781-452** 100 (4 x 25)

0.08 - 4 mm<sup>2</sup> 800 V/8 kV/3 **0** 32 A

AWG 28 - 12 600 V, 20 A **9** 600 V, 15 A @

Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in

\* 🗝 🖁 ® VR RJ R B 🔊 👺 © Ø Œ3AC) 🖼 🏚 al Rr. UR \*

0.08 − 4 mm<sup>2</sup> 800 V/8 kV/3 **①** 32 A

AWG 28 - 12 600 V, 20 A **9** 600 V, 15 A ®

Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in

\* 👊 🍪 KEEB (CAKEEB 🛈 🕾 📽 🗥 GL BV LR NV 🛭 🚳 🖘

### **Accessories Series 281**

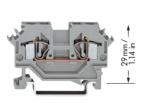
Insulation stop 3, 5 pcs/strip

Item No.

white

**Adjacent jumper,** insulated,  $I_N$  32 A,  $\langle E \rangle$  26 A

grey





	7	<u>'</u> _	U/O		
			Alternate jumper,	insulated, I <sub>N</sub> 32 A, Ex	26 A
<b>←</b> 61	1,5 mm / 2.42 in	-		grey <b>281-4</b>	<b>09</b> 100 (4
İte	m	Pack. unit			
No	<b>).</b>	pcs	Staggered jumpe	<b>3,</b> insulated, I <sub>N</sub> 32 A	λ, (ξ <sub>x</sub> ) 26
3-conductor through	terminal blocks			width 6 mm/0.236	in
arev 28	1-631	100		from 1 to 2 781-4	<b>52</b> 100 (4

4	53 mm / 2.09 in	-	◄	— 61,5 mm / 2.42 in -	
	Item No.	Pack. unit pcs		Item No.	Pack. unit pcs
2-conductor thre	ough terminal block	s	3-conductor thr	ough terminal blo	cks
grey	281-601	50	grey	281-631	100
blue	281-604 🕗	50	blue	281-651 🕗	100
light grey (Ex)	281-691	50	light grey (Ex)	281-998	100
2-conductor gro	ound (earth) termina	l blocks	3-conductor gro	ound (earth) termi	nal blocks
green-yellow	281-607 🕕	50	green-yellow	281-637 🕕	100
green-yellow 🕸	281-607/999-95	<b>0</b> 🔵 50	green-yellow 🕸	281-637/999-9	<b>950 (</b> ) 100
Other terminal I diode	blocks with the sam 281-603/	e shape page 7.58	3 = poll (see also section (see also section) (see	d surge voltage ution degree on 15)  Ex i applications  Ex e II applications  AWG 24 - A on 13) taggered jumpers t e reduced to 275 V eparator see page on notes	he max. rated
	Appropriate mar	king system <b>WM</b>	B/WSB/WFB	(see section 14)	
End and interme	ediate plate, 3 mm/		End and interm	<b>ediate plate,</b> 2.5 n	
	0	<b>-317</b> 100 (4×25)			<b>31-313</b> 100 (4×25
	0 ,	<b>-316</b> 100 (4×25)		0 /	<b>31-312</b> 100 (4×25
		<b>-353</b> 100 (4×25)			<b>31-357</b> 100 (4×25
Separator, overs	ized, 2 mm/0.079 in		Separator, overs	sized, 2 mm/0.079	
		007 100 // 05\			

grey	261-601	30	grey	201-031				110111 1 10	2 /01-432	00 (4 x 23)
blue	281-604 🕗	50	blue	281-651 🕗	100			from 1 to 3	3 <b>781-453</b> 1	00 (4 x 25)
light grey ⟨ξx⟩	281-691	50	light grey (Ex)	281-998	100			from 1 to	4 <b>781-454</b> 1	00 (4 × 25)
0 0 / 0			0 0 , _					from 1 to	5 <b>781-455</b>	50 (2 × 25)
0		. also	2	/			W)		6 <b>781-456</b>	. ,
	und (earth) terminal blo		3-conductor grou					from 1 to	0 /01-430	50 (2 x 25)
green-yellow	281-607 🕕	50	green-yellow _	281-637						
green-yellow (£x)	281-607/999-950	50	green-yellow (Ex)	281-637/99	<b>99-950</b> 🛑 100		Push-in type wire	jumper 🚱,	insulated, I <sub>N</sub> 9	9 A
								L = 60 mi	m <b>249-125</b>	10
			800 V = rated     ■ 10 Table 1    ■ 1	voltage			<b>←</b> L →	L = 110 m	m <b>249-126</b>	10
				surge voltage	е		7 7		m <b>249-127</b>	
				ion degree			Protective warning			
			(see also sectio	n 15)			Protective warning			DIOCKS,
			Suitable for EE	x i application	ıs				rewdriver slot	
			⟨Ex⟩ Suitable for EE				5566	yellow	<b>281-415</b> 1	00 (4 × 25)
Other terminal b	locks with the same sh	аре	0.2 – 4 mm <sup>2</sup>	AWG 2						
diode	281-603/	page 7.58	550 V~, 30 A	71110 2	2		Comb type jumper	r bar 🚱, in	sulated.	
		1 - 3	(see also sectio	n 13)			Project Control of the Control of th		terminal block	
					ers the max. rated	d	ППП	2-way	<b>281-482</b> 1	
			voltage will be	reduced to 27	75 V.		777	,		, ,
			EEx e/EEx i se	parator see p	age 2.13			3-way	<b>281-483</b> 1	
			See application	notes			Alternate comb ty	pe jumper	bar, insulated	,
			on pages 2.38	- 2.45			10000	$I_N = I_N$ of	terminal block	
		34/84	D AMED AMED				ų ų	2-way	<b>281-492</b> 1	00 (4 × 25)
	Appropriate marking	system <b>W</b> M	B/WSB/WFB (se	ee section 14)				,		` ′
End and interme	diate plate, 3 mm/0.118	in thick	End and interme	diate plate.	2.5 mm/0.098 in t	thick	Operating tool, ins	ulated		
and did internie	•	7 100 (4×25)	zna ana miemie		<b>281-313</b> 100 (		operaning room, and	2-way	280-432	1
				orange	,	` '		,		
	0 ,	5 100 (4 x 25)		grey	<b>281-312</b> 100 (			3-way	280-433	1
		3 100 (4×25)		light grey	· · · · · · · · · · · · · · · · · · ·	(4 x 25)				
Separator, oversi	zed, 2 mm/0.079 in thick		Separator, oversize	ed, 2 mm/0.0	079 in thick		Test plug module (	3,		
	orange 281-327	7 100 (4×25)		orange	<b>281-318</b> 100 (	(4 x 25)	222 2	testing usi	ng jumper con	tact slots
		7 100 (4×25)		grey	<b>281-348</b> 100 (	$(4 \times 25)$		or conduc	tor entry holes	
	0 ,	100 (4×25)		light grey	<b>281-358</b> 100 (		111		,	
Insulation stop	0 0 /	1 100 (1×20)	Insulation stop €	<u> </u>	201 000 100 (	(17,20)	Test plug, with cable	o 500 mm /1	'77"	
misolation stop (		200 strips	madranon stop e	white	<b>281-470</b> 200 s	atuina	icsi piog, will cobi		210-136	50 (5 × 10)
- 000 CO			ARREST COL							, ,
000000	0 0 /	200 strips	099000	light grey				2.3 mm Ø, ye	el. <b>210-137</b>	50 (5 x 10)
	dark grey <b>281-472</b>	2 200 strips	0981	dark grey	<b>281-472</b> 200 s	strips				
Adjacent jumper	<b>,</b> insulated, I <sub>N</sub> 32 A, &x 2	26 A	Adjacent jumper	insulated, I <sub>N</sub>	32 A, 🕸 26 A		Test plug adapter,	suitable f. te	rm. bl. 1.5 mm	$^{2}$ – 4 mm $^{2}$ ,
lin .	grey 281-402	2 200 (8 x 25)	line .	grey	<b>281-402</b> 200 (	(8 x 25)		5 mm / 0.1	97 in wide	
	yellgreen 281-422	2 200 (8 x 25)	<b>T</b>	yellgreen	<b>281-422</b> 200 (	$(8 \times 25)$			<b>280-404</b> 1	00 (4 x 25)
ŲĮ)	7 - 3	( ,	Ų0	7 3	,	( /	Ī	for test pl	ug 210-137 (2	, ,
Staggered jumps	er <b>3</b> , insulated, I <sub>N</sub> 32 A,	(Ex) 26 ∆	Staggered jumpe	r (1) insulated	1 L 32 A (Ex) 26	4 Δ	Test plug adapter,			
Siaggerea joinpe	width 6 mm/0.236 in	EX 20 /1	Siaggerea joinpe		m/0.236 in	<i>3</i> / (	lesi piog dadpiei,		315 in wide	10 11111 ,
		100 // 05\				// 05\	w w	0 111117 0.0		50 (0 05)
	from 1 to 2 781-452	, ,			<b>781-452</b> 100 (	` '	n		209-170	, ,
	from 1 to 3 <b>781-453</b>	` '			3 <b>781-453</b> 100 (	` /	II .		ug 4 mm/0.15	
	from 1 to 4 781-454	1 100 (4 x 25)		from 1 to 4	4 <b>781-454</b> 100 (	$(4 \times 25)$	Test plug, 6 mm/0.2	236 in wide,	with CAGE C	LAMP® for
	from 1 to 5 781-455	50 (2 x 25)		from 1 to 5	<b>781-455</b> 50 (	(2 x 25)		0.08 mm <sup>2</sup>	- 2.5 mm <sup>2</sup> /AV	/G 28 –14
40	from 1 to 6 781-456	5 50 (2 x 25)	40	from 1 to 6	<b>781-456</b> 50 (	$(2 \times 25)$		I <sub>N</sub> 24 A	<b>281-407</b> 1	00 (4 x 25)
		(-11-3)				,	T	IN		,,
Protective werni	ng marker, comp type i	iumner har	Protective warning	a marker e	omn type iumne	ar har	Banana plugs, 4 m	nm/0157 in	Ø color miyo	d
		-		-				/ U.13/ III	, color mixe	u
	r, etc. (see righthand si	ae or me	test plug adapte	, erc. (see ric	gninana side of i	me	see page 2.42			
page)			page )							



# Through/Ground (Earth) Conductor and (Ex) Terminal Blocks 6 mm<sup>2</sup> / AWG 10, Series 282

0.2 - 6 mm<sup>2</sup> 800 V/8 kV/3 **0** 41 A

AWG 24 - 10 600 V, 30 A **9** 600 V, 40 A @

Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in

\* 🕦 🏽 KEUR CCAKEUR 🕞 🐨 🗥 GL BV LR NV 🛭 🐼

0.2 - 6 mm<sup>2</sup> 800 V/8 kV/3 **0** 41 A AWG 24 - 10 600 V, 30 A **9** 600 V, 40 A ®

Terminal block width 8 mm / 0.315 in 12 – 13 mm / 0.49 in

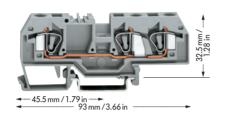
\* 🗫 🍪 KEUR CCAKEUR 📀 🐨 🗥 GL BV LR NV 🛭 🏵 😥

0.2 - 6 mm<sup>2</sup> 800 V/8 kV/3 **①**  AWG 24 – 10 600 V, 30 A **%** 600 V, 40 A ®

Terminal block width 8 mm / 0.315 in 12 – 13 mm / 0.49 in

\* **FLU ©** REER CCAREER © SE © ® W AS GL BV LR NV @ ® # &







**◄**----- 62 mm / 2.44 in ----

		Pack. unit pcs		Item No.	Pack. unit pcs		Item No.	Pack. unit pcs
2-conductor thr	ough terminal blocks		3-conductor thro	ough terminal blocks		2-conductor thro	ugh terminal blocks	
grey	282-901	50	grey	282-681	25	grey	282-601	50
blue	282-904 🕗	50	blue	282-684 🕗	25	blue	282-604 2	50
orange	282-902	50	orange	282-682	25			
light grey 🖘	282-992 🔾	50	light grey (Ex)	282-993 🔾	25	light grey 🕸	282-691 🔘	50
2-conductor gro	ound (earth) terminal b	locks	3-conductor gro	und (earth) terminal b	olocks	2-conductor gro	und (earth) terminal b	locks
green-yellow	282-907 🛑	50	green-yellow	282-687 🛑	25	green-yellow	282-607 🕕	50
green-yellow (Ex)	282-907/999-950	50	green-yellow (Ex)	282-687/999-950	<u>25</u>	green-yellow (Ex)	282-607/999-950 (	50

800 V = rated 8 kV = rated 3 = polluti (see also section 2 Suitable for EEx	surge voltage on degree 1 15) a i application	s	Suitable for EEx 0.5 – 6 mm² 550 V~, 39 A (see also section EEx e/EEx i sep	AWG 20 jumper 35 A 13) arator see pa	0 – 10 age 2.13			
Accessories S					/SB/WFB (see section			
End and intermed	liate plate, 2	2.5 mm/0.098 in thick	End and intermed	iate plate, 2.	.5 mm/0.098 in thick	End and interme	ediate plate,	4 mm/0.157 in thick
	orange	<b>282-328</b> 100 (4×25)		orange	<b>282-339</b> 100 (4×25)		orange	<b>282-317</b> 100 (4×25
	grey	<b>282-325</b> 100 (4 x 25)		grey	<b>282-308</b> 100 (4 x 25)		grey	<b>282-316</b> 100 (4×25
	light grey	<b>282-330</b> 100 (4 x 25)		light grey	<b>282-341</b> 100 (4×25)		0 0 7	<b>282-318</b> 100 (4×25
Separator, oversize	ed, 2 mm/0.0	079 in thick	Separator, oversize	ed, 2 mm/0.0	79 in thick	Separator, overs	ized, 2 mm/0.	079 in thick
	orange	<b>282-329</b> 100 (4 x 25)		orange	<b>282-340</b> 100 (4×25)		orange	282-327 100 (4 x 25)
4	grey	<b>282-326</b> 100 (4×25)	4	grey	<b>282-309</b> 100 (4×25)		grey	282-337 100 (4×25)
4 6 4	light grey	<b>282-331</b> 100 (4 x 25)	1 0 1	light grey	282-342 100 (4×25)		light grey	282-338 100 (4 x 25)
Adjacent jumper,	insulated, I <sub>N</sub> 4	41 A, (Ex) 35 A	Adjacent jumper,	insulated, I <sub>N</sub> 4	1 A, ⟨ξx⟩ 35 A	Adjacent jumpe	r, insulated, I <sub>N</sub>	41 A, (Ex) 35 A
lin .	grey	<b>282-402</b> 100 (4×25)	lin .	grey	282-402 100 (4×25)	lin.	grey	282-402 100 (4×25)
	yellgreen	<b>282-422</b> 100 (4×25)	W	yellgreen	<b>282-422</b> 100 (4×25)	V	yellgreer	<b>282-422</b> 100 (4×25)
Alternate jumper,	insulated, I <sub>N</sub>	41 A, ⟨ξx⟩ 35 A	Alternate jumper,	insulated, I <sub>N</sub> 4	11 A, (Ex) 35 A	Alternate jumpe	er, insulated, I <sub>N</sub>	41 A, ⟨ξx⟩ 35 A
17	grey	<b>282-409</b> 100 (4 × 25)	II.	grey	<b>282-409</b> 100 (4 × 25)	17	grey	<b>282-409</b> 100 (4 × 25
Protective warning	<b>g marker,</b> fo	r 5 terminal blocks,	Protective warning	g marker, for	5 terminal blocks,	Protective warni	i <mark>ng marker,</mark> fo	or 5 terminal blocks,
	fits into scr	ewdriver slot		fits into scre	ewdriver slot		fits into sc	rewdriver slot
6666	yellow	<b>282-415</b> 100 (4×25)	5666	yellow	<b>282-415</b> 100 (4×25)	56666	yellow	<b>282-415</b> 100 (4×25)
Test plug adapter,	suitable f. teri	m. bl. 1.5 mm <sup>2</sup> – 10 mm <sup>2</sup> ,	Test plug adapter,	suitable f. tern	n. bl. 1.5 mm <sup>2</sup> – 10 mm <sup>2</sup> ,	Test plug adapte	r, suitable f. ter	m. bl. 1.5 mm <sup>2</sup> – 10 mm <sup>2</sup>
iii	8 mm / 0.3	15 in wide	iii	8 mm / 0.31	5 in wide	iii.	8 mm / 0.3	315 in wide
Y		<b>209-170</b> 50 (2 x 25)	Y		<b>209-170</b> 50 (2×25)			209-170 50 (2×25)
	for test plu	ig 4 mm / 0.157 in Ø		for test plue	g 4 mm / 0.157 in Ø		for test pl	ug 4 mm / 0.157 in Ø
Test plug module		suitable for term. blocks	Test plug module		suitable for term. blocks	Test plug modul		, suitable for term. blocks
		6 mm <sup>2</sup> /AWG 24-10	<b>F</b>		6 mm <sup>2</sup> /AWG 24-10	<b>11</b>		6 mm <sup>2</sup> /AWG 24-10
	8 mm / 0.3	15 in wide		8 mm / 0.31	5 in wide	P	8 mm / 0.3	B15 in wide
T U	see page 2			see page 2			see page	
Step down jumpe			Step down jumpe	<u>.                                </u>		Step down jump		
see pages 2.26 -			see pages 2.26 -			see pages 2.26		
p - g	. =-		p g					

<sup>\*</sup>For further approvals with corresponding ratings see section 15.

