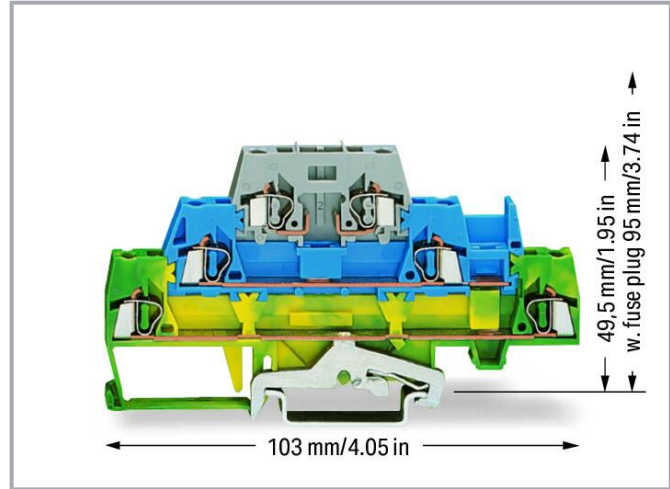
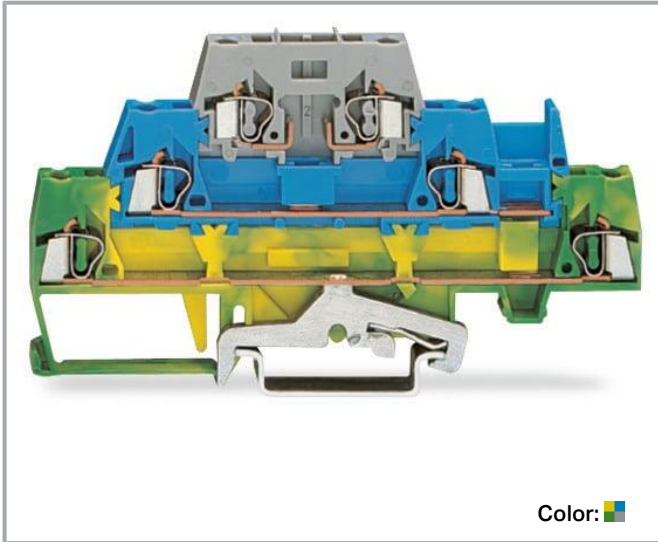


Data sheet | Item number: 280-510

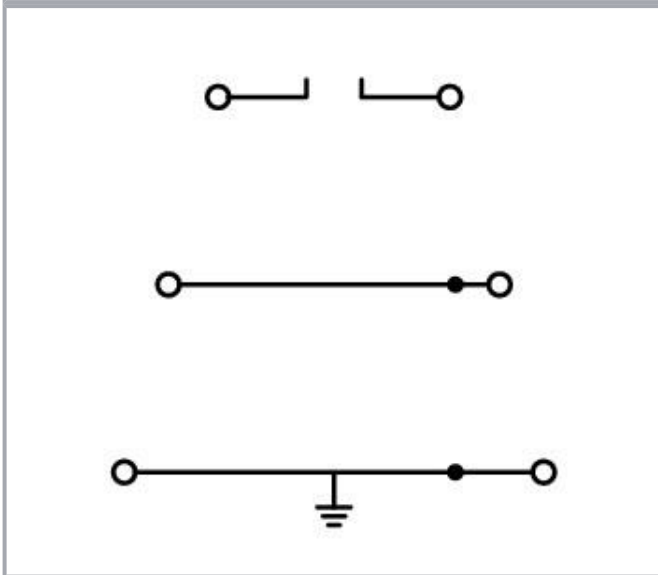
Triple-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; green-yellow/blue/gray



www.wago.com/280-510



Color:



Data

Electrical data

Ratings per IEC/EN

Ratings per

IEC/EN 60947-7-1

Subject to changes. Please also observe the further product documentation!

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Email: info.de@wago.com | Web: www.wago.com

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Nominal voltage (III/3)	400 V
Rated impulse voltage (III/3)	6 kV
Rated current	20 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Power loss

Power loss, per pole (potential)	0.532 W
Rated current I_N for specified power loss	20 A
Resistance value for specified, current-dependent power loss	0.001 Ω

Connection data

Connection points	6
Total number of potentials	3
Number of levels	3

Connection 1

Connection technology	CAGE CLAMP [®]
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum

Connectable conductor materials (note)	<p>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.</p>
--	--

"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.

Subject to changes. Please also observe the further product documentation!



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.

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 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 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	103 mm / 4.055 inches
Depth from upper-edge of DIN-rail	49.5 mm / 1.949 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	green-yellow/blue/gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.313 MJ
Weight	20.8 g

Subject to changes. Please also observe the further product documentation!



