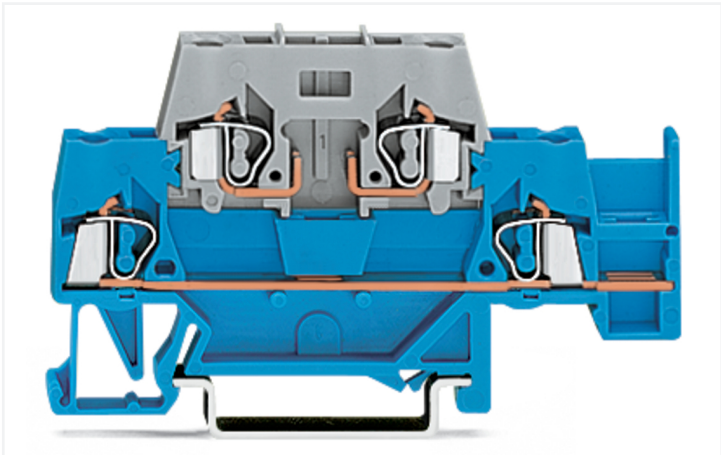


Data Sheet | Item Number: 280-891

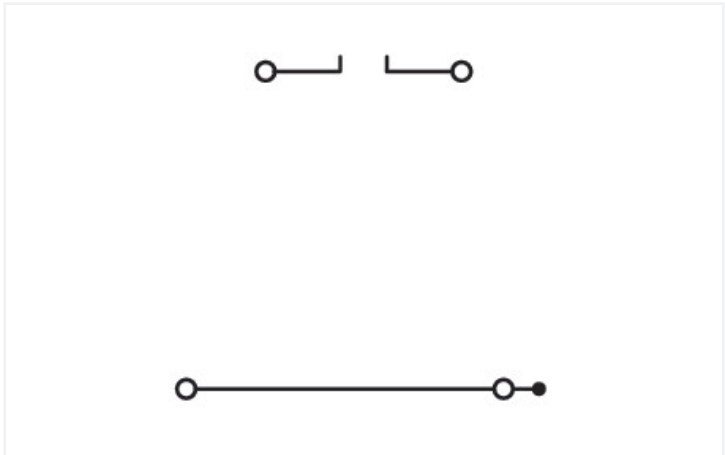
Double-deck terminal block; with additional jumper position on lower level; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; gray/gray

<https://www.wago.com/280-891>



Color: ■ gray/gray

Similar to illustration



Similar to illustration

Double-deck terminal block, 280 Series, CAGE CLAMP®

This double-deck terminal block (item number 280-891) simplifies electrical installations. The double-deck terminal block also serves as carrier terminal block. Ensure that the strip lengths are between 8 mm and 9 mm when connecting conductors to this double-deck terminal block. Featuring conductor terminals along with CAGE CLAMP®, this product outperforms the competition. Our celebrated universal connection known as CAGE CLAMP® leads the way when it comes to connection technology and electrical interconnections. This double-deck terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm². It comes with two levels and four clamping points that you can use to connect two potentials. The gray housing is made of polyamide (PA66) for insulation. These function terminal blocks are mounted using DIN-35 rails..

Electrical data

Ratings per		IEC/EN 60947-7-1			Power Loss	
Overvoltage category		III	III	II	Power loss, per pole (potential)	0.266 W
Pollution degree		3	2	2	Rated current I _N for power loss specification	10 A
Nominal voltage		400 V	-	-	Resistance value for specified, current-dependent power loss	0.00133 Ω
Rated impulse withstand voltage		6 kV	-	-		
Rated current		10 A	-	-		
Current at conductor cross-section (max.) mm²		20 A	-	-		

Connection data

Clamping units	4	Connection 1	
Total number of potentials	2	Connection technology	CAGE CLAMP®
Number of levels	2	Actuation type	Operating tool
		Connectable conductor materials	Copper Aluminum



Connection 1

Connectable conductor materials (note)	Terminating Aluminum Conductors WAGO Spring-Clamp Terminal Blocks are suitable for solid aluminum conductors up to 4 mm²/12 AWG if WAGO “Alu-Plus” Contact Paste 249-130 is used for termination. “Alu-Plus” Contact Paste Advantages: • Automatically destroys the oxide film during clamping. • Prevents fresh oxidation at the clamping point. • Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block). • Provides long-term protection against corrosion. Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, aluminum conductors must first be cleaned with a blade and then immediately inserted into the clamping units filled with “Alu-Plus” contact paste. It is also possible to apply WAGO “Alu-Plus” additionally on the whole surface of the aluminum conductor before termination. Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors:: 2.5 mm² = 16 A 4 mm² = 22 A
Solid conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG
Note (conductor cross-section)	12 AWG: THHN, THWN
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Wiring direction	Front-entry wiring

Physical data	
Width	5 mm / 0.197 inches
Height	74 mm / 2.913 inches
Depth from upper-edge of DIN-rail	39.5 mm / 1.555 inches