## Through/Ground (Earth) Conductor and (Ex) Terminal Blocks 10 mm<sup>2</sup> / AWG 8, Series 284



0.2 - 10 mm<sup>2</sup> 800 V/8 kV/3 **0** 57 A

AWG 24 - 8 600 V, 50 A **%** 600 V, 54 A ®

Terminal block width 10 mm / 0.394 in □■ 12 – 13 mm / 0.49 in

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 $0.2 - 10 \text{ mm}^2$ 800 V/8 kV/3 **①**  AWG 24 – 8 600 V, 50 A **%** 600 V, 54 A ®

Terminal block width 10 mm / 0.394 in □ 12 – 13 mm / 0.49 in

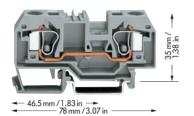
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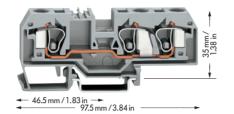
0.2 - 10 mm<sup>2</sup> 800 V/8 kV/3 **①** 57 A

AWG 24 – 8 600 V, 50 A **%** 600 V, 65 A ®

Terminal block width 10 mm / 0.394 in □■■ 12 – 13 mm / 0.49 in

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— 69 mm / 2.72 in -

		Pack. unit pcs		Item No.	Pack. unit pcs		Item No.	Pack. unit pcs
2-conductor thre	ough terminal blocks		3-conductor thro	ough terminal blocks		2-conductor thro	ough terminal blocks	
grey	284-901	25	grey	284-681	25	grey	284-601	25
blue	284-904 🔵	25	blue	284-684	25	blue	284-604 🔵	25
orange	284-902	25	orange	284-682	25			
light grey ⟨€x⟩	284-992 🔘	25	light grey (Ex)	284-993 🔘	25	light grey 🖘	284-691 🔘	25
2-conductor gro	ound (earth) terminal b	locks	3-conductor gro	und (earth) terminal b	locks	2-conductor gro	und (earth) terminal b	locks
green-yellow	284-907	25	green-yellow	284-687 🛑	25	green-yellow	284-607 🛑	25
green-yellow (Ex)	284-907/999-950 (	25	green-yellow (Ex)	284-687/999-950	<u>)</u> 25	green-yellow (Ex)	284-607/999-950 (	25

 $\bullet$  800 V = rated voltage

⟨£x⟩ Suitable for EEx e II applications

800 V = rate 8 kV = rate 3 = pollu (see also section	d surge voltage ition degree		0.5 – 10 mm² 550 V~, 53 A (see also section	AWG 20				
Accessories	Series 284	Appro	opriate marking systen	www.	/SB/WFB (see section	ո 14)		
End and interme	diate plate, 2	.5 mm/0.098 in thick	End and intermed	iate plate, 2	.5 mm/0.098 in thick	End and interme	diate plate,	2.5 mm/0.098 in thick
	orange	<b>284-328</b> 100 (4×25)		orange	<b>284-339</b> 100 (4×25)		orange	<b>284-317</b> 100 (4 x 25)
	grey	<b>284-325</b> 100 (4×25)		grey	<b>284-308</b> 100 (4×25)		grey	<b>284-316</b> 100 (4×25)
0	light grey	<b>284-330</b> 100 (4×25)		<del></del>	<b>284-341</b> 100 (4×25)		light grey	
Separator, overs	zed, 2 mm/0.0	179 in thick	Separator, oversize	ed, 2 mm/0.0	79 in thick	Separator, oversi	ized, 2 mm/0.	079 in thick
	orange	<b>284-329</b> 100 (4×25)		orange	<b>284-340</b> 100 (4×25)		orange	<b>284-327</b> 100 (4×25)
-	grey	<b>284-326</b> 100 (4×25)	£ 35	grey	<b>284-309</b> 100 (4×25)		grey	<b>284-337</b> 100 (4×25)
1 6 5	light grey	<b>284-331</b> 100 (4×25)	0 1	light grey	<b>284-342</b> 100 (4×25)			<b>284-338</b> 100 (4×25)
Adjacent jumpe	r, insulated, I <sub>N</sub> 5	57 A, ⟨€x⟩ 53 A	Adjacent jumper,	insulated, I <sub>N</sub> 5	7 A, 🐼 53 A	Adjacent jumpe	<b>r,</b> insulated, I <sub>N</sub>	57 A, 🐼 53 A
līg.	grey	<b>284-402</b> 100 (4×25)	līg.	grey	<b>284-402</b> 100 (4×25)	li7	grey	<b>284-402</b> 100 (4×25)
W	yellgreen	<b>284-422</b> 100 (4×25)	W	yellgreen	<b>284-422</b> 100 (4×25)	W	yellgreen	<b>284-422</b> 100 (4×25)
Alternate jumpe	<b>r,</b> insulated, I <sub>N</sub> 5	57 A, 🐼 53 A	Alternate jumper,	insulated, I <sub>N</sub> 5	57 A, ⟨€x⟩ 53 A	Alternate jumpe	<b>r,</b> insulated, I <sub>N</sub>	57 A, 🐼 53 A
F	grey	<b>284-409</b> 50 (2×25)		grey	<b>284-409</b> 50 (2×25)	II.	grey	<b>284-409</b> 50 (2×25)
Protective warni	<b>ng marker,</b> for	r 5 terminal blocks,	Protective warnin	<b>g marker,</b> for	5 terminal blocks,	Protective warni	ng marker, fo	or 5 terminal blocks,
	fits into scre	ewdriver slot		fits into scre	ewdriver slot		fits into sc	rewdriver slot
5666	yellow	<b>284-415</b> 50 (2×25)	5666	yellow	<b>284-415</b> 50 (2 × 25)	56666	yellow	<b>284-415</b> 50 (2×25)
Test plug adapte	r, suitable f. tern	m. bl. 1.5 mm² – 10 mm²,	Test plug adapter,	suitable f. tern	n. bl. 1.5 mm <sup>2</sup> – 10 mm <sup>2</sup> ,	Test plug adapte	<b>r,</b> suitable f. ter	m. bl. 1.5 mm <sup>2</sup> – 10 mm <sup>2</sup> ,
iii	8 mm / 0.31	15 in wide	iii	8 mm/0.31	5 in wide	in .	8 mm / 0.3	15 in wide
Y		<b>209-170</b> 50 (2×25)	Y		<b>209-170</b> 50 (2×25)			<b>209-170</b> 50 (2×25)
1	see also po	age 2.41		see also po	ige 2.41		see also p	age 2.41
Finger guard co	ver,		Finger guard cove	er,		Finger guard co	ver,	
		ouchproof protection		serves as to	ouchproof protection		serves as	touchproof protection
	for unused	clamping units		for unused	clamping units		for unused	d clamping units
	yellow	<b>284-400</b> 100 (4×25)		yellow	<b>284-400</b> 100 (4×25)		yellow	<b>284-400</b> 100 (4×25)
Step down jump	er and cover	plate	Step down jumpe	r and cover	plate	Step down jump	er and cover	plate

see pages 2.26 - 2.27

see pages 2.26 - 2.27



see pages 2.26 - 2.27

<sup>\*</sup> For further approvals with corresponding ratings see section 15.

## Through/Ground (Earth) Conductor and (Ex) Terminal Blocks 16 mm<sup>2</sup> / AWG 6, Series 283

0.2 - 16 mm<sup>2</sup> 800 V/8 kV/3 **0** 

AWG 24 - 6 600 V, 65 A **9** 600 V, 70 A ®

Terminal block width 12 mm / 0.472 in 16 - 17 mm / 0.65 in

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0.2 - 16 mm<sup>2</sup> 800 V/8 kV/3 **0**  AWG 24 - 6 600 V, 65 A **9** 600 V, 70 A ®

Terminal block width 12 mm / 0.472 in 16 – 17 mm / 0.65 in

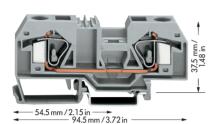
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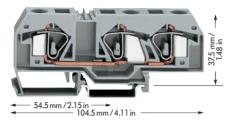
0.2 **– 16 mm²** 800 V/8 kV/3 **●** 76 A

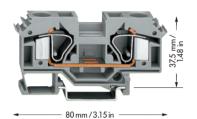
AWG 24 - 6 600 V, 65 A **%** 600 V, 70 A ®

