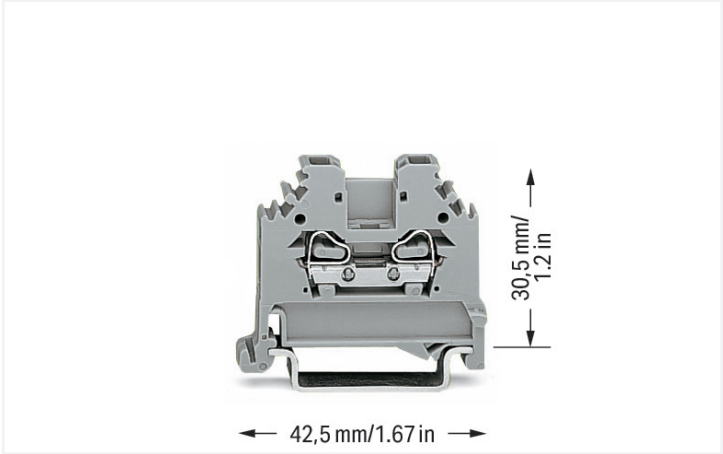
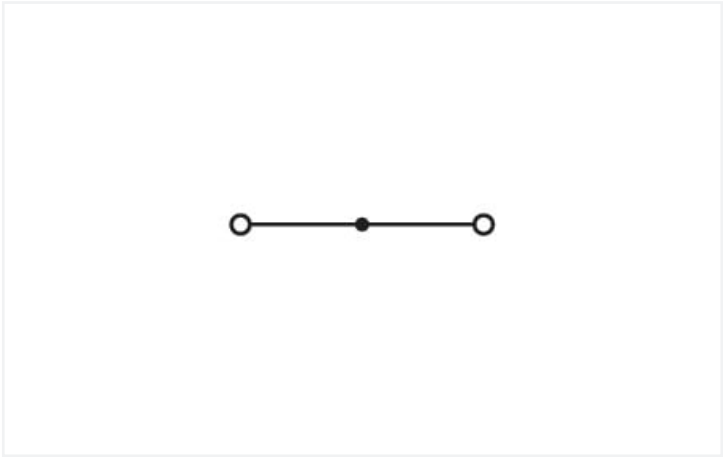
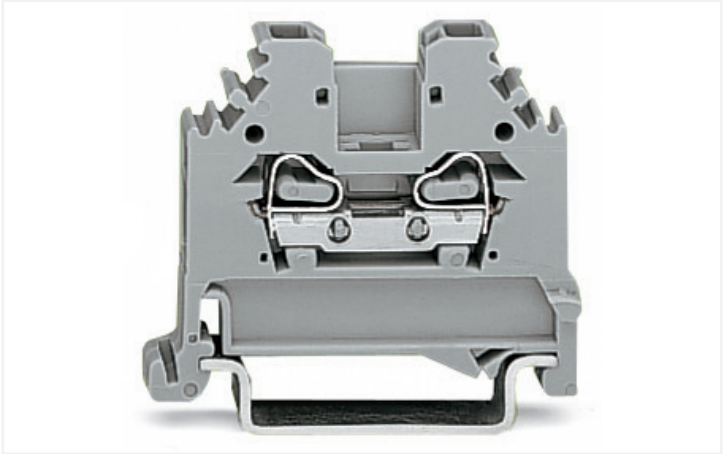


Data Sheet | Item Number: 280-101
2-conductor through terminal block; 2.5 mm²; lateral marker slots; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm²; gray
<https://www.wago.com/280-101>



Color: gray



Similar to illustration

Electrical data			
Ratings per IEC/EN		Ratings per UL 1059	
Ratings per	IEC/EN 60947-7-1	Approvals per	UL 1059
Nominal voltage (III/3)	800 V	Rated voltage UL (Use Group C)	600 V
Rated impulse voltage (III/3)	8 kV	Rated current UL (Use Group C)	20 A
Rated current	24 A		
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3		

Ratings per CSA		Power loss	
Approvals per	CSA 22.2 No 158	Power loss, per pole (potential)	0.7661 W
Rated voltage CSA (Use Group C)	600 V	Rated current I _N for specified power loss	24 A
Rated current CSA (Use Group C)	20 A	Resistance value for specified, current-dependent power loss	0.00133 Ω