Mechanical data	
Design	horizontal type
Mounting type	DIN-35 rail
Marking level	without marking level

Material data	
Note (material data)	Information on material specifications can be found here
Color	gray/gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.172 MJ
Weight	9.9 g



Environmental requirements	
Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C

Commercial data	
Product Group	1 (Rail Mounted Terminal Blocks)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918539111
Customs tariff number	85369010000

Product Classification	
UNSPSC	39121410
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 9.0	EC000897
ETIM 8.0	EC000897
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-8068
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-154769

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 280-891

Download icon



Documentation

Bid Text			
280-891	19.02.2019	xml 3.64 KB	
280-891	02.03.2017	doc 25.00 KB	

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 280-891	EPLAN Data Portal 280-891
	WSCAD Universe 280-891
	ZUKEN Portal 280-891

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 280-342
End and intermediate plate; 2.5 mm thick; gray



Item No.: 280-343
End and intermediate plate; 2.5 mm thick; orange



Item No.: 280-369
Intermediate plate; 1.1 mm thick; orange

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories



Item No.: 210-196
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored



Item No.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored



Item No.: 210-508
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; galvanized; similar to EN 60715; silver-colored



Item No.: 210-197
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; similar to EN 60715; silver-colored



Item No.: 210-506
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; galvanized; similar to EN 60715; silver-colored



Item No.: 210-114
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; similar to EN 60715; silver-colored



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored



Item No.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; according to EN 60715; silver-colored



Item No.: 210-112
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; according to EN 60715; silver-colored



Item No.: 210-504
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; galvanized; according to EN 60715; silver-colored



Item No.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored



Item No.: 210-505
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; galvanized; according to EN 60715; silver-colored



1.2.2 Ferrule

1.2.2.1 Ferrule



Item No.: 216-301
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-302
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-201
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-101
Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored



Item No.: 216-202
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-102
Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored



Item No.: 216-203
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-103
Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated



Item No.: 216-204
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-104
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored

1.2.3 Installation

1.2.3.1 Cover



Item No.: 709-154
Cover; Type 2; suitable for cover carrier, type 2; 1 m long; transparent

1.2.3.2 Cover carrier



Item No.: 709-168
Cover carrier; Type 2; incl. fixing/retaining screws and knurled nut; suitable for 283 to 285 Series rail-mounted terminal blocks; suitable for 279 to 281 Series double- and triple-deck terminal blocks; suitable for 780 to 785, 775, 776 and 777 Series TOP-JOB® rail-mounted terminal blocks; suitable for 280 Series sensor and actuator terminal blocks; suitable for 282 Series disconnect/test terminal blocks for transformer circuits; gray

1.2.3.3 Mounting accessories



Item No.: 209-106
Mounting carrier; for isolated mounting on DIN 35 rails; gray



Item No.: 249-116
Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray



1.2.4 Insulation stop			
1.2.4.1 Insulation stop			
			
Item No.: 280-470 Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white	Item No.: 280-471 Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray	Item No.: 280-472 Insulation stop; 0.75 - 1 mm²; 5 pieces/strip; black	
1.2.5 Jumper			
1.2.5.1 Jumper			
			
Item No.: 280-490 Jumper; 10-way; insulated; gray	Item No.: 280-482 Jumper; 2-way; insulated; gray	Item No.: 280-492 Jumper; 2-way; insulated; gray	Item No.: 280-483 Jumper; 3-way; insulated; gray
			
Item No.: 280-484 Jumper; 4-way; insulated; gray	Item No.: 280-485 Jumper; 5-way; insulated; gray	Item No.: 280-402 Jumper; insulated; gray	Item No.: 280-409 Jumper; insulated; gray
			
Item No.: 780-452 Staggered jumper; from 1 to 2; insulated; gray	Item No.: 780-453 Staggered jumper; from 1 to 3; insulated; gray	Item No.: 780-454 Staggered jumper; from 1 to 4; insulated; gray	Item No.: 780-455 Staggered jumper; from 1 to 5; insulated; gray
			
Item No.: 780-456 Staggered jumper; from 1 to 6; insulated; gray	Item No.: 780-457 Staggered jumper; from 1 to 7; insulated; gray	Item No.: 780-458 Staggered jumper; from 1 to 8; insulated; gray	Item No.: 709-110 Wire commoning chain; 2.5 mm²; insulated; black
			
Item No.: 709-111 Wire commoning chain; 2.5 mm²; insulated; black	Item No.: 709-112 Wire commoning chain; 2.5 mm²; insulated; black	Item No.: 210-103 Wire commoning chain; insulated; black	Item No.: 210-123 Wire commoning chain; insulated; blue
1.2.6 Marking			
1.2.6.1 Marker			
			
Item No.: 793-5501 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white	Item No.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white	Item No.: 2009-115 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	
1.2.7 Plug			
1.2.7.1 Fuse plug			
			