Terminal block width 12 mm / 0.472 in 16 – 17 mm / 0.65 in

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	Item No.	Pack. unit pcs		Item No.	Pac pcs	k. unit		Item No.	Pa po	ıck. unit s
2-conductor thr	rough terminal blocks		3-conductor thro	ough terminal	l blocks		2-conductor thro	ough terminal	blocks	
grey	283-901	20	grey	283-671	) :	20	grey	283-601		25
blue	283-904 🔵	20	blue	283-674	) :	20	blue	283-604		25
orange	283-902 🛑	20	orange	283-672	)	20				
lichtgrau (Ex)	283-992 🔾	20	light grey (Ex)	283-998	) :	20	light grey (Ex)	283-691		25
2-conductor gra	ound (earth) terminal b	locks	3-conductor gro	ound (earth) te	erminal block	s	2-conductor gro	und (earth) te	rminal bloc	ks
green-yellow	283-907 🛑	20	green-yellow	283-677 🕕	) :	20	green-yellow	283-607 🌕		25
green-yellow (Ex)	283-907/999-950 (	<u>0</u> 20	green-yellow (Ex)	283-677/99	99-950 🕕 🗆	20	green-yellow (Ex)	283-607/99	9-950 🕕	25
			Attention! These	terminal blo	cks cannot be	•				
			commoned with	adjacent jun	npers!					
		A	0.5 – 6 mm² 550 V~, 68 A (see also section		A	lana anatin	- 14)			
	ediate plate, 2.5 mm/0		End and interme				End and interme	ediate plate. 4	. mm/0.157 i	in thick
and the michin	•	28 50 (2 x 25)	and the michine	orange	283-352		and and memo	orange	283-317	
	O .	25 50 (2 x 25)		grey	283-350	, ,		grey	283-316	•
	0 /	30 50 (2 x 25)		light grey		, ,		light grey		,
Separator, over	sized, 2 mm / 0.079 in this		Separator, overs	<u> </u>		(=::==)	Separator, oversi	<u> </u>		
•										
	orange <b>283-3</b> 5	<b>29</b> 50 (2 x 25)		orange	283-353	50 (2 x 25)		orange	283-327	50 (2×2
£.		29 50 (2 x 25) 26 50 (2 x 25)		•		, ,		•	283-327 283-337	
-		<b>26</b> 50 (2 × 25)		orange	283-353 3 283-351 3	50 (2 x 25)		orange grey		50 (2×2
Adjacent jumpe	grey <b>283-3</b> 2	26 50 (2 x 25) 31 50 (2 x 25)	(	orange grey	283-353 : 283-351 :	50 (2 x 25)	Adjacent jumper	orange grey light grey	283-337 283-338	50 (2×2 50 (2×2
Adjacent jumpe	grey 283-33 light grey 283-33 er, insulated, I <sub>N</sub> 70 A, (Ex)	26 50 (2 x 25) 31 50 (2 x 25)		orange grey	283-353 : 283-351 :	50 (2 x 25)		orange grey light grey	283-337 283-338	50 (2×2 50 (2×2 8 A
Adjacent jumpe	grey 283-33 light grey 283-33 er, insulated, I <sub>N</sub> 70 A, (Ex)	26 50 (2×25) 31 50 (2×25) 63 A 02 50 (2×25)		orange grey	283-353 : 283-351 :	50 (2 x 25)		orange grey light grey r, insulated, I <sub>N</sub> 7 grey	283-337 283-338 70 A, (Ex) 63	50 (2 x 2 50 (2 x 2 3 A 50 (2 x 2
Adjacent jumpe	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, (Ex) grey 283-40	26 50 (2×25) 31 50 (2×25) 63 A 02 50 (2×25)		orange grey	283-353 : 283-351 :	50 (2 x 25)		orange grey light grey r, insulated, I <sub>N</sub> 7 grey	283-337 283-338 70 A, (Ex) 63 283-402	50 (2×2 50 (2×2 8 A 50 (2×2
	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, (Ex) grey 283-40	26 50 (2 x 25) 31 50 (2 x 25) 63 A 02 50 (2 x 25) 22 50 (2 x 25)		orange grey	283-353 : 283-351 :	50 (2 x 25)		orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen	283-337 283-338 70 A, (£x) 63 283-402 283-422	50 (2×2 50 (2×2 3 A 50 (2×2 50 (2×2
	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, & grey 283-4! yellgreen 283-4: er, insulated, I <sub>N</sub> 76 A, &	26 50 (2 x 25) 31 50 (2 x 25) 63 A 02 50 (2 x 25) 22 50 (2 x 25)		orange grey	283-353 : 283-351 :	50 (2 x 25)	Adjacent jumper	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen	283-337 283-338 70 A, (£x) 63 283-402 283-422	50 (2×2 50 (2×2 3 A 50 (2×2 50 (2×2
	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, & grey 283-4! yellgreen 283-4: er, insulated, I <sub>N</sub> 76 A, &	26 50 (2×25) 31 50 (2×25) 63 A 02 50 (2×25) 22 50 (2×25)		orange grey	283-353 : 283-351 :	50 (2 x 25)	Adjacent jumper	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 2	283-337 283-338 70 A, (Ex) 63 283-402 283-422 76 A, (Ex) 63	50 (2×2 50 (2×2 3 A 50 (2×2 50 (2×2
Alternate jump	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, & grey 283-4: yellgreen 283-4: er, insulated, I <sub>N</sub> 76 A, & grey 283-4:	26 50 (2×25) 31 50 (2×25) 63 A 02 50 (2×25) 22 50 (2×25) 63 A 09 50 (2×25)		orange grey	283-353 : 283-351 :	50 (2 x 25)	Adjacent jumper	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 7 grey	283-337 283-338 70 A, ( 6 63 283-402 283-422 76 A, ( 6 63 283-409	50 (2×2 50 (2×2 3 A 50 (2×2 50 (2×2 50 (2×2
Alternate jump	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, & grey 283-4: yellgreen 283-4: er, insulated, I <sub>N</sub> 76 A, & grey 283-4: er, suitable f. term. bl. 1.5	26 50 (2×25) 31 50 (2×25) 63 A 02 50 (2×25) 22 50 (2×25) 26 63 A 29 50 (2×25) 20 63 A 21 63 A 22 70 (2×25)		orange grey	283-353 : 283-351 :	50 (2 x 25)	Adjacent jumper	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 7 grey	283-337 283-338 70 A, & 63 283-402 283-422 76 A, & 63 283-409	50 (2×2 50 (2×2 3 A 50 (2×2 50 (2×2 3 A 50 (2×2 3 A 50 (2×2
Alternate jump	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, &x grey 283-4: yellgreen 283-4: er, insulated, I <sub>N</sub> 76 A, &x grey 283-4: er, suitable f. term. bl. 1.5 11.6 mm/0.457 in v	26 50 (2×25) 31 50 (2×25) 63 A 02 50 (2×25) 22 50 (2×25) 26 63 A 29 50 (2×25) 20 63 A 20 50 (2×25) 21 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		orange grey	283-353 : 283-351 :	50 (2 x 25)	Adjacent jumper	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 7 grey	283-337 283-338 70 A, & 63 283-402 283-422 76 A, & 63 283-409 m. bl. 1.5 mm	50 (2×2 50 (2×2 3 A 50 (2×2 50 (2×2 50 (2×2 3 A 50 (2×2
Alternate jump	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, & & grey 283-4: yellgreen 283-4: er, insulated, I <sub>N</sub> 76 A, & grey 283-4: er, suitable f. term. bl. 1.5 11.6 mm/ 0.457 in w 283-44	26 50 (2×25) 31 50 (2×25) 63 A 02 50 (2×25) 22 50 (2×25) 26 63 A 29 50 (2×25) 20 63 A 20 50 (2×25) 20 63 A 20 50 (2×25)		orange grey	283-353 : 283-351 :	50 (2 x 25)	Adjacent jumper	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 7 grey r, suitable f. terr 11.6 mm/0	283-337 283-338 70 A, & 63 283-402 283-422 76 A, & 63 283-409 m. bl. 1.5 mm .457 in wide 283-404	50 (2×2 50 (2×2 3 A 50 (2×2 50 (2×2 50 (2×2 50 (2×2 50 (2×2 50 (2×2
Alternate jump	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, Exgrey 283-4: yellgreen 283-4: grey 283-4: er, insulated, I <sub>N</sub> 76 A, Exgrey 283-4: for test plug 4 mm/	26 50 (2×25) 31 50 (2×25) 63 A 02 50 (2×25) 22 50 (2×25) 26 63 A 29 50 (2×25) 20 63 A 20 50 (2×25) 20 63 A 20 70 (2×25)	Protective warm	orange grey light grey	283-353 283-351 283-355	50 (2 × 25) 50 (2 × 25)	Adjacent jumper	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 7 grey f, insulated, I <sub>N</sub> 7 grey f, suitable f. terr 11.6 mm/0	283-337 283-338 70 A, & 63 283-402 283-422 76 A, & 63 283-409 m. bl. 1.5 mm .457 in wide 283-404 g 4 mm/0.1	50 $(2 \times 2)$ 50 $(2 \times 2)$ 6 A 50 $(2 \times 2)$ 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 9 The second sec
Alternate jump	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, Exgrey 283-4: yellgreen 283-4: grey 283-4: er, insulated, I <sub>N</sub> 76 A, Exgrey 283-4: for test plug 4 mm/sing marker, for 5 termin	26 50 (2×25) 31 50 (2×25) 63 A  22 50 (2×25) 22 50 (2×25) 26 63 A 29 50 (2×25) 20 63 A 20 50 (2×25) 21 64 25 22 70.157 in Ø 23 rad blocks,	Protective warni	orange grey light grey	283-353 : 283-355 : 283-35	50 (2 × 25) 50 (2 × 25)	Adjacent jumper	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 7 grey for test plu ng marker, for	283-337 283-338 70 A, & 63 283-402 283-422 76 A, & 63 283-409 m. bl. 1.5 mm .457 in wide 283-404 g 4 mm/0.1 r 5 terminal	50 $(2 \times 2)$ 50 $(2 \times 2)$ 6 A 50 $(2 \times 2)$ 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 9 A 50 $(2 \times 2)$ 10 March 19 March
Alternate jump	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, Exgrey 283-4: yellgreen 283-4: grey 283-4: grey 283-4: er, insulated, I <sub>N</sub> 76 A, Exgrey 283-4: for test plug 4 mm/sing marker, for 5 terming fits into screwdriver	26 50 (2×25) 31 50 (2×25) 63 A  22 50 (2×25) 22 50 (2×25) 26 63 A 29 50 (2×25) 20 63 A 20 50 (2×25) 21 64 25 22 70.157 in Ø 23 rad blocks,	Protective warni	orange grey light grey	283-353 283-351 283-355	50 (2 × 25) 50 (2 × 25) locks,	Adjacent jumper	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 7 grey for test plu ng marker, for	283-337 283-338 70 A, & 63 283-402 283-422 76 A, & 63 283-409 m. bl. 1.5 mm .457 in wide 283-404 g 4 mm/0.1	50 $(2 \times 2)$ 50 $(2 \times 2)$ 6 A 50 $(2 \times 2)$ 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 9 Display to the second of the second
Alternate jump	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, Exgrey 283-4: yellgreen 283-4: grey 283-4: grey 283-4: er, insulated, I <sub>N</sub> 76 A, Exgrey 283-4: for test plug 4 mm/sing marker, for 5 termining marker, for 5 termining screwdriver yellow 283-4:	26 50 (2×25) 31 50 (2×25) 63 A  22 50 (2×25) 22 50 (2×25) 26 63 A 29 50 (2×25) 20 63 A 20 50 (2×25) 21 64 25 22 70.157 in Ø 23 nal blocks, 3 slot	Protective warni Finger guard co	orange grey light grey light grey	283-353 : 283-355 : 283-35	50 (2 × 25) 50 (2 × 25) locks,	Adjacent jumper	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 7 grey for test plu ng marker, for fits into scre yellow	283-337 283-338 70 A, & 63 283-402 283-422 76 A, & 63 283-409 m. bl. 1.5 mm .457 in wide 283-404 g 4 mm/0.1 r 5 terminal ewdriver slov	50 $(2 \times 2)$ 50 $(2 \times 2)$ 6 A 50 $(2 \times 2)$ 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 9 Display to the second of the second
Alternate jump	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, Exgrey 283-4: yellgreen 283-4: grey 283-4: grey 283-4: er, insulated, I <sub>N</sub> 76 A, Exgrey 283-4: for test plug 4 mm/sing marker, for 5 termining marker, for 5 termining screwdriver yellow 283-4:	26 50 (2×25) 31 50 (2×25) 63 A 22 50 (2×25) 22 50 (2×25) 24 63 A 25 63 A 26 63 A 27 63 A 28 63 A 29 50 (2×25) 29 63 A 29 50 (2×25) 20 63 A 20 20 70 (2×25) 20	16666	orange grey light grey light grey  ing marker, for fits into scr yellow  ver,	283-353 : 283-355 : 283-35	50 (2 × 25) 50 (2 × 25) locks, 50 (2 × 25)	Adjacent jumper  Alternate jumper  Test plug adapter  Protective warni	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 7 grey  r, suitable f. terr 11.6 mm/0 for test plu ng marker, for fits into scre yellow	283-337 283-338 70 A, & 63 283-402 283-422 76 A, & 63 283-409 m. bl. 1.5 mm .457 in wide 283-404 g 4 mm/0.1 r 5 terminal ewdriver slov	50 $(2 \times 2)$ 50 $(2 \times 2)$ 6 A 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 8 A 50 $(2 \times 2)$ 9 Delocks, the state of the st
Alternate jump	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, Exgrey 283-4: yellgreen 283-4: grey 283-4: grey 283-4: er, insulated, I <sub>N</sub> 76 A, Exgrey 283-4: for test plug 4 mm/ sing marker, for 5 termin fits into screwdriver yellow 283-4:  pover,	26 50 (2×25) 31 50 (2×25) 63 A  22 50 (2×25) 22 50 (2×25) 24 63 A 29 50 (2×25) 26 63 A 29 50 (2×25) 27 63 A 29 50 (2×25) 28 63 A 29 50 (2×25) 29 64 25 20 157 in Ø 20 21 25 20 157 in Ø 20 21 25 20 25	16666	ing marker, for fits into scr yellow  ver, serves as t	283-353 : 283-355 : 283-35	locks, 50 (2 x 25)	Adjacent jumper  Alternate jumper  Test plug adapter  Protective warni	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 7 grey r, suitable f. terr 11.6 mm/0 for test plu ng marker, for fits into scre yellow	283-337 283-338 70 A, & 63 283-402 283-422 76 A, & 63 283-409 m. bl. 1.5 mm .457 in wide 283-404 g 4 mm/0.1 r 5 terminal ewdriver slor 283-415	50 $(2 \times 2 \times 2 \times 3 \times 2 \times 2 \times 3 \times 3 \times 3 \times 3 \times $
Alternate jump	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, Exgrey 283-4: yellgreen 283-4: grey 283-4: er, insulated, I <sub>N</sub> 76 A, Exgrey 283-4: for test plug 4 mm/ sing marker, for 5 termin fits into screwdriver yellow 283-4:  ever, serves as touchproce for unused clamping	26 50 (2×25) 31 50 (2×25) 63 A  22 50 (2×25) 22 50 (2×25) 24 63 A 29 50 (2×25) 26 63 A 29 50 (2×25) 27 63 A 29 50 (2×25) 28 63 A 29 50 (2×25) 29 64 25 20 157 in Ø 20 21 25 20 157 in Ø 20 21 25 20 25	16666	ing marker, for fits into scr yellow  ver, serves as t	283-353 : 283-355 : 283-355 : 283-355 : 283-355 : 283-41	locks, 50 (2 x 25) 50 (2 x 25) 50 (2 x 25) 50 (2 x 25)	Adjacent jumper  Alternate jumper  Test plug adapter  Protective warni	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 7 grey r, suitable f. terr 11.6 mm/0 for test plu ng marker, for fits into scre yellow	283-337 283-338 70 A,	50 (2 x 2 50 (2 x 2 3 A 50 (2 x 2 50 (2 x 2 50 (2 x 2 50 (2 x 2 3 A 50 (2 x 2 3 A 50 (2 x 2 57 in Ø blocks, t 50 (2 x 2
Alternate jump	grey 283-3: light grey 283-3: er, insulated, I <sub>N</sub> 70 A, Exgrey 283-4: yellgreen 283-4: grey 283-4: er, insulated, I <sub>N</sub> 76 A, Exgrey 283-4: for test plug 4 mm/ sing marker, for 5 termin fits into screwdriver yellow 283-4:  ever, serves as touchproce for unused clamping	26 50 (2×25) 31 50 (2×25) 63 A  72 50 (2×25) 72 50 (2×25) 73 63 A 74 75 75 75 75 75 75 75 75 75 75 75 75 75	16666	ing marker, for fits into scripellow  ver, serves as to for unused yellow	283-353 3 283-351 283-355 3 283-355 3 283-415 3 283-415 3 283-400 10 283-400	locks, 50 (2 x 25) 50 (2 x 25)	Adjacent jumper  Alternate jumper  Test plug adapter  Protective warni	orange grey light grey r, insulated, I <sub>N</sub> 7 grey yellgreen r, insulated, I <sub>N</sub> 7 grey r, suitable f. terr 11.6 mm/0 for test plu ng marker, for fits into screy yellow ver, serves as te for unused yellow	283-337 283-338 70 A,	50 (2 x 2 50 x 2 50 (2 x 2 50

<sup>\*</sup> For further approvals with corresponding ratings see section 15.

# High Current Through/Ground (Earth) Conductor and (Ex) Terminal Blocks 35 mm<sup>2</sup> / AWG 2, Series 285

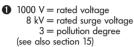


6 - 35 mm<sup>2</sup> 1000 V/8 kV/3 **0** 125 A AWG 10 - 2 600 V, 115 A **9** 600 V, 140 A ®

Terminal block width 16 mm / 0.63 in 23 mm / 0.91 in [16 mm/0.63 in for 35 mm<sup>2</sup> "str."]

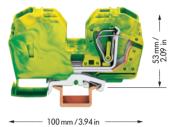
\* 91 @ CCAKETA GL &

For terminal blocks with larger cross sections, please see Specialty Products Catalog KSK 1.2



(Ex) Suitable for EEx e II applications 6 – 35 mm² AWG 8 – 2 750 V ~, 85 A 6 – 25 mm² AWG 8 – 4 for ground (earth) terminal blocks (see also section 13)





Description			Item No.	Pack. unit pcs		
Rail-mounted hig	h current terminal blocks,	2-conductor through terminal blocks				
for DIN 35 rail		with integrated er	nd plate			
		grey	285-635	15		
		blue	285-634 🔵	15		
		light grey (Ex)	285-992 🔾	15		
		2-conductor gro	und (earth) terminal b	locks		
		with integrated er	nd plate			
		green-yellow	285-637 🕕	15		
		green-yellow (Ex)	285-637/999-950	15		
		<b>not</b> to be used or	n DIN 35 x 7.5 rail			
Accessories S	eries 285 Appropriate marking	g system WMB/W\$	B or Mini-WSB (see	section 14)		
Accessories S	Adjacent jumper,	I <sub>N</sub> 85 A	·	<u>'</u>		
Accessories S	, pp. op. i.a. i. i.a. i.i.a.		SB or Mini-WSB (see	<u>'</u>		
Accessories S	Adjacent jumper,	I <sub>N</sub> 85 A	·	<u>'</u>		
Accessories S	Adjacent jumper, insulated	I <sub>N</sub> 85 A grey	·	50 (2×25		
Accessories S	Adjacent jumper, insulated Step-down jumper,	I <sub>N</sub> 85 A grey I <sub>N</sub> 32 A	285-435	50 (2×25		
Accessories S	Adjacent jumper, insulated  Step-down jumper, insulated	I <sub>N</sub> 85 A grey I <sub>N</sub> 32 A	285-435 283-414	50 (2×25		
Accessories S	Adjacent jumper, insulated  Step-down jumper, insulated	I <sub>N</sub> 85 A grey I <sub>N</sub> 32 A grey	285-435 283-414 . 249-116	50 (2×25 50 (2×25 100 (4×25		
Accessories S	Adjacent jumper, insulated  Step-down jumper, insulated	I <sub>N</sub> 85 A grey I <sub>N</sub> 32 A grey 6 mm/0.236 in w	285-435 283-414 . 249-116	50 (2×25 50 (2×25 100 (4×25		
Accessories S	Adjacent jumper, insulated  Step-down jumper, insulated  Screwless end stop	I <sub>N</sub> 85 A grey I <sub>N</sub> 32 A grey 6 mm/0.236 in w	285-435 283-414 . 249-116	50 (2×25 50 (2×25 100 (4×25 50 (2×25 50 (2×25		
Accessories S	Adjacent jumper, insulated  Step-down jumper, insulated  Screwless end stop  Protective warning marker,	I <sub>N</sub> 85 A grey I <sub>N</sub> 32 A grey 6 mm/0.236 in w	283-414 283-414 249-116 249-117	50 (2×25 50 (2×25 100 (4×25 50 (2×25		
Accessories S	Adjacent jumper, insulated  Step-down jumper, insulated  Screwless end stop  Protective warning marker, for 5 terminal blocks,	I <sub>N</sub> 85 A grey I <sub>N</sub> 32 A grey 6 mm/0.236 in w	283-414 283-414 249-116 249-117	50 (2×25) 50 (2×25) 100 (4×25) 50 (2×25)		



Connection of conductor 35 mm<sup>2</sup>/AWG 2



Protective warning markers in operating slots



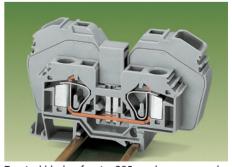
**Application notes** 

for unused clamping units

Commoning of a series 285 terminal block (35 mm $^2$ /AWG 2) with a series 281 terminal block (4 mm $^2$ /AWG 12) using step-down jumper 283-414



Finger guard cover snapped into unused clamping unit



Terminal blocks of series 285 can be commoned with terminal blocks of series 283: 285-635 and 285-634 with 283-601 and 283-604 resp. jumper required: 285-435.

Please note that the nominal current of the

adjacent jumper should not exceed 63 A.