Connection data



Connection points	2
Total number of potentials	1
Number of levels	1

Connection 1	
Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum
Connectable conductor materials (note)	<p>Terminating Aluminum Conductors</p> <p>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.</p> <p>"Alu-Plus" Contact Paste Advantages:</p> <ul style="list-style-type: none">• 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. <p>Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, aluminum conductors must first be cleaned with a blade and then immediately be inserted into the clamping units filled with "Alu-Plus" Contact Paste.</p> <p>It is also possible to apply WAGO "Alu-Plus" additionally on the whole surface of the aluminum conductor before termination.</p> <p>Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors::</p> <p>2.5 mm² = 16 A 4 mm² = 22 A</p>
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	Side-entry wiring

Physical data	
Width	5 mm / 0.197 inches
Height	42.5 mm / 1.673 inches
Depth from upper-edge of DIN-rail	30.5 mm / 1.201 inches

Mechanical data	
Design	horizontal type
Mounting type	DIN-35 rail
Marking level	Side marking






Material data	
Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.084 MJ
Weight	4.1 g





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

Commercial data	
Product Group	1 (Rail Mounted Terminal Blocks)
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 8.0	EC000897
ETIM 7.0	EC000897
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	IN
GTIN	4045454075552
Customs tariff number	85369010000

Approvals / Certificates

General approvals		Declarations of conformity and manufacturer's declarations
  		
Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	2157201.01
CSA DEKRA Certification B.V.	C22.2	1536071
UL UL International Germany GmbH	UL 1059	E45172
Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

   		
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
BV Bureau Veritas S.A.	EN 60947	07436/F0 BV
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2
LR Lloyds Register	EN 60947	91/20112 (E9)



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 280-101

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Documentation

Additional Information

Technical Section

pdf

2142.18 KB

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Bid Text

280-101

19.02.2019

xml

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CAE data

EPLAN Data Portal 280-101

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WSCAD Universe 280-101

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ZUKEN Portal 280-101

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1 Compatible Products

1.1 Optional Accessories

1.1.1 DIN-rail

1.1.1.1 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; unslopped; 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; "Hole width 18 mm; 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; "Hole width 25 mm; 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; unslopped; galvanized; according to EN 60715; silver-colored

1.1.2 End plate



1.1.2.1 End plate



Item No.: 281-333
Step-down intermediate plate; 1 mm thick;
"only for 4 mm terminal blocks; gray

1.1.3 Ferrule

1.1.3.1 Ferrule



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



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



Item No.: 216-201
Ferrule; Sleeve for 0.5 mm² / 20 AWG; in-
sulated; electro-tin plated; white



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



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



Item No.: 216-102
Ferrule; Sleeve for 0.75 mm² / AWG 20;
uninsulated; electro-tin plated; silver-co-
lored



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



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



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



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

1.1.4 Installation

1.1.4.1 Cover



Item No.: 709-153
Cover; Type 1; suitable for cover carrier,
type 1; 1 m long; transparent

1.1.4.2 Cover carrier



Item No.: 709-167
Cover carrier; Type 1; incl. fixing/retaining
screws and knurled nut; suitable for 279 to
282 and 880 Series rail-mounted terminal
blocks; suitable for 264 Series miniature
rail-mounted terminal blocks; suitable for
270 Series sensor and actuator terminal
blocks; gray

1.1.4.3 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

1.1.5 Jumper

1.1.5.1 Jumper

**Item No.: 280-402**

Jumper; insulated; gray

**Item No.: 280-409**

Jumper; insulated; gray

**Item No.: 280-422**

Jumper; insulated; yellow-green

**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.: 284-414**

Step-down jumper; from 284/282 to 281/280/279 series; 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

1.1.6 Marking

1.1.6.1 Group marker carrier

**Item No.: 209-140**

Group marker carrier; gray

**Item No.: 209-141**

Group marker carrier; gray

**Item No.: 209-142**

Group marker carrier; gray

**Item No.: 249-105**

Group marker carrier; gray

1.1.6.2 Marker

**Item No.: 793-5501/000-006**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue

**Item No.: 793-5501/000-007**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray

**Item No.: 793-5501/000-023**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green

**Item No.: 793-5501/000-017**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green

**Item No.: 793-5501/000-012**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange

**Item No.: 793-5501/000-005**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red

**Item No.: 793-5501/000-024**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet

**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.: 793-5501/000-002**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