Item No.: 281-512/281-418 Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with blown fuse indication by neon lamp; 120 V; 6 mm wide; gray	Item No.: 281-512/281-417 Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with blown fuse indication by neon lamp; 230 V; 6 mm wide; gray	Item No.: 281-512/281-501 Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with LED indicator; 24 V AC/DC; 6 mm wide; gray	Item No.: 281-512 Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with port for LED; 6 mm wide; gray



1.2.7.1 Fuse plug

 Item No.: 281-511 Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; without blown fuse indication; 6 mm wide; gray	 Item No.: 280-854 Fuse plug; with soldered miniature fuse; 1 A FF; 5 mm wide; gray	 Item No.: 280-856 Fuse plug; with soldered miniature fuse; 2 A FF; 5 mm wide; gray	 Item No.: 280-850 Fuse plug; with soldered miniature fuse; 250 mA FF; 5 mm wide; gray
 Item No.: 280-852 Fuse plug; with soldered miniature fuse; 500 mA FF; 5 mm wide; gray	 Item No.: 280-854/281-415 Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); AC 15 - 30 V; 1 A FF; 5 mm wide; gray	 Item No.: 280-856/281-415 Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); AC 15 - 30 V; 2 A FF; 5 mm wide; gray	 Item No.: 280-850/281-415 Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); AC 15 - 30 V; 250 mA FF; 5 mm wide; gray
 Item No.: 280-852/281-415 Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); AC 15 - 30 V; 500 mA FF; 5 mm wide; gray	 Item No.: 280-854/281-413 Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 15 - 30 V; 1 A FF; 5 mm wide; gray	 Item No.: 280-856/281-413 Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 15 - 30 V; 2 A FF; 5 mm wide; gray	 Item No.: 280-850/281-413 Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 15 - 30 V; 250 mA FF; 5 mm wide; gray
 Item No.: 280-852/281-413 Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 15 - 30 V; 500 mA FF; 5 mm wide; gray	 Item No.: 280-854/281-414 Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 30 - 65 V; 1 A FF; 5 mm wide; gray	 Item No.: 280-856/281-414 Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 30 - 65 V; 2 A FF; 5 mm wide; gray	 Item No.: 280-850/281-414 Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 30 - 65 V; 250 mA FF; 5 mm wide; gray
 Item No.: 280-852/281-414 Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 30 - 65 V; 500 mA FF; 5 mm wide; gray			

1.2.8 Protective warning marker

1.2.8.1 Cover

 Item No.: 280-415 Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow
--

1.2.9 Push-in type wire jumper

1.2.9.1 Jumper

 Item No.: 249-126 Push-in type wire jumper; 0.75 mm²; insulated; 110 mm long; black	 Item No.: 249-123 Push-in type wire jumper; 0.75 mm²; insulated; 180 mm long; black	 Item No.: 249-127 Push-in type wire jumper; 0.75 mm²; insulated; 250 mm long; black	 Item No.: 249-125 Push-in type wire jumper; insulated; 60 mm long; black
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1.2.10 Test and measurement

1.2.10.1 Testing accessories



Item No.: 249-142

L-type end module; modular; with rigid contact pin; End module; 1,50 mm²; gray



Item No.: 249-141

L-type test plug module; modular; with spring-loaded contact pin; Center module; 1,50 mm²; gray

1.2.11 Tool

1.2.11.1 Operating tool



Item No.: 210-658

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



Item No.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

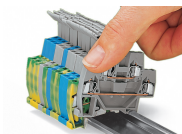


Item No.: 210-657

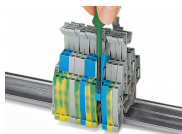
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

Installation Notes

Installation



Snapping a terminal block onto the DIN-rail.

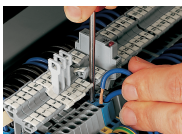


Removing a terminal block from the assembly.



Double-deck terminal blocks accommodate two circuits of different potentials on two decks; different circuits can be differentiated by color coding either deck (280 Series). The lower deck is wider than the upper for easier wiring.

Conductor termination

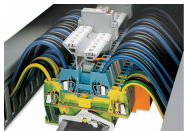


The flexible marker carrier, which is placed above the wiring level, can be pushed aside during wiring or commoning. The carrier has two staggered levels for WMB markers that perfectly align with the terminal block decks.

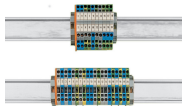
Commoning



Commoning using an adjacent jumper.
Push jumpers down until fully inserted!



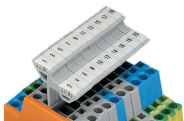
Example of a mixed assembly with double-deck terminal blocks.
The 280 Series Double-Deck Terminal Blocks are available with decks of same or different color according to their function. This is an additional visual aid during wiring, service or maintenance.



With a terminal block width of just 5 mm, an effective width of just 2.5 mm for terminal blocks of same or different potentials can be realized for conductors ranging 0.08 mm² ... 2.5 mm² (28 ... 14 AWG).

Use 50% less rail space with double-deck terminal blocks.

Marking



Labeling via WMB Multi Marking System.