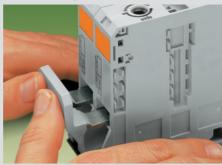
## 95 mm<sup>2</sup>/AWG 4/0 Rail-Mounted High Current Terminal Blocks . . . with POWER CLAMP Connection, Series 285

Wire connection



Counter-clockwise rotation using a hex wrench. Hold clamp in open position using the latch.

### Commoning



Commoning with adjacent jumper. Insertion of jumper above the conductor entry hole, without tools. Rated cross section is still 95 mm²/AWG 0000.

## **Testing**



Testing with test plug 4 mm/0.157 in diameter, protected against accidental contact.

### Wire connection



Introduce stripped wire into the clamping unit up to the stop and hold it in position . . .

### Wire connection



... A small counter-clockwise rotation releases the latch 1. Once the operating tool 2 has been removed the conductor is safely clamped.



The POWER CLAMP connection clamps the following copper wires:\*



stranded



### **Assembly**



Snapping a terminal block onto the carrier rail. From the left or from the right.



Removing a terminal block from the carrier rail. To the left or to the right.



fine-stranded, also with tinned single strands

\* For aluminum wire see notes in section 15!

## ... Description and Handling

Safety notices



Bend the conductor before stripping! Wire end has to be straight! Note: Stripped length 35 mm



Attention! Health hazard! Keep your fingers out of the conductor entry hole!



Protective warning marker may indicate: Attention! Voltage may be present despite main circuit being switched off!

## Grounding foot



Contact pressure is distributed symmetrically on all defined contact zones.

Short circuit currents of more than 11, 400 A per second are grounded safely.

## Ground (earth) conductor terminal blocks



Firmly snap ground (earth) conductor terminal block onto the carrier rail. The grounding foot makes an automatic contact to the rail.

### Touch protection cover



Covers provide touchproof safety by closing unused clamping units and jumper contact slots (detach the cover of the jumper contact slot from the touch protection cover of the clamping unit)



Voltage tap



Reliable and simple tap directly onto the power supply. Insert the unwired tap before opening the pressure spring.



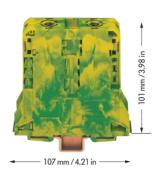
fine-stranded, with crimped ferrule (gas tight)



## High Current Through/Ground (Earth) Conductor and Terminal Blocks 95 mm²/AWG 4/0, Series 285

### 24 Side-entry







	Item No.	Pack. unit pcs		ltem No.	Pa po	ck. unit s		ltem No.	Pack. unit pcs
2-conductor th	rough terminal block	cs	2-conductor gro	und (earth) te	erminal bloc	ks	Voltage tap	,	
grey	285-195	5	green-yellow	285-197	)	5	grey	285-407	5
blue	285-194	5	green-yellow (Ex)	285-197/9	99-950 🕕	5			
light grey (Ex)	285-995 🔘	5							
	usively on DIN 35 x 1	5;	To be used <b>exclus</b>	•	35 x 15;				
2.3 mm / 0.091 i	n thick		2.3 mm / 0.091 in	thick, Cu					
Accessories			Appropriate mar	king system <b>V</b>	VSB (see see	ction 14)	Appropriate	marking system <b>WMB</b> .	/WSB
Adjacent jump	<b>er,</b> insulated,		Adjacent jumper	r, insulated,					
	I <sub>N</sub> 232 A for 1 ju	ımper		I <sub>N</sub> 232 A	for 1 jumper			rated voltage	
	I <sub>N</sub> 192 A for 2 to	4 jumpers		I <sub>N</sub> 192 A	for 2 to 4 jum	pers		rated surge voltage	
	grey <b>285</b>	<b>-495</b> 25		grey	285-495			pollution degree section 15)	
Hex wrench w	ith partially insulated	d shaft	Hex wrench wit	h partially in	sulated shaf	t	_ `	or EEx e II applications	
	285	<b>-172</b> 1			285-172	1	25 – 95 r		0
							750 V~, 35 - 70 r		ı
Protective war	ning marker,		Protective warni	ng marker,				nd (earth) terminal blocks section 13)	
	with high voltage	e symbol, black		with high	voltage symb	ol, black	(555 55		
1	yellow 285	-170 50 (2 x 25)	-	yellow	285-170	50 (2 x 25)			
Touch protectio	n cover, serves as tou	chproof protec-	Touch protection	cover, serves	as touchpro	of protec-			
100	tion for unused o	clamping units	100	tion for u	nused clampir	ng units			
	yellow 285	<b>-169</b> 25	1	yellow	285-169	25			
Test plug, Ø 4 n	nm / 0.157 in, protected	against accidental	Test plug, Ø 4 mr	n / 0.157 in, pro	otected agains	t accidental			
	contact, not offe	red by WAGO		contact, n	ot offered by	WAGO			
	e. g. Fa. Multi-Conto	act Deutschland GmbH		e.g. Fa. Mu	ulti-Contact Deut	schland GmbH			
	Postfach 16 06 · 79	9551 Weil am Rhein		Postfach 16	06 · 79551 W	eil am Rhein			
Hegenheimerstro	aße 19 · 79576 Weil ar	m Rhein	Hegenheimerstraß	Be 19 · 79576	Weil am Rhei	n			
			-						

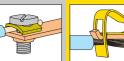
<sup>\*</sup>For further approvals with corresponding ratings see section 15.

## **Distribution Terminal Blocks, Series 284**

Front-entry/side-entry







0.2 - 10 mm<sup>2</sup> 0 6.0 - 35 mm<sup>2</sup> 0 800 V/8 kV/3 ©; 125 A AWG 10 - 2 0 600 V, 115 A 91 ©

Terminal block width 17.5 mm / 0.689 in □■■ 12 – 14 mm / 0.51 in

\* 🗫 🍪 KEMA CCAKEMA CB GL BV LR NV

- CAGE CLAMP® connection
- 2 Screw-clamp connection
- 800 V = rated voltage 8 kV = rated surge voltage 3 = pollution degree (see also section 15)
- 4 Individual arrangement 125 A 2 jumpers combined in one clamping unit 100 A



89 mm / 3.5 in

Description			ltem No.	Pack. unit pcs				
Distribution term	inal block, for DIN 35 rail	Distribution	Distribution terminal blocks,					
		with 3 x CAC	GE CLAMP® connection	10 mm <sup>2</sup> /AWG 8				
		and 1 x scre	w-clamp connection <b>2</b> 3	35 mm <sup>2</sup> /AWG 2				
		grey	284-621	15				
		blue	284-624 🔵	15				
Accessories	Appro	priate marking syste	em WMB/WSB (see	section 14)				
Comb type jump	<b>er bar,</b> insulated,	I <sub>N</sub> 125 A 4						
	2-way	grey	284-412	100 (4 x 25)				
B								
60								
60								
60								
60								
80								
-								



Connection of conductor 35 mm<sup>2</sup>/AWG 2 Screw-clamp connection, side-entry



Connection of conductor 10 mm²/AWG 8 CAGE CLAMP® connection, front-entry



Commoning with comb type jumper bar



Connecting a 35 mm<sup>2</sup>/AWG 2 conductor



Rail-mounted distribution terminal block with 35 mm²/AWG 2 and 3 x 10 mm²/3 x AWG 8 front-entry CAGE CLAMP® connection. To snap onto DIN 35 carrier rails according to EN 60715. The terminal block is closed on both sides, an end or intermediate plate is not necessary. In case of maximum wiring with

3 x 10 mm<sup>2</sup>/3 x AWG 8 on the distribution side the nominal current of 125 A should not be exceeded.



## **Step-Down Jumpers for** Front-Entry Through Terminal Blocks up to 16 mm<sup>2</sup> / AWG 6\*

Step-down jumper commoning term. bl.  $10/6 \text{ mm}^2/\text{AWG }8/10 \rightarrow 4/2.5/1.5 \text{ mm}^2/\text{AWG }12/14/16$   $800 \text{ V/8 kV/3; }15 \text{ A or }10/6 \text{ mm}^2/\text{AWG }8/10 \rightarrow 6/4 \text{ mm}^2/\text{AWG }10/12$  800 V/8 kV/3; 30 A

Step-down jumper for commoning terminal blocks 16 mm²/AWG 6 → 4 mm²/AWG 12 800 V/8 kV/3 32 A





Step-down jumpers cannot be used for commoning front-entry terminal blocks with side-entry terminal blocks





Description				Item No.	Pack. unit pcs			ltem No.	Pack. unit pcs
Step-down jumpe	r, insulated	10/6 mn	n <sup>2</sup> / AWG 8/	70 →			16 mm <sup>2</sup> / AWG	$6.6 \rightarrow 4 \text{ mm}^2 / I$	AWG 12
		4/2.5/1.	5 mm²/AW	/G 12/14/16			I <sub>N</sub> 32 A, grey	283-414	50 (2 x 25)
		I <sub>N</sub> 15 A, gr	еу	284-414	50 (2 x 2	25)			
		10/6 mn	n <sup>2</sup> / AWG 8/	70 → 6/4 mr	n <sup>2</sup> / AWG 10/12	:			
		I <sub>N</sub> 30 A, g	rey	284-413	50 (2 x 2	25)			
Accessories									
	Cover plate,	1 mm/0.0	39 in thick				1 mm/0.039 in	thick, for 2-cond.	terminal block 283-601
1 10000	for 2-, 3- and	grey	284-334	284-336 1	<b>284-335 2</b> 2	5	grey	283-334	25
1	4-conductor terminal blocks	orange	284-344	284-346 1	<b>284-345 2</b> 2	5	orange	283-336	25
	Cover plate,	1 mm/0.039 in 1	hick series 282	series 284			1 mm/0.039 in	thick, for 2-cond.	terminal block 283-901
	for 2-conductor terminal blocks	grey	282-357	284-357	2	5	grey	283-357	25
(0)	282-901 and 284-901	orange	282-367	284-367	2	5	orange	283-367	25

1 mm/0.039 in thick series 282 series 284

282-358 284-358 282-368 284-368

grey

orange

#### **Application notes**

Step-down jumpers may be used for commoning terminal blocks of different sizes, without losing a conductor clamping point. This can be an advantage on long conductor runs where voltage drop can be a problem.

Cover plate,

for 3-conductor terminal blocks

282-681 and 284-681

A large conductor can be easily connected to smaller wires at the distribution point.

Step-down jumpers are simply pushed down to full insertion, in the same way as all other push-in jumpers. Commoning may be made in either direction using the special thin end plate to cover the open side. Further terminal blocks of the smaller cross section may be commoned using standard adjacent jumpers. In this case pay attention that:

#### 1. the total current flowing does not exceed the rating of the step-down jumper

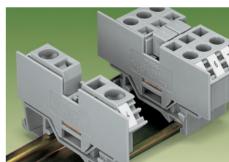
2. the standard or special thin end plate is applied to the open side of the larger block.



25

25

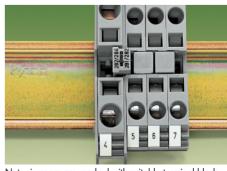
Cover plate snapped onto open side of terminal block



Always use a cover plate also on the other side of the



Larger "supply" blocks may be commoned to blocks for Push jumper down FIRMLY until FULLY inserted!



Note: jumpers are marked with suitable terminal block sizes ensuring they are correctly installed.

## **Examples of Assembly**





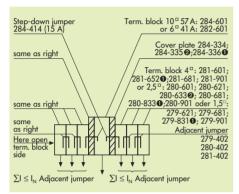
Commoning of front-entry rail-mounted terminal blocks 6 mm<sup>2</sup>/AWG 10 (series 282) with front-entry rail-mounted terminal blocks 1.5 mm<sup>2</sup>/AWG 16 (series 279).



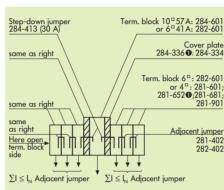
Commoning of front-entry rail-mounted terminal blocks 10 mm²/AWG 8 (series 284) with front-entry rail-mounted terminal blocks 6 mm²/AWG 10 (series 282).



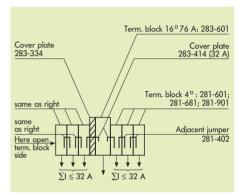
Commoning of front-entry rail-mounted terminal blocks 16 mm²/AWG 6 (series 283) with front-entry rail-mounted terminal blocks 4 mm²/AWG 12 (series 281).



Example of assembly "Commoning of front-entry rail-mounted terminal blocks 10/6 mm²/AWG 8/10 with front-entry rail-mounted terminal blocks 4/2.5/1.5 mm²/AWG 12/14/16 with step-down jumper 284-414."



Example of assembly "Commoning of front-entry rail-mounted terminal blocks 10/6 mm²/AWG 8/10 with front-entry rail-mounted terminal blocks 6/4 mm²/AWG 10/12 with step-down jumper 284-413."



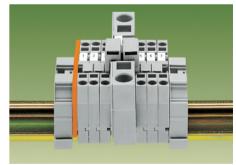
Example of assembly "Commoning of front-entry rail-mounted terminal blocks 16 mm²/AWG 6 with front-entry rail-mounted terminal blocks 4 mm²/AWG 12 with step-down jumper 283-414."



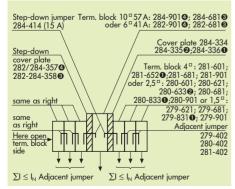
Commoning of front-entry rail-mounted terminal blocks 6 mm²/AWG 10 (series 282) with front-entry rail-mounted terminal blocks 1.5 mm²/AWG 16 (series 279).



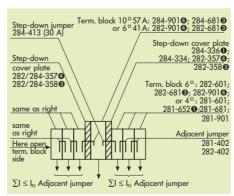
Commoning of front-entry rail-mounted terminal blocks 10 mm²/AWG 8 (series 284) with front-entry rail-mounted terminal blocks 6 mm²/AWG 10 (series 282).



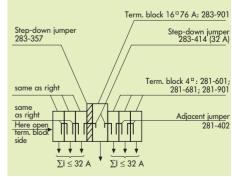
Commoning of front-entry rail-mounted terminal blocks 16 mm²/AWG 6 (series 283) with front-entry rail-mounted terminal blocks 4 mm²/AWG 12 (series 281).



Example of assembly "Commoning of front-entry rail-mounted terminal blocks 10/6 mm²/AWG 8/10 with front-entry rail-mounted terminal blocks 4/2.5/1.5 mm²/AWG 12/14/16 with step-down jumper 284-414."



Example of assembly "Commoning of front-entry rail-mounted terminal blocks 10/6 mm²/AWG 8/10 with front-entry rail-mounted terminal blocks 6/4 mm²/AWG 10/12 with step-down jumper 284-413."



Example of assembly "Commoning of front-entry rail-mounted terminal blocks 16 mm²/AWG 6 with front-entry rail-mounted terminal blocks 4 mm²/AWG 12 with step-down jumper 283-414."



## Double and Triple Deck Terminal Blocks with CAGE CLAMP® connection Description and Handling

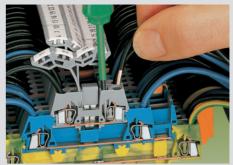
Series 279/280 and 281



Assembly of a terminal block on the rail



Removal of a terminal block from the assembly



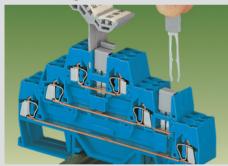
Connection of wires

## Commoning



Commoning with adjacent jumpers 280-402.
Push jumper down FIRMLY until FULLY inserted!

### Commoning



Combined horizontal and vertikal commoning

### Marking



Marking with WMB multi-marking system or WSB quick marking system. For other systems see section 15

CAGE CLAMP® clamps the following copper wires:\*

fine-stranded wire tip bonded

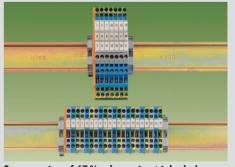
stranded

Space saving

## Space saving of 50 % when using double deck terminal blocks

fine-stranded wire

with crimped ferrule 1



Space saving of 67 % when using triple deck terminal blocks

fine-stranded, also with tinned single strands

fine-stranded wire with crimped pin terminal

\* For aluminum wire see notes in section 15!

When using wires with ferrules, it is necessary to use a terminal block one size larger than the nominal cross section of the wire.