**Item No.: 793-501/000-006**

WMB marking card; as card; not stretchable; plain; snap-on type; blue

**Item No.: 793-501/000-007**

WMB marking card; as card; not stretchable; plain; snap-on type; gray

**Item No.: 793-501/000-023**

WMB marking card; as card; not stretchable; plain; snap-on type; green

**Item No.: 793-501/000-017**

WMB marking card; as card; not stretchable; plain; snap-on type; light green

**Item No.: 793-501/000-012**

WMB marking card; as card; not stretchable; plain; snap-on type; orange

**Item No.: 793-501/000-005**

WMB marking card; as card; not stretchable; plain; snap-on type; red

**Item No.: 793-501/000-024**

WMB marking card; as card; not stretchable; plain; snap-on type; violet

**Item No.: 793-501**

WMB marking card; as card; not stretchable; plain; snap-on type; white

**Item No.: 793-501/000-002**

WMB marking card; as card; not stretchable; plain; snap-on type; yellow

**Item No.: 2009-115/000-006**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

**Item No.: 2009-115/000-007**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



1.1.6.2 Marker



[Item No.: 2009-115/000-023](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



[Item No.: 2009-115/000-017](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green



[Item No.: 2009-115/000-012](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



[Item No.: 2009-115/000-024](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



[Item No.: 2009-115](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



[Item No.: 2009-115/000-002](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.1.7 Plug

1.1.7.1 Diode plug



[Item No.: 280-803/281-420](#)
Component plug; 2-pole; with rectifier diode and LED; 10 mm wide; gray



[Item No.: 280-803/281-421](#)
Component plug; 2-pole; with rectifier diode and LED; 10 mm wide; gray

1.1.7.2 Empty component plug housing



[Item No.: 280-803](#)
Empty component plug housing; 10 mm wide; Type 4; 2-pole; gray

1.1.7.3 LED plug



[Item No.: 280-803/281-415](#)
Component plug; 2-pole; LED (red); 10 mm wide; gray



[Item No.: 280-803/281-416](#)
Component plug; 2-pole; LED (red); 10 mm wide; gray



[Item No.: 280-803/281-413](#)
Component plug; 2-pole; LED (red); 24 VDC; 10 mm wide; gray



[Item No.: 280-803/281-414](#)
Component plug; 2-pole; LED (red); 48 VDC; 10 mm wide; gray



[Item No.: 280-803/281-411](#)
Component plug; 2-pole; with diode 1N4007; 10 mm wide; gray

1.1.7.4 Neon indicator module



[Item No.: 280-803/281-417](#)
Component plug; 2-pole; 10 mm wide; gray



[Item No.: 280-803/281-418](#)
Component plug; 2-pole; 10 mm wide; gray

1.1.8 Protective warning marker

1.1.8.1 Cover



Item No.: 280-405
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.1.9 Push-in type wire jumper

1.1.9.1 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

1.1.10 Test and measurement

1.1.10.1 Testing accessories



Item No.: 280-404
Test plug adapter; 5 mm wide; for test plug (2.3 mm Ø); suitable for 1.5 mm² - 4 mm² tbs; gray



Item No.: 209-170
Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm² - 10 mm² tbs; gray



Item No.: 281-407
Test plug; 6 mm wide; Nominal current 24 A; for 0.08 mm² - 2.5 mm²; 2,50 mm²; gray

1.1.11 Tool

1.1.11.1 Operating tool



Item No.: 210-658
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



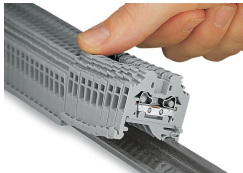
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



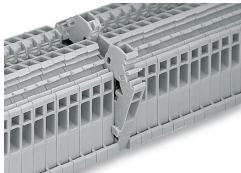
Item No.: 210-657
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

Installation Notes

Installation



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

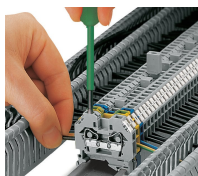


Quick assembly keys prevent reverse mounting.



Removing a terminal block from the assembly.

Conductor termination

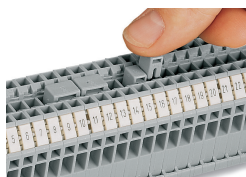


CAGE CLAMP® connection

Inserting a conductor.

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

Commoning



Commoning using an adjacent jumper (280-402).

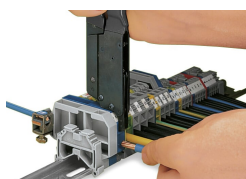
Push jumper down until fully inserted.

Testing



Testing with a test plug.

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



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

Marking



Labeling via WMB Multi Marking System.