## Double Deck Terminal Blocks 1.5 mm<sup>2</sup> / AWG 16, Series 279



 $0.08 - 1.5 \text{ mm}^2$ 500 V/6 kV/3 **①** 18 A

AWG 28 - 16

0.08 - 1.5 mm<sup>2</sup> 500 V/6 kV/3 **①** 

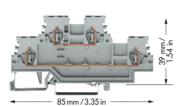
AWG 28 - 16

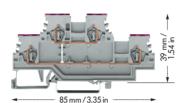
Terminal block width 4 mm / 0.157 in

□ 8 - 9 mm / 0.33 in

Terminal block width 4 mm / 0.157 in ■■ 8 - 9 mm / 0.33 in

Accessories







Height including WSB double marker carrier

	ltem No.	Pack. unit pcs		ltem No.	Pack. unit pcs	
Double decl	k terminal block, for D	IN 35 rail	Double deck terminal block, for DIN 35 rail			
Through/thr	ough terminal blocks,		4-conductor through terminal block,			
housing color	r grey		internal commoning, housing color grey,			
			conductor entry position colored in violet			
L/L	279-501	50	L	279-508	50	
N/L	279-512	50				
L/N	279-513	50				

Item Pack, unit No. pcs End and intermediate plate, 2 mm/0.079 in thick 279-519 100 (4 x 25) orange 279-518 100 (4 x 25) grey Insulation stop 2, 5 pcs/strip



279-470 200 strips

dark grey 279-471 200 strips Adjacent jumper, insulated, I<sub>N</sub> 15 A



279-402 200 (8 x 25) grey yell.-green **279-422** 200 (8 x 25)

Alternate jumper, insulated,  $I_N$  15 A

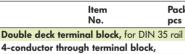


279-409 100 (4 x 25) grey



**Comb type jumper bar 2,** ins.,  $I_N = I_N$  of terminal block 279-482 200 (8 x 25) 2-way 279-483 200 (8 x 25) 3-way

279-490 50 (2×25) 10-way Alternate comb type jumper bar, insulated,



Pack. unit

pcs

85 mm / 3.35 in

279-509 3

Item

No.

internal commoning, housing color grey,

conductor entry position colored in violet

 $I_N = I_N$  of terminal block



2-way 279-492 200 (8 x 25)

Operating tool, insulated

2-way 279-432 **279-433** 1 3-way 10-way 279-440

WMB multi-marking system or 1 2 3 4 5 5 2 8 9 10 11 12 13 8 6 8 8 8 90 33

WSB double marker carrier

WSB quick marking system, 10 strips with 10 markers each

see section 14



85 mm / 3.35 in

279-504 3

Item

No.

Double deck terminal block, for DIN 35 rail

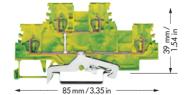
Through/through terminal block,

housing color blue

PE/L

Pack, unit

pcs



279-529 50 (2 x 25)

	Item No.	Pack. unit pcs					
Double deck	terminal block, for D	IN 35 rail					
Ground (eart	h) conductor/through	terminal blocks,					
housing color grey							
PF / N	279-517	50					

279-527

85 mm / 3.35 in

ltem Pack. unit No. Double deck terminal block, for DIN 35 rail 4-conductor ground (earth) terminal block, internal commoning, housing color green-yellow

279-507

PΕ

50

1 500 V = rated voltage 6 kV = rated surge voltage 3 = pollution degree (see also section 15)

2 See application notes on pages 2.43 – 2.44





## Double Deck Terminal Blocks 2.5 mm<sup>2</sup> / AWG 12, Series 280

0.08 - **2.5** mm<sup>2</sup> 500 V/6 kV/3 **①** 20 A AWG 28 - 12 300 V, 15 A **%** 300/600 V, 20/5 A ®

Terminal block width 5 mm / 0.197 in 8—8 8 - 9 mm / 0.33 in

\* 🕦 🏽 KETA CCAKETA 🕦 🛈 🚭 🗥 GL BV LR NV 🕲

0.08 - 2.5 mm<sup>2</sup> 500 V/6 kV/3 **0** 20 A

| AWG 28 - 12 | 300 V, 15 A **%** | 300/600 V, 20/5 A ®

Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in

\* 🗫 🎕 KEER CCAKEER 🕲 🛈 🚭 🕸 GL BV LR NV 🕄

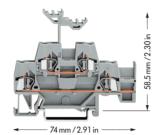
0.08 **– 2.5** mm<sup>2</sup> 500 V/6 kV/3 **①** 20 A

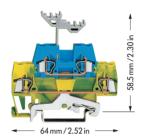
AWG 28 - 12 300 V, 15 A **%** 300/600 V, 20/5 A ®

Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in

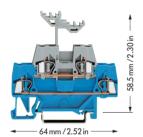
\* 🗫 🍪 KEER CCAKEER 🕦 🛈 🕾 🖫 GL BV LR NV 🚷

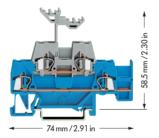






	Item No.	Pack. unit pcs		Item No.	Pack. unit pcs	Item No.	Pack. unit pcs
Double deck terminal block, for DIN 35 rail			Double deck terminal block, for DIN 35 rail			Double deck terminal block, for D	IN 35 rail
Through/through terminal blocks			Through/thro	ugh terminal blocks		Ground (earth) conductor/throug	h terminal blocks
			horizontal jui	mpering on lower leve	el		
grey	280-519	50	grey	280-520	50	green-yellow/grey 280-527	50
blue	280-529 🕗	50	blue	280-530 🕗	50	green-yellow/blue 280-537	50
						-	
Other terminal	Other terminal blocks with the same shape						
diode/LED	280-9xx/	page 7.62					







	Item No.	Pack. unit pcs		ltem No.	Pack. unit pcs		Item No.	Po po	ıck. unit :s
Double deck termi	nal block, fo	or DIN 35 rail	Double deck terminal block, for DIN 35 rail			Double deck to	erminal block,	for DIN 35 rd	ail
Through/through t	erminal blo	cks	Through/through terminal blocks			4-conductor g	round (earth) t	erminal bloc	:k,
			horizontal jumperi	ing on lowe	er level	internal comm	oning		
blue/grey (shown)	280-523	50	blue/grey (shown)	280-524	50	green-yellow	280-517		50
grey/blue (not show	n) <b>280-533</b>	50	grey/blue (not show	n) <b>280-534</b>	50				
- 1 14 - 14			= 1 11 1		25 (2002)	= 1 11 .		0.5 (0.00	0.1.1.1
End and intermedi		2.5 mm/0.098 in thick	End and intermed		2.5 mm/0.098 in thick	End and interr	nediate plate,		
	orange	<b>280-341</b> 100 (4×25)		orange	280-343 100 (4×25)		orange	280-341	
	grey	<b>280-340</b> 100 (4×25)		grey	<b>280-342</b> 100 (4×25)		grey	280-340	100 (4 x 25
Intermediate plate	, 1.1 mm/0.	043 in thick	Intermediate plate, 1.1 mm/0.043 in thick			Intermediate plate, 1.1 mm/0.043 in thick			
	orange	280-366 100 (4×25)		orange	280-369 100 (4×25)		orange	280-366	100 (4 x 2
Accessories Se	ries 280	, see page 2.13 for a co	mplete overview		Appropriate marking system	WMB/WSE	3 (see section 14	1)	
Adjacent jumper, i	nsulated, I <sub>N</sub> 2	24 A	Alternate jumper,	insulated, I <sub>N</sub>	24 A	Vertical jumpe	er, insulated, I <sub>N</sub> 2	4 A	
lite	grey	280-402 200 (8×25)		grey	<b>280-409</b> 100 (4×25)	1	grey	281-421	200 (8 x 2
W	yellgreen	<b>280-422</b> 200 (8×25)				}			
<b>Comb type jumper bar 4</b> , ins., $I_N = I_N$ of terminal block			Alternate comb ty	pe jumper	bar, insulated,	Operating too	I, insulated		
	2-way	<b>280-482</b> 200 (8 x 25)		$I_N = I_N$ of	terminal block		2-way	280-432	1
	3-way	280-483 200 (8×25)	ų ų	2-way	280-492 200 (8×25)		3-way	280-433	1
	10-way	280-490 50 (2 x 25)					10-way	280-440	1

<sup>\*</sup>For further approvals with corresponding ratings see section 15.



0.08 - 2.5 mm<sup>2</sup> 400 V/6 kV/3 **0 3** 6.3 A @/10 A

AWG 28 - 12 300 V, 10 A **% 6** 300/600 V, 20/5 A **6** 

Terminal block width 5 mm / 0.197 in ■ 8 – 9 mm / 0.33 in

\* 👊 🚳 KEEB CCAKEER 😡 💿 🚭 👺 🙈 GL BV LR NV 🛭

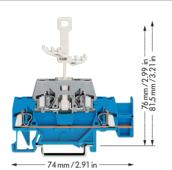
0.08 - 2.5 mm<sup>2</sup> 400 V/6 kV/3 **0 3** 6.3 A **3**/10 A

AWG 28 - 12 300 V, 10 A **% ©** 300/600 V, 20/5 A **®** 

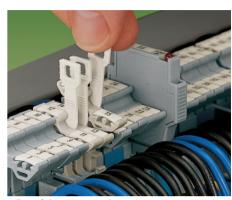
Terminal block width 5 mm / 0.197 in □ 8 – 9 mm / 0.33 in

\* 💫 @ KEUR CCAKEUR 🕲 🛈 🕞 GL BV LR NV 🎚



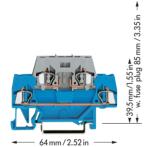


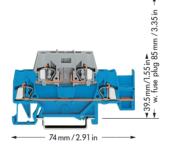
	Item No.	Pack. unit pcs		ltem No.	Pack. unit pcs	
Double deck to	erminal block, for D	IN 35 rail	Double deck terminal block, for DIN 35 rail			
Through/disconnect terminal blocks			Through/disco	nnect terminal bloc	ks	
			horizontal jum	pering on lower lev	rel .	
grey/grey	280-521	50	grey/grey	280-522	50	
blue/grey	280-525	50	blue/grey	280-526	50	



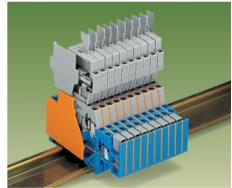
Pulling of disconnecting tab

The double deck terminal blocks enable two circuits of different potentials to be contained in one 2-level terminal block. The lower deck is wider than the upper, for ease of wiring. Different circuits can be differentiated by color coding of either level.





	ltem No.	Pack. unit pcs		ltem No.	Pack. unit pcs
Double deck termi	Double deck terminal block, for DIN 35 rail			nal block, fo	or DIN 35 rail
Through/carrier te	rminal bloc	ks for pluggable fuse	Through/carrier te	rminal bloc	ks for pluggable fuse
modules 🔞			modules 🔞		
			horizontal jumperi	ng on lowe	r level
blue/grey (shown)	280-531	50	blue/grey (shown)	280-532	50
grey/grey (not show	n) <b>280-514</b>	50	grey/grey (not show	n) <b>280-891</b>	50
End and intermedi	iate plate, 2	.5 mm/0.098 in thick	End and intermediate plate, 2.5 mm/0.098 in thick		
	orange	<b>280-341</b> 100 (4×25)		orange	280-343 100 (4 x 25)
	grey	<b>280-340</b> 100 (4×25)		grey	280-342 100 (4×25)
Intermediate plate	, 1.1 mm / 0.	043 in thick	Intermediate plate	, 1.1 mm/0.	043 in thick
	orange	<b>280-366</b> 100 (4×25)		orange	280-369 100 (4 x 25)
		'	Annunuinto		



Double deck terminal blocks with fuse plugs

When double deck terminal blocks are used with a fuse plug (width 6 mm/0.236 in) in the receptacle (top) level, the extra width can be compensated for the 280 series (width 5 mm/0.197 in) by use of an intermediate plate (thickness 1.1 mm/ 0.043 in).

This special intermediate plate still allows jumpering on the lower level when required, by use of the push-in jumpers.

Accessories Series 280, see page 2.13

Appropriate marking system

WMB/WSB (see section 14)

Fuse plug, for miniature metric fuses

5 x 20 mm and 5 x 25 mm 6 mm / 0.236 in wide with pull-tab **281-511** 50

Fuse plug, same as above, but with hole for LED

(for self-assembly) 6 mm / 0.236 in wide with pull-tab **281-512** 50

residual current in case of blown fuse LED 5 - 20 mA

Fuse plug, same as on the left, with additional indicator lamp, LED, AC/DC 24 V,

Can be used in either polarity direction

6 mm/0.236 in wide with pull-tab **281-512/281-501** 50

1 400/500 V = rated voltage 6 kV = rated surge voltage

3 = pollution degree (see also section 15)

- 2 Suitable for EEx i applications
- 3 Electrical ratings are given by the fuse or nominal voltage of the indicator lamp respectively see also pages 7.38 – 7.39
- 4 See application notes on pages 2.43 and 2.44

## Double Deck Terminal Blocks 2.5 mm<sup>2</sup> / AWG 12, Series 280

0.08 - 2.5 mm<sup>2</sup> 500 V/6 kV/3 **①** 20 A

AWG 28 - 12 300 V, 15 A **%** 300/600 V, 20/5 A ®

Terminal block width 5 mm / 0.197 in ■ 8 – 9 mm / 0.33 in

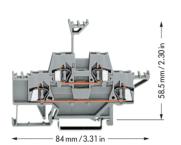
\* 🗫 🏽 KETA CCAKETA 🗞 🕾 👺 🙈 GL BV LR NV 🕄

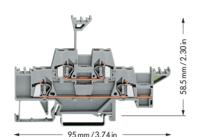
 $0.08 - 2.5 \text{ mm}^2$ 500 V/6 kV/3 **①** 

AWG 28 - 12 300 V, 15 A **%** 300/600 V, 20/5 A ®

Terminal block width 5 mm / 0.197 in □ 8 – 9 mm / 0.33 in

SAL @ KEER (N) @ W A GL BV LR NV @





10-way

280-440

	Item No.	Pack. unit pcs		Item No.	Pack. unit pcs	
Double deck terr	minal block, v	with additional	Double deck terminal block, with additional			
marking possibil	ities on both	sides of the	marking poss	ibilities on both	sides of the	
terminal block, fo	or DIN 35 rail		terminal block	k, for DIN 35 rail		
Through/through	terminal blo	ck	Through/throu	ugh terminal blo	ck	
			horizontal jun	npering on lowe	er level	
grey	280-513	50	grey	280-543	50	
			,			
End and interme	diate plate, 2	2.5 mm/0.098 in thick	End and intermediate plate, 2.5 mm/0.098 in thick			
	orange	280-341 100 (4×25)		orange	280-343 100 (4×25)	
	grey	280-340 100 (4×25)		grey	280-342 100 (4×25)	
Intermediate pla	te, 1.1 mm/0	.043 in thick	Intermediate	<b>plate,</b> 1.1 mm/0	.043 in thick	
	orange	280-366 100 (4×25)		orange	280-369 100 (4×25)	
	- C			,	, ,	
Accessories S	Series 280	, see page 2.13 for a co	mplete overview			

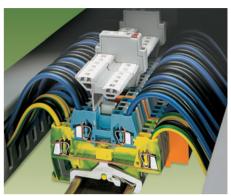
Appropriate marking system WMB/WSB (see section 14)

ı	Adjacent jumper, i	nsulated,	I <sub>N</sub> 24 A	Comb type jumper	r <b>bar ②,</b> ins	$I_N = I_N$ of te	rminal	bloc
	lin .	grey	<b>280-402</b> 200 (8 x 25)		2-way	280-482	200 (8	x 25)
					3-way	280-483	200 (8	x 25)
	(UI)				10-way	280-490	50 (2	x 25)
l	Alternate jumper, i	insulated,	I <sub>N</sub> 24 A	Alternate comb type jumper bar, insulated,				
		grey	<b>280-409</b> 100 (4×25)	1000	$I_N = I_N$ of terminal block			
	77			ų ų	2-way	280-492	200 (8	x 25)
I	Vertical jumper, ins	ulated, I <sub>N</sub>	24 A	Operating tool, ins	sulated			
	1	grey	281-421 200 (8 x 25)		2-way	280-432	1	
	n				3-way	280-433	1	

#### Application notes



Double deck terminal blocks used for the connection of a three-phase motor



Example of a mixed assembly with double deck terminal blocks

Standard insulated push-in jumpers can be used for commoning. A vertical jumper allows commoning of upper and lower level, giving a 4-conductor commoned through terminal block in one housing. Two adjacent terminals may be commoned together on the same level using a push-in adjacent jumper.



Double deck terminal blocks used as control wire terminals; for ex. for magnetic valves. Upper deck

The flexible marker carrier, which is placed above the wiring level, can be pushed aside during the wiring or commoning operation. The marker carrier has two levels for two different markers relating to the two decks of the terminal blocks.

The double deck terminal blocks, series 280, are available with decks of same or different color according to the function. This is an additional visual aid during wiring or in case of possible service and maintenance work.

With a terminal block width of only 5 mm/0.197 in, an effective width of only 2.5 mm/0.098 in for terminal blocks of same or different potential can be realized at a cross sectional area of 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>/AWG 28 – 14!

- 1 500 V = rated voltage 6 kV = rated surge voltage 3 = pollution degree (see also section 15)
- 2 See application notes on pages 2.43 and 2.44

<sup>\*</sup>For further approvals with corresponding ratings see section 15.

## Double Deck Terminal Blocks 4 mm<sup>2</sup> / AWG 12, Series 281



0.08 - 4 mm<sup>2</sup> 500 V/6 kV/3 **0** 26 A

AWG 28 - 12 300 V, 15 A **9** 600 V, 15 A **6** 

Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in

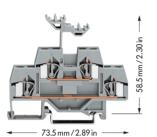
\* 🗫 🍪 KEETA CCAKEETA 🛈 🕾 👺 🗥 GL BV LR NV 🕄 🏵

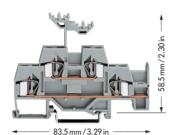
0.08 - 4 mm<sup>2</sup> 500 V/6 kV/3 **0** 26 A

AWG 28 - 12 300 V, 15 A **9** 600 V, 15 A ®

Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in

\* 🕦 🏽 KEEB CCAKEEB 🛈 🕾 🚏 🗥 GL BV LR NV 🛭 🖗

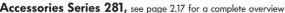




	ltem No.	Pack. unit pcs		Item No.	Pack. unit pcs
Double deck terr	<b>minal block,</b> fo	r DIN 35 rail	Double deck terminal block, for DIN 35 rail		
Through/through	n terminal bloc	:ks	Through/thro	ugh terminal b	locks
			horizontal jui	mpering on lov	ver level
grey	281-619	50	grey	281-62	<b>o</b> 50
blue	281-629	2 50	blue	281-63	<b>0 2</b> 50
Other terminal b	olocks with the	same shape			
diode/LED	281-6xx/.	page 7.62			
End and interme	diate plate, 2.	5 mm/0.098 in thick	End and inter	mediate plate,	, 2.5 mm/0.098 in thick
	orange	281-341 100 (4×25)		orange	281-343 100 (4×25)
	grey	281-340 100 (4×25)		grey	281-342 100 (4×25)



Wiring



Accessories Se	Accessories Series 281, see page 2.17 for a complete overview						
	Appr	opriate marking system	WMB/WSB (see s	ection 14)			
	<i></i>			· / · ·			
Insulation stop (3),			Insulation stop (3)				
A444	white	<b>281-470</b> 200 strips	A444	white	<b>281-470</b> 200 strips		
2000000	light grey	<b>281-471</b> 200 strips	2000000	light grey	<b>281-471</b> 200 strips		
000	dark grey	<b>281-472</b> 200 strips		dark grey	<b>281-472</b> 200 strips		
Adjacent jumper, ir	nsulated, I <sub>N</sub> 3	32 A	Adjacent jumper,	insulated, I <sub>N</sub> :	32 A		
line .	grey	281-402 200 (8 x 25)	like .	grey	281-402 200 (8 x 25)		
***	yellgreen	281-422 200 (8×25)		yellgreen	281-422 200 (8 x 25)		
UK)	, 0	, ,	U/U	, 0	, ,		
Alternate jumper, i	nsulated, I <sub>N</sub>	32 A	Alternate jumper,	insulated, I <sub>N</sub>	32 A		
	grey	281-409 100 (4 x 25)		grey	281-409 100 (4 x 25)		
474	,			,			
Vertical jumper, ins	ulated, I <sub>N</sub> 24	· A	Vertical jumper, in	sulated, I <sub>N</sub> 24	4 A		
2	grey	281-421 200 (8 x 25)	2	grey	281-421 200 (8 x 25)		
N Company	Ŭ ,			0 ,	· í		
1			H				
Comb type jumper	bar <b>3</b> , ins.,	$I_N = I_N$ of terminal block	Comb type jumper bar $\Theta$ , ins., $I_N = I_N$ of terminal block				
		281-482 100 (4×25)			281-482 100 (4×25)		
	3-way	<b>281-483</b> 100 (4×25)		3-way	<b>281-483</b> 100 (4×25)		
	10-way	281-490 50 (2×25)		10-way	<b>281-490</b> 50 (2×25)		
Alternate comb typ		· · · · ·	Alternate comb ty		, ,		
Anemale comb typ		erminal block	Allemate comb ty		terminal block		
	., .,	<b>281-492</b> 100 (4×25)		2-way			
	z-wuy	<b>201-472</b> 100 (4 x 23)		z-wuy	201-472 100 (4 x 23)		
Operating tool, inst	ulated		Operating tool, in:	sulated			
	2-way	<b>280-432</b> 1		2-way	<b>280-432</b> 1		
	3-way	<b>280-433</b> 1		3-way	<b>280-433</b> 1		
	5-way	281-440		5-way	<b>281-440</b> 1		
	/						



Commoning of double deck terminal blocks

<sup>1 500</sup> V = rated voltage 6 kV = rated surge voltage 3 = pollution degree (see also section 15)

<sup>2</sup> Suitable for EEx i applications

<sup>3</sup> See application notes on pages 2.43 and 2.44

**WAGO**®

<sup>\*</sup>For further approvals with corresponding ratings see section 15.

## Triple Deck Terminal Blocks 2.5 mm<sup>2</sup> / AWG 12, Series 280

0.08 - **2.5** mm<sup>2</sup> 500 V/6 kV/3 **0** 20 A

AWG 28 - 12 300/600 V, 15/5 A **N** 300/600 V, 20/5 A ®

Terminal block width 5 mm / 0.197 in 8-9 mm / 0.33 in

\* 🗫 🍪 KEEB CCAKEEB 🕦 🔘 🚭 📽 🗥 GL BV LR NV 🕲

0.08 - **2.5** mm<sup>2</sup> 500 V/6 kV/3 **0** 20 A

AWG 28 - 12 300/600 V, 15/5 A % 300/600 V, 20/5 A ®

Terminal block width 5 mm / 0.197 in 8 — 9 mm / 0.33 in

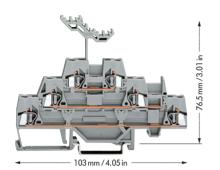
\* 🗫 🍪 KEETA (CAKEETA 🕦 🛈 🚱 🚏 🗥 GL BV LR NV 🚷

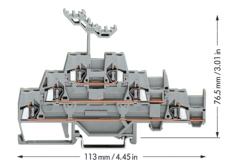
0.08 **– 2.5** mm<sup>2</sup> 500 V/6 kV/3 **①** 20 A

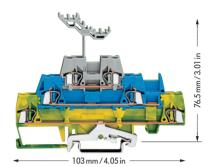
| AWG 28 - 12 | 300/600 V, 15/5 A **%** | 300/600 V, 20/5 A ®

Terminal block width 5 mm / 0.197 in
8 8 - 9 mm / 0.33 in

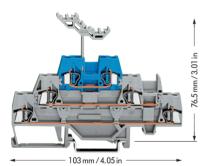
\* 🗫 🏽 KEESA (CAKEESA 🕦 🛈 🕾 📽 🗥 GL BV LR NV 🕲

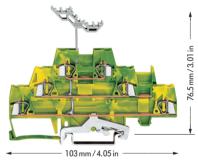






	ltem No.	Pack. unit pcs		ltem No.	Pack. unit pcs		Item No.	Pack. unit pcs	
Triple deck	Triple deck terminal block, for DIN 35 rail			Triple deck terminal block, for DIN 35 rail			Triple deck terminal block, for DIN 35 rail		
Through/th	Through/through/through terminal blocks			rough/through termin	al block	Ground (earth)/th	rough/through	terminal blocks	
			horizontal	horizontal jumpering on lower level			ey <b>280-547</b>	40	
grey	280-549	40	grey	280-550	40	green-yel./grey/gre	ey <b>280-557</b>	40	
blue	280-551	40							
						Shield (screen)/thi	rough/through t	terminal blocks	
						white/grey/grey	280-548	40	
						white/blue/grey	280-558	40	





	ltem No.	Pack. unit pcs					ltem No.	Po po	ıck. unit :s
Triple deck termin	<b>al block,</b> for	DIN 35 rail				Triple deck term	inal block, for	DIN 35 rail	
Through/through/	through terr	minal block				6-cond. gr. (eart	6-cond. gr. (earth) term. block, internal commonic		
grey/grey/blue	280-552	40				green-yellow	280-597		40
End and intermed	liate plate, 2	.5 mm/0.098 in thick	End and interm	ediate plate.	2.5 mm/0.098 in thick	End and interm	ediate plate.	2.5 mm/0.09	8 in thick
	orange	<b>280-304</b> 100 (4×25)		orange	<b>280-306</b> 100 (4×25)		orange	280-304	
	grey	<b>280-303</b> 100 (4×25)		grey	<b>280-305</b> 100 (4×25)		grey	280-303	100 (4 x 2
Intermediate plate	e, 1.1 mm/0.	043 in thick	Intermediate pl	ate, 1.1 mm/0	0.043 in thick	Intermediate pl	ate, 1.1 mm/0	.043 in thick	
	orange	<b>280-336</b> 100 (4×25)		orange	<b>280-339</b> 100 (4×25)		orange	280-336	100 (4×2
Accessories S	eries 280,	, see page 2.13 for a con	nplete overview		Appropriate marking system	WMB/WSB	(see section 14)		
Adjacent jumper,	insulated, I <sub>N</sub> 2	24 A	Alternate jumpe	<b>er,</b> insulated, I <sub>N</sub>	24 A	Vertical jumper,	insulated, I <sub>N</sub> 24	4 A	
	grey yellgreen	<b>280-402</b> 200 (8 × 25) <b>280-422</b> 200 (8 × 25)		grey	<b>280-409</b> 100 (4×25)		grey	281-421	200 (8 x 2
Comb type jumpe	r bar 🜖, ins.,	$I_N = I_N$ of terminal block	Alternate comb	type jumper	bar, insulated,	Operating tool,	insulated		
	2-way 3-way 10-way	<b>280-482</b> 200 (8 × 25) <b>280-483</b> 200 (8 × 25) <b>280-490</b> 50 (2 × 25)		$I_N = I_N$ of 2-way	terminal block <b>280-492</b> 200 (8×25)		2-way 3-way 10-way	280-432 280-433 280-440	1 1 1

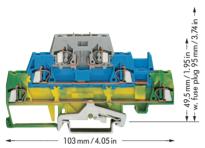


0.08 **– 2.5 mm²** 400 V/6 kV/3 **①** ② 6.3 A ② / 20 A

AWG 28 - 12 300/600 V, 15/5 A **9**\(\frac{1}{2}\) 600 V, 20 A @

Terminal block width 5 mm / 0.197 in □ 8 – 9 mm / 0.33 in

S N G KEUR CCAKEUR N 🕞 🚏 🗥 GL BV LR NV 🎕



	100111117 4.00	, III					
	Item No.	Pack. unit					
Triple deck termi	<b>nal block,</b> for	DIN 35 rail					
Ground (earth) conductor/through/carrier terminal							
blocks for plugge	able fuse mo	dules					
green-yellow/blue	e/grey						
(shown)	280-510	50					
grey/grey/grey							
(not shown)	280-889	50					
End and interme	diate plate, 2	2.5 mm/0.098 in thick					
	orange	280-304 100 (4×25)					
	grey	280-303 100 (4×25)					
Intermediate pla	<b>te,</b> 1.1 mm / 0.	043 in thick					
	orange	280-336 100 (4×25)					

Accessories Series 280, see page 2.13

Appropriate

marking system

WMB/WSB (see section 14)

Adjacent jumper, insulated, I<sub>N</sub> 24 A

280-402 200 (8 x 25) arev yell.-green 280-422 200 (8 x 25)

Alternate jumper, insulated, I<sub>N</sub> 24 A

grey 280-409 100 (4 x 25)

Vertical jumper, insulated, I<sub>N</sub> 24 A

281-421 200 (8 x 25)

Fuse plug, for miniature metric fuses



 $5 \times 20$  mm and  $5 \times 25$  mm 6 mm / 0.236 in wide with pull-tab **281-511** 50

Fuse plug, same as above, but with hole for LED



(for self-assembly) 6 mm/0.236 in wide with pull-tab **281-512** 50

Fuse plug, same as above,

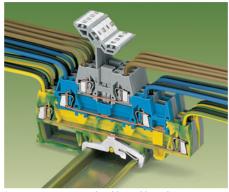


with additional indicator lamp, LED, AC/DC 24 V,

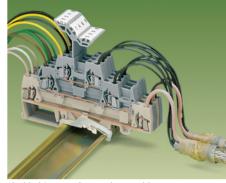
Can be used in either polarity

residual current in 6 mm / 0.236 in wide with pull-tab case of blown fuse LED 5 - 20 mA

**281-512/281-501** 50

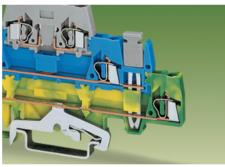


3-wire power circuit with additional branch circuit tapping



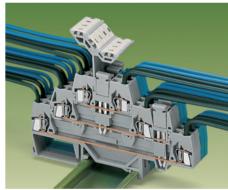
Shielded (screened) twisted pair cable

The triple deck terminal blocks enable three circuits of different potentials to be contained in one 3-level terminal block. The lower decks are wider than the upper, for ease of wiring. Different circuits can be differentiated by color coding of any level.

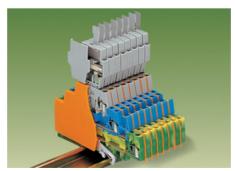


Grounding (earthing) to carrier rail. Connection of N-level to ground (earth) level by vertical jumper

Standard insulated push-in jumpers can be used for commoning. A vertical jumper allows commoning of upper and lower level, giving a 6-conductor commoned through terminal block in one housing. Two adjacent terminals may be commoned together on the same level using a push-in adjacent jumper.



Commoning with vertical and adjacent jumpers



The greater width of the fuse plugs compared to the terminal blocks has to be compensated by use of an intermediate plate (280-336)

The ground (earth) conductor or screen (shield) terminal blocks have a contact foot in the bottom level, ensuring automatically a direct contact to the carrier rail

The flexible marker carrier, which is placed above the wiring levels, can be pushed aside during the wiring or commoning operation. The marker carrier has three levels for three different markers relating to the three decks of the terminal blocks.

With a terminal block width of only 5 mm/0.197 in an effective width of only  $1.67\,\mathrm{mm}/0.066\,\mathrm{in}$  for terminal blocks of same or different potentials can be realized for wire sizes  $0.08 - 2.5 \text{ mm}^2$ AWG 28 - 14.

- **1** 400/500 V = rated voltage 6 kV = rated surge voltage 3 = pollution degree (see also section 15)
- 2 Electrical ratings are given by the fuse or nominal voltage of the indicator lamp respectively see also pages 7.38 - 7.39
- 3 See application notes on pages 2.43 and 2.44



## Rail-Mounted Quadruple Deck Terminal Blocks or Rail-Mounted Terminal Blocks for Wiring of Electric Motors, Series 281 **Description and Handling**

In addition to the rail-mounted terminal blocks for electric motor wiring, new versions are now available.

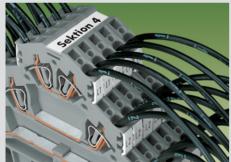
- Terminal block **without** ground (earth) contact and with only 2 potentials.

Especially for additional functions such as engine brakes or temperature probes. Having the same shape, this type can be put next to the appropriate terminal block for electric motor wiring without having to use separator plates. That makes the rail assembly clearer and wiring is easier. Since no clamping unit remains unwired, wiring errors are avoided.

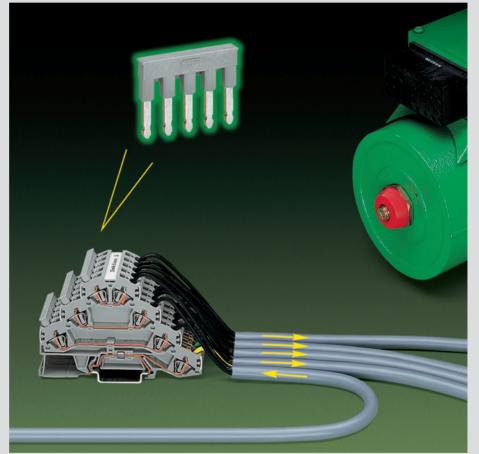
- Terminal block **without** ground (earth) contact and with 3 potentials.

Clear and unambiguous assignment of clamping units is also the main advantage with this type. When using devices with protective insulation for example, there are no open ground (earth) clamping units that could lead to confusion.

## Marking



Marking clamping units with WMB multi-marking system or WSB quick marking system. (see section 14) Group marking with marking strips Item No. 709-196.



**Testing** 



3 phases and ground (earth) conductor in one terminal block Compact design

CAGE CLAMP® clamps the following copper wires:\*

fine-stranded wire tip bonded

stranded

Testing with test plug 2 mm/0.079 in Ø

fine-stranded wire with crimped ferrule\*\*  $\mathbf{1}$  400 V = rated voltage 6 kV = rated surge voltage 3 = pollution degree (see also section 15)

See application notes on pages 2.43 and 2.44

fine-stranded, also with tinned sinale strands

fine-stranded wire with crimped pin terminal

\* For aluminum wire see notes in section 15!

\*\* When using wires with ferrules, it is necessary to use a terminal block one size larger than the nominal cross section of the wire.

## Rail-Mounted Quadruple Deck Terminal Blocks or Rail-Mounted Terminal Blocks for Wiring of Electric Motors Series 281



0.08 - 4 mm<sup>2</sup> 400 V/6 kV/3 **①** 20 A (2.5 mm<sup>2</sup>) 25 A (4 mm<sup>2</sup>)

\* ¿¶L'us @ KEDA CCAKEDA 🖭 GL BV LR NV

AWG 28 - 12 300 V, 20 A

0.08 **– 4 mm²** 400 V/6 kV/3 **①** 20 A (2.5 mm²) 25 A (4 mm²)

AWG 28 - 12

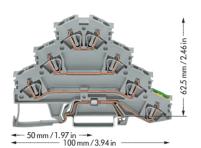
0.08 **– 4 mm²** 400 V/6 kV/3 **①** 20 A (2.5 mm²) 25 A (4 mm²)

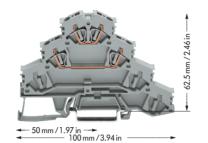
AWG 28 - 12

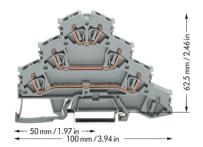
Terminal block width 6 mm / 0.236 in □ 8 – 9 mm / 0.33 in

Terminal block width 6 mm / 0.236 in 8 – 9 mm / 0.33 in

Terminal block width 6 mm / 0.236 in 8 – 9 mm / 0.33 in







	ltem No.	Pack. unit pcs		Item No.	pcs	k. unit		Item No.	pcs	
	minal block fo	r wiring of electric	Rail-mounted terminal block for wiring of			Rail-mounted terminal block for wiring of				
motors or			electric motors or			electric motors or				
rail-mounted qua	adruple deck te	erminal block,	rail-mounted qua	druple deck	terminal blo	ck,	rail-mounted qua	druple deck	terminal blo	ock,
for DIN 35 rail			for DIN 35 rail				for DIN 35 rail			
L1 – L2 – L3 – PE			L1 – L2				L1 – L2 – L3			
grey	281-530	50	grey	281-531	:	50	grey	281-532		50
End and intermed	-		End and intermed	-			End and intermed	-		
	- C	281-366 100 (4×25)		orange	281-366 1	, ,		orange	281-366	
	grey	<b>281-365</b> 100 (4×25)		grey	<b>281-365</b> 1	00 (4 x 25)		grey	<b>281-365</b> 1	00 (4 × 25
Accessories S	eries 281		Appropriate marking s	ystem <b>WME</b>	B/WSB (see	section 14	)			
Insulation stop 2	, 5 pcs/strip		Insulation stop 2	, 5 pcs/strip			Insulation stop 2	, 5 pcs/strip		
. 444		<b>281-470</b> 200 strips	4000	white	<b>281-470</b> 2	00 strips	4400	white	281-470 2	200 strips
000000		<b>281-471</b> 200 strips	000000	light grey	<b>281-471</b> 2	00 strips	000000	light grey	281-471 2	200 strips
0000	dark grey	<b>281-472</b> 200 strips	0000	dark grey	<b>281-472</b> 2	00 strips	0905	dark grey	281-472 2	200 strips
Comb type jumpe	er bar <b>2</b> , insula	ited,	Comb type jumpe	er bar <b>2</b> , insu	ılated,	·	Comb type jumpe	r bar <b>2</b> , insu	ılated,	<u> </u>
	$I_N = I_N$ of ter	rminal block		$I_N = I_N$ of t	terminal block			$I_N = I_N$ of t	erminal block	
	2-way	<b>281-482</b> 100 (4×25)		2-way	281-482 1	00 (4 x 25)		2-way	<b>281-482</b> 1	
	3-way	281-483 100 (4×25)		3-way	<b>281-483</b> 1	00 (4 x 25)		3-way	<b>281-483</b> 1	00 (4 x 25
	5-way	<b>281-485</b> 100 (4×25)		5-way	281-485 1	00 (4 x 25)		5-way	<b>281-485</b> 1	00 (4×25
	10-way 2	281-490 50 (2×25)		10-way	281-490	50 (2 x 25)		10-way	281-490	50 (2 x 25
Alternate comb t	ype jumper ba	ı <b>r 2,</b> insulated,	Alternate comb t	ype jumper l	bar <b>2</b> , insulat	ed,	Alternate comb ty	pe jumper l	oar <b>2</b> , insula	ited,
1000	$I_N = I_N$ of ter			$I_N = I_N$ of t	erminal block				erminal block	
4 4	2-way	<b>281-492</b> 100 (4×25)	4 4	2-way	<b>281-492</b> 1	00 (4 x 25)	4	2-way	<b>281-492</b> 1	00 (4 x 25
Operating tool, in	nsulated		Operating tool, in	sulated			Operating tool, in	sulated		
Operating root, ii		<b>280-432</b> 1	Operating root, ii	2-way	280-432	1	Operating foot, in	2-way	280-432	1
		280-433		3-way		1		3-way	280-433	1
	•	281-440 1		5-way	281-440	i		5-way	281-440	1
Test plug, with cal			Test plug, with cab				Test plug, with cab			<u>'</u>
/ / /		<b>210-136</b> 50 (5×10)	/ / /		210-136	50 (5 × 10)	A /		210-136	50 (5 × 10
		210-137 50 (5×10)			210-137	. ,			210-137	
	2.0 11111 2, 701. 1	210 107 30 (8 × 10)		2.0 11111 2, 701	. 210 107	30 (0 X 10)		2.0 11111 27, 701	. 210 107	00 (0 × 10
WMB multi-mark	• .		WMB multi-mark	• .			WMB multi-mark	• .		
WAGO Y3136-511		n 10 markers each,	MANGO R28 309-507		ith 10 markers	each,	MAGO V3 36-50		ith 10 marker	
1123145112111111	white with bl		11231451171111	white with	black printing		1223 (5122) 010	white with	black printing	3
11 12 12 14 15 13 17 16 15	see section 1	4	H 12 10 X 2 H 17 W W 25	see section	14		11 12 13 N 8 18 11 17 18 18 25	see section	14	
WSB quick markin	0 ,		WSB quick markin				WSB quick marking			
HAGO Y3136-517		10 markers each,	MARGO 103 315-527		ith 10 markers	each,	WAGO Y21 20-521		ith 10 marker	
112151415141414	white with bl		12237451877181818		black printing		1/2/2/4/5/0/2/0/0/0		black printing	3
11 12 12 15 15 11 17 18 18 25	see section 1		H 12 10 K 2 11 17 W W 25	see section			H - 12 - 12 - 12 - 13 - 13 - 13 - 13 - 13	see section		
Marker strips, tra		for central marking	Marker strips, trai			marking	Marker strips, tran			marking
	– group mar	-		- group m				- group m		
	1 m / 3'33" lo	0.		1 m/3'33"	0.			1 m / 3'33"	0.	
	7.5 mm / 0.29			7.5 mm/0.	295 in wide			7.5 mm/0.	295 in wide	
on roll 50 m		<b>709-177</b> 1	on roll 50 m		709-177	1	on roll 50 m		709-177	1
on roll 300 m		<b>709-187</b> 1	on roll 300 m		709-187	1	on roll 300 m		709-187	1

<sup>\*</sup> For further approvals with corresponding ratings see section 15.



# Test Plug Modules with CAGE CLAMP®, for Testing of Rail-Mounted Terminal Blocks 2.5 mm²/AWG 14 and 4 mm²/AWG 12, Using the Conductor Wire Opening

Test plug for rail-mounted terminal blocks of series 280 Module width 5 mm / 0.197 in Test voltage 630 V

Test current 6 A

Test plug for rail-mounted terminal blocks of Module width 6 mm / 0.236 in Test voltage 630 V Test current 6 A





	Item No.	Pack. unit pcs	Iter No		Pack. unit pcs
Test plug module	with spring load	ded contact pin	Test plug module with spring loaded contact pin		
with CAGE CLAN	ΛP <sup>®</sup> ,		with CAGE CLAMP®,		
center module, gre	y, module width 5	mm / 0.197 in	center module, grey, module width 6 mm/0.236 in		
	249-141	100 (4 x 25)	249	9-144	100 (4 x 25)
End module with	rigid contact pir	1	End module with rigid	contact pin	
with CAGE CLAMP®,			with CAGE CLAMP®,		
external module, g	rey, module width	5 mm / 0.197 in	external module, grey, mo	odule width (	6 mm / 0.236 in
	249-142	100 (4 x 25)	249	9-145	100 (4 x 25)
Spacer module,			Spacer module,		
for bridging over v	vired terminal bloc	ks, grey,	for bridging over wired terminal blocks, grey,		
module width 5 mm	n/0.197 in		module width 6 mm / 0.236 in		
	249-143	100 (4 x 25)	249	9-146	100 (4 x 25)
Accessories					
Miniature WSB qu	uick marking syst	em or	Miniature WSB quick m	arking syste	em or
	WMB multi-n	narking system,	WA	MB multi-m	arking system,
	10 strips with 1	0 markers each,	10 :	strips with 10	) markers each,
	white with blac	k printing	whi	te with black	c printing
	see section 14		see	section 14	

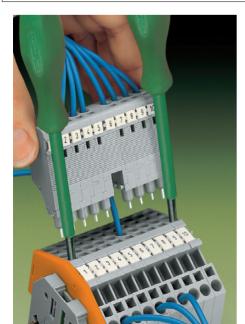


Snapping together of test plug, end and spacer modules to assemble a multipole test plug strip (10-pole max.)





A = center module with spring loaded contact pin B = external module with rigid contact pin



**Application notes** 

For simple testing of terminal block assemblies, the test plug modules with CAGE CLAMP® (version for testing using the conductor wire opening) may be used for testing unwired terminal blocks. For testing, the module is assembled with spring loaded pins in the center positions and rigid pin modules at the ends.

The terminal blocks corresponding to the end position modules are opened using screwdrivers (as shown), these rigid pins are then held in place by the CAGE CLAMP®, the intermediate pins are spring loaded and make contact with the current bars, for test currents up to 6 amps.

Clamping units which need to remain wired may be skipped over by assembling a spacer in the test plug module.

Attention!

Mating direction must be observed (see ill.)



CAGE CLAMP® 0.08 mm<sup>2</sup> - 1.5 mm<sup>2</sup> (AWG 28 - 16), module width 5 mm / 0.197 in 0.08 mm<sup>2</sup> - 2.5 mm<sup>2</sup> (AWG 28 - 14), module width 6 mm/0.236 in

# Test Plug Modules with CAGE CLAMP<sup>®</sup>, for Testing of Rail-Mounted Terminal Blocks 2.5 mm<sup>2</sup>/AWG 14 and 4 mm<sup>2</sup>/AWG 12, Using Jumper Contact Position in Current Bar



Test plug for rail-mounted terminal blocks of series 280

Module width 5 mm / 0.197 in Test voltage 630 V Test current 10 A Test plug for rail-mounted terminal blocks of series 281 Module width 6 mm / 0.236 in Test voltage 630 V Test current 10 A





ltem No.	Pack. unit pcs	ltem No.	Pack. unit pcs	
Test plug module with CAGE C	LAMP®,	Test plug module with CAGE CLAMP®,		
version using jumper contact position	on in current bar,	version using jumper contact position	in current bar,	
grey, module width 5 mm/0.197 ir	١,	grey, module width 6 mm/0.236 in,	suitable for all rail-	
suitable for all rail-mounted termin	al blocks series 280	mounted terminal blocks series 281 v	vith jumper contact	
with jumper contact slots in the cur	rent bar	slots in the current bar		
249-106	100 (4 x 25)	249-147	100 (4 x 25)	
Spacer module,		Spacer module,		
for bridging over commoned term	inal blocks, grey,	for bridging over commoned terminal blocks, grey,		
module width 5 mm / 0.197 in		module width 6 mm / 0.236 in		
249-107	100 (4 x 25)	249-148	100 (4 x 25)	
Accessories				
Miniature WSB quick marking s	ystem or	Miniature WSB quick marking system or		
WMB mult	i-marking system,		marking system,	
	10	10	10 1	



Snapping together of test plug and spacer modules to assemble multi-pole test plug modules (10-pole max.)

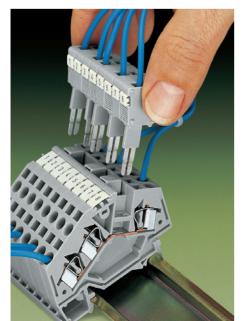


WMB multi-marking system, 10 strips with 10 markers each, white with black printing see section 14



WMB multi-marking system, 10 strips with 10 markers each, white with black printing see section 14

#### **Application notes**



For testing of individual circuits WAGO offers a single-pole test plug accessory with CAGE CLAMP® - up to 2.5 mm²/AWG 14 for direct contact with the current bar of a terminal block, or 1-pole test plug adapters for test plugs 4 mm dia

For serial testing on assembled terminal block assemblies WAGO has developed special multipole (max. 10) modular test plug modules. For testing completely wired terminal blocks (even when using horizontal jumpers) the test plug modules with CAGE CLAMP® (version with testing using jumper contact position in current bar) are the ideal solution. For this type of testing, the structure of the testing plug modules is exactly adaptable to that of the terminal block assembly. The test plug modules make direct contact to the jumper contact slot of the terminal blocks to be tested.



Test plug modules are directly inserted into the jumper contact slots in the current bar



CAGE CLAMP® 0.08 mm² – 1.5 mm² (AWG 28 – 16), module width 5 mm / 0.197 in 0.08 mm² – 2.5 mm² (AWG 28 – 14), module width 6 mm / 0.236 in



## Modular Test Plugs for Rail-Mounted Terminal Blocks 2.5 mm<sup>2</sup>/AWG 14 and 4 mm<sup>2</sup>/AWG 12

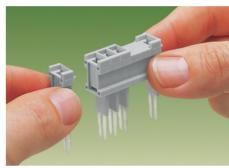
Test plug for rail-mounted terminal blocks of series 280
Module width 5 mm / 0.197 in
Test voltage 400 V
Test current 6 A

Test plug for rail-mounted terminal blocks of series 281 Module width 6 mm / 0.236 in Test voltage 400 V Test current 6 A

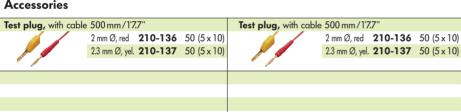




ltem No.	Pack. unit pcs	ltem No.	Pack. unit pcs		
Test plug, modular, grey,		Test plug, modular, grey,			
module width 5 mm/0.197 in,		module width 6 mm/0.236 in,			
suitable for all rail-mounted terminal k	olocks series 280	suitable for all rail-mounted terminal l	olocks series 281		
with jumper slots in the current bar		with jumper slots in the current bar			
280-418	100 (4 x 25)	281-418	100 (4 x 25		
Spacer, modular, grey,		Spacer, modular, grey,			
module width 5 mm / 0.197 in,		module width 6 mm/0.236 in,			
for bridging over alternate or multiple	terminal blocks	for bridging over alternate or multiple terminal blocks			
280-419	100 (4 x 25)	281-419	100 (4 x 25		



Assembly of modular test plugs and spacers to multipole test plug strips





The modular test plugs are directly pushed into the jumper slots of the current bar

## Test Plug Modules with CAGE CLAMP®, for Testing of Rail-Mounted Terminal Blocks 6 mm²/AWG 10 and 10 mm<sup>2</sup>/AWG 8, Using Jumper Contact Position in Current Bar



Test plug module **0** for rail-mounted terminal blocks of Series 282 0.2 - 6 mm<sup>2</sup> | AW

| AWG 24 - 10 Module width 8 mm / 0.315 in

Spacer plate for test plug module for testing rail-mounted terminal blocks of series 284 Module width 2 mm / 0.079 in

1 Test voltage 800 V/8 kV Test current 32 A

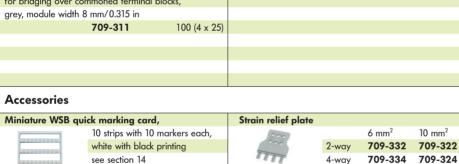


12 mm / 0.472 in



709-326

ltem No.	Pack. unit pcs	ltem No.	Pack. unit pcs		
Test plug module with CAGE CLA	MP®,	Spacer plate,			
version using jumper contact position	in current bar,	modular, grey, module width 2 mm/0.079 in,			
grey, module width 8 mm/0.315 in, su	itable for all rail-	snap on test plug modules 709-310 and spacer module			
mounted terminal blocks series 282 ar	nd 782 with jumper	709-311 for testing of rail-mounted te	rminal blocks series		
slots in the current bar		284			
709-310	100 (4 x 25)	709-312	100 (4 x 25)		
Spacer module,					
for bridging over commoned terminal	blocks,				
grey, module width 8 mm/0.315 in					
709-311	100 (4 x 25)				



5 cards

5 cards



5 mm/0.197 in wide **248-5..** 

10 mm/0.394 in wide 264-9...



For testing of individual circuits WAGO offers as accessory the single-pole test plugs with CAGE CLAMP® up to 6 mm²/AWG 10 for direct contact with the current bar of a terminal block, or single-pole test plug adapters for test plugs 4 mm dia.

6-way

709-336

For serial testing on assembled terminal strips WAGO has developed special multipole (max. 10) modular test plug strips. For testing completely wired terminal strips (also when using horizontal jumpers) the test plug modules with CAGE CLAMP® (version with testing using jumper contact position in current bar) are the ideal solution. For this type of testing the structure of the testing strips is exactly adapted to that of the terminal strip. The contacting of the test plug modules is made directly in the jumper contact position of the terminal blocks to be tested.



Snapping together of test plug and spacer modules to assemble a multipole test plug strip for series 282 (max. 10 poles)



Snapping together of test plug and spacer modules with spacer plates to assemble a multipole test plug strip for series 284 (max. 10 poles)



Test plug strips are directly inserted into the jumper contact slots in the current bar (picture shows series 282)



Test plug strip with spacer plates for testing of rail-mounted terminal blocks series 284 CAGE CLAMP®  $0.2 \text{ mm}^2 - 6 \text{ mm}^2$ AWG 24 - 10



## Banana Plugs (Only for Safety Extra-Low Voltage)

For sockets Ø 4 mm / 0.157 in 0.08 - 2.5 mm<sup>2</sup> 42 V 20 A AWG 28 - 14

9 – 11 mm / 0.39 in

For sockets Ø 4 mm / 0.157 in 0.08 - 2.5 mm<sup>2</sup> 42 V 20 A AWG 28 - 14

9 – 11 mm / 0.39 in

For sockets Ø 4 mm / 0.157 in 0.08 - 2.5 mm<sup>2</sup> 42 V 20 A AWG 28 - 14

9 – 11 mm / 0.39 in







Color	ltem No.	Pack. unit pcs	Color	ltem No.	Pack. unit pcs		ltem No.	Pack. unit pcs
Banana plug	, for sockets Ø 4 mm/	0.157 in	Banana plug	g, for sockets Ø 4 mm/	0.157 in	Banana plugs,	for sockets Ø 4 mm	/0.157 in
orange	215-211	50	yellow	215-511	50	color mixed	215-111	50
						10 each – orang	e, white, black, blue,	yellow yellow





	Color	Item No.	Pack. unit pcs	Color	Item No.	Pack. unit
ı	Banana plu	g, for sockets Ø 4 mm/0	).157 in	Banana plug	, for sockets Ø 4 mm/	0.157 in
	red	215-212	50	blue	215-711	50



To connect: Press button fully and insert stripped conductor into square entry hole and release.





_						
	Color	ltem No.	Pack. unit pcs	Color	ltem No.	Pack. unit pcs
	Banana plug, for sockets Ø 4 mm/0.157 in			Banana plug	, for sockets Ø 4 mm/	0.157 in
	black	215-311	50	arev	215-811	50

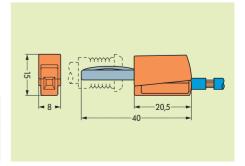


Banana plug used as test plug Picture shows test adapter 209-170





Color	ltem No.	Pack. unit pcs	Color	ltem No.	Pack. unit pcs		
Banana plug	Banana plug, for sockets Ø 4 mm/0.157 in			Banana plug, for sockets Ø 4 mm/0.157 in			
green	215-411	50	green-yellow	215-911	50		
white	215-611	50					



## Insulation Stops for Conductors 0.08 mm<sup>2</sup> - 1.5 mm<sup>2</sup> / AWG 28 - 16



Insulation stop, suitable for all front-entry rail-mounted terminal blocks of series 279

Terminal block width 4 mm / 0.157 in ■ 8 - 9 mm / 0.33 in Insulation stop, suitable for all front-entry rail-mounted term. blocks of series 280 and 880

Terminal block width 5 mm / 0.197 in ■ 8 - 9 mm / 0.33 in Insulation stop, suitable for all front-entry rail-mounted terminal blocks of series 281

Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in







	ltem No.	Pack. unit pcs		ltem No.	Pack. unit pcs		ltem No.	Pack. unit pcs
Insulation stop, 5 pcs/strip			Insulation stop, 5 pcs / strip			Insulation stop, 5 pcs/strip		
white	279-470	200 strips	white	280-470	200 strips	white	281-470	200 strips
0.08 - 0.2 mm <sup>2</sup> 1 / AWG 28 - 24			0.08 - 0.2 mm <sup>2</sup> <b>1</b> /AWG 28 - 24			0.08 − 0.2 mm <sup>2</sup> <b>1</b> /AWG 28 − 24		
			light grey	280-471	200 strips	light grey	281-471	200 strips
			0.25 - 0.5 mm <sup>2</sup>	/AWG 22 – 20		0.25 - 0.5 mm <sup>2</sup>	/AWG 22 - 20	
dark grey	279-471	200 strips	dark grey	280-472	200 strips	dark grey	281-472	200 strips
0.25 mm <sup>2</sup> /AWG 22			0.75 - 1 mm <sup>2</sup> /AWG 18			0.75 - 1.5 mm <sup>2</sup> /AWG 18 - 16		
1 0.2 mm <sup>2</sup> /AWG 24 solid			1 0.2 mm <sup>2</sup> /A	WG 24 solid		1 0.2 mm <sup>2</sup> /A	WG 24 solid	
0.14 mm <sup>2</sup> /AWG 26 fine-stranded			0.14 mm <sup>2</sup> //	AWG 26 fine-stranded		0.14 mm <sup>2</sup> //	AWG 26 fine-stranded	

#### **Application notes**

For the wiring of programmable logic controllers and microprocessor operated control circuits very small cross sections of fine-stranded conductors are frequently used. These small conductors are so flexible that they deform when pushed against the conductor stop in the terminal blocks. As a result, the conductor insulation may be clamped instead of the copper conductor, resulting in no or very intermittent contact. This problem exists with all types of terminal blocks currently offered on the market. Unnecessary time is spent on fault-tracing as a consequence.

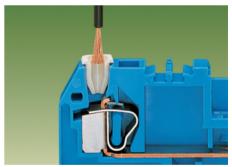
The insulation stop for rail-mounted terminal blocks is the answer to solve these problems. It bundles the cores of fine-stranded conductors automatically when introduced into the clamping unit without any splaying and reduces the conductor entry hole to a defined cross sectional area so that the insulation of these conductors cannot be introduced into the clamping unit.

The insulation stop is available as dividable 5-pole strip for rail-mounted terminal blocks of series 279, 280/870/880 and 281.

With the use of the insulation stop the conductor stripped lengths related to the respective rail-mounted terminal block, remain unchanged.



Push insulation stop into the conductor entry holes of front-entry rail-mounted terminal blocks.



Introduce stripped, untwisted conductor into insulation stop . . .



... the conductor is bundled ...



 $\dots$  and the conductor insulation is prevented from being pushed into the clamping unit by the positive stop.



## Comb Type Jumper Bars and Alternate Comb Type Jumper Bars Operating Tools

Comb type jumper bar and alternate comb type jumper bar for series 279  $I_N = I_N$  of terminal block

**Operating tool** 

Comb type jumper bar and alternate comb type jumper bar for series 280/769/880  $I_N = I_N$  of terminal block

Operating tool

Comb type jumper bar and alternate comb type jumper bar for series 281  $I_N = I_N$  of terminal block

Operating tool





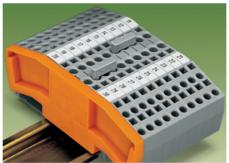


	ltem No.	Pack. unit pcs		ltem No.	Pack. unit pcs		ltem No.	Pack. unit pcs
Comb type jumper bar, insulated			Comb type jumper bar, insulated			Comb type jumper bar, insulated		
2-way	279-482	200 (8 x 25)	2-way	280-482	200 (8 x 25)	2-way	281-482	100 (4 x 25)
3-way	279-483	200 (8 x 25)	3-way	280-483	200 (8 x 25)	3-way	281-483	100 (4 x 25)
10-way	279-490	50 (2 x 25)	10-way	280-490	50 (2 x 25)	5-way	281-485	100 (4 x 25)
						10-way	281-490	50 (2 x 25)
Alternate comb type jumper bar, insulated			Alternate comb type jumper bar, insulated			Alternate comb type jumper bar, insulated		
2-way	279-492	200 (8 x 25)	2-way	280-492	200 (8 x 25)	2-way	281-492	100 (4 x 25
Operating tool, insulated			Operating too	ol, insulated		Operating to	ol, insulated	
2-way	279-432	1	2-way	280-432	1	2-way	280-432	1
3-way	279-433	1	3-way	280-433	1	3-way	280-433	1
10-way	279-440	1	10-way	280-440	1	5-way	281-440	1
see also section 1	14		see also section	n 14		see also section	n 14	

#### **Applications**



Double potential terminal blocks 2-way, 3-way and 10-way comb type jumper bars



3-conductor double potential terminal blocks Alternate comb type jumper bars

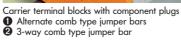


Disconnect terminal blocks for test purposes 10-way comb type jumper bar



4-conductor through terminal blocks, angled version Formation of groups with 3-way comb type jumper bars







Diode terminal blocks 10-way comb type jumper bar

## Push-in Type Wire Jumpers Staggered Jumpers



Wire jumpers

800 V/8 kV/3 Nominal voltage:

Nominal current: 9 A
Nominal cross section: 0.75 mm²/AWG 18 **Conductor lengths:** 60/110/250 mm

Staggered jumpers

Nominal voltage: 400 V/6 kV/3





ltem No.	Pack. unit pcs		ltem No.	Pack. unit pcs		
Push-in type wire jumpers,		Staggered jumpers, insulated,				
insulated, grey, conductor cross section		for terminal blocks series 280, 769 and 880				
0.75 mm <sup>2</sup> /AWG 18,		I <sub>N</sub> 24 A, ⟨ξx⟩ 23 A conductor terminal blocks				
suitable for rail-mounted terminal blod	cs	22 A conductor terminal blocks				
series 279 (1.5 mm²/AWG 16),		20 A conductor terminal blocks				
280 (2.5 mm <sup>2</sup> /AWG 14) and		from 1 to 2	780-452	100 (4 x 25)		
281/769/880 (4 mm <sup>2</sup> /AWG 12)		from 1 to 3	780-453	100 (4 x 25)		
		from 1 to 4	780-454	100 (4 x 25)		
Wire length		from 1 to 5	780-455	50 (2 x 25)		
60 mm/2.362 in 249-125	10	from 1 to 6	780-456	50 (2 x 25)		
		from 1 to 7	780-457	50 (2 x 25)		
Wire length		from 1 to 8	780-458	50 (2 x 25)		
110 mm/4.331 in 249-126	10					
		for terminal bloc	ks series 281			
Wire length		I <sub>N</sub> 32 A, ⟨ξx⟩ 26	A			
250 mm/9.843 in 249-127	10	from 1 to 2	781-452	100 (4 x 25)		
		from 1 to 3	781-453	100 (4 x 25)		
		from 1 to 4	781-454	100 (4 x 25)		
		from 1 to 5	781-455	50 (2 x 25)		
		from 1 to 6	781-456	50 (2 x 25)		
Note:						
Push wire jumper down FIRMLY until FI	JLLY inserted!					

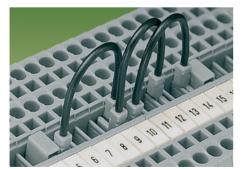
#### **Application notes**

### Wire jumpers

When installing machines or control systems, it is often necessary to make an additional connection between two terminal blocks that are not directly adjacent on the rail. In such cases, the new plug-in, touchproof wire jumper is of great help.

Suitable for rail-mounted terminal blocks series 279 (1.5 mm²/AWG 16), 280 (2.5 mm²/AWG 14) and 281/769 and 880 (4 mm²/AWG 12), this jumper is available in 3 different wire lengths: 60 mm, 110 mm and 250 mm. This allows up to 60 terminal blocks between the two blocks being commoned (see table below).

"n" = number of series 279, 280/769/880 and 281 terminal blocks which can be skipped with a wire jumper.



Series 280 and 281 will accept two wire jumpers, so it is possible to bridge several terminal blocks together. Since series 279 will only accept one wire jumper per terminal block, the bridging of several terminal blocks is not possible. Series 280, 769, 281 and 880 permit the introduction of a wire jumper and a adjacent jumper into the same block at the same time



Staggered jumper for sophisticated wiring jobs

Terminal blocks Series	Wire jumpers Item No.	"n"
279 1.5 mm <sup>2</sup> /AWG 16	249-125 249-126 249-127	13 25 60
280 2.5 mm <sup>2</sup> /AWG 14 769, 880 4 mm <sup>2</sup> /AWG 12	249-125 249-126 249-127	10 20 48
281 4 mm <sup>2</sup> /AWG 12	249-125 249-126 249-127	9 17 40