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	27-14-11-41
eCl@ss 9.0	27-14-11-41
ETIM 8.0	EC000901
ETIM 7.0	EC000901
PU (SPU)	50 pcs
Packaging type	box
Country of origin	CN
GTIN	4050821293552
Customs tariff number	85369010000

Environmental Product Compliance

CAS-No.	7439-92-1
REACH Candidate List Substance	Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	c92acfce-4478-4cb3-a44c-47dcdad74b35
SCIP notification number (Belgium)	7fc96bb9-3dd3-487e-a8e3-5ee7ad642f01
SCIP notification number (Bulgaria)	9a90e806-31b5-4b81-a14a-0ea63add5c76
SCIP notification number (Czech Republic)	95451e47-a41f-42e4-9fba-617af946cef7
SCIP notification number (Denmark)	f44420ee-64af-439e-b8d1-5a87178fff61
SCIP notification number (Finland)	e9dd04ed-231b-4215-8b17-d0ca35ab6f37
SCIP notification number (France)	bb5c7da6-21c5-41d5-86c3-595b21b59e10
SCIP notification number (Germany)	4ff53ca3-4137-459b-adc3-9d5c087415f7
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SCIP notification number (Italy)	8ec30e27-1697-43aa-a104-6eeeed8293a2
SCIP notification number (Netherlands)	0ff7bb59-bb95-4fde-9717-3694c2005910
SCIP notification number (Poland)	5bf6e40b-c2e4-4422-b38e-5e6104d0b8a5
SCIP notification number (Romania)	2bf21171-e90e-42b6-8f20-71e758d4ca4d

Subject to changes. Please also observe the further product documentation!

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SCIP notification number (Sweden)



33ede2e8-ac67-4169-9dfb-6aad5bc3d025

Approvals / Certificates



General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	2157201.01
	CSA DEKRA Certification B.V.	C22.2	1536071
	UR Underwriters Laboratories Inc.	UL 1059	E45172

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	EN 60947	20-HG1941090-PDA
	BV Bureau Veritas S.A.	EN 60947	07436/F0 BV
	DNV GL	-	TAE00001V2

Subject to changes. Please also observe the further product documentation!

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Det Norske Veritas, Germanischer Lloyd

LR
Lloyds Register

EN 60947

91/20112
(E9)

Required accessories

End plate

End plate



Item no.: 280-303
End and intermediate plate; 2.5 mm thick; gray

www.wago.com/280-303

Item no.: 280-304
End and intermediate plate; 2.5 mm thick; orange

www.wago.com/280-304

Optional accessories

Protective warning marker

Cover



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

www.wago.com/280-415

Tool

Operating tool



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

www.wago.com/210-657

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

www.wago.com/210-658

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

www.wago.com/210-720

Ferrule

Ferrule











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


www.wago.com/216-101

Item no.: 216-104




Subject to changes. Please also observe the further product documentation!

	Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-104
	Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-102
	Item no.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated	www.wago.com/216-103
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; light turquoise	www.wago.com/216-302

Push-in type wire jumper

Jumper		
	Item no.: 249-123 Push-in type wire jumper; 0.75 mm ² ; insulated; 180 mm long; black	www.wago.com/249-123
	Item no.: 249-126 Push-in type wire jumper; 0.75 mm ² ; insulated; 110 mm long; black	www.wago.com/249-126
	Item no.: 249-127 Push-in type wire jumper; 0.75 mm ² ; insulated; 250 mm long; black	www.wago.com/249-127
	Item no.: 249-125 Push-in type wire jumper; insulated; 60 mm long; black	www.wago.com/249-125
















Plugs

Fuse plug		
	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	www.wago.com/280-854/281-413
	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	www.wago.com/280-854/281-415
	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	www.wago.com/280-856/281-415

Subject to changes. Please also observe the further product documentation!

	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	www.wago.com/280-856/281-414
	Item no.: 280-856 Fuse plug; with soldered miniature fuse; 2 A FF; 5 mm wide; gray	www.wago.com/280-856
	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	www.wago.com/280-854/281-414
	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	www.wago.com/280-856/281-413
	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	www.wago.com/281-511
	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	www.wago.com/281-512/281-501
	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	www.wago.com/281-512
	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	www.wago.com/281-512/281-418
	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	www.wago.com/281-512/281-417
	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	www.wago.com/280-850/281-414
	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	www.wago.com/280-850/281-413
	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	www.wago.com/280-850/281-415
	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	www.wago.com/280-852/281-413
	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	www.wago.com/280-852/281-414

Subject to changes. Please also observe the further product documentation!

	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	www.wago.com/280-852/281-415
	Item no.: 280-854 Fuse plug; with soldered miniature fuse; 1 A FF; 5 mm wide; gray	www.wago.com/280-854
	Item no.: 280-852 Fuse plug; with soldered miniature fuse; 500 mA FF; 5 mm wide; gray	www.wago.com/280-852
	Item no.: 280-850 Fuse plug; with soldered miniature fuse; 250 mA FF; 5 mm wide; gray	www.wago.com/280-850
Insulation stop		
Insulation stop		
	Item no.: 280-472 Insulation stop; 0.75 - 1 mm ² ; 5 pieces/strip; black	www.wago.com/280-472
	Item no.: 280-470 Insulation stop; 0.08 - 0.2 mm ² "s" (0.14 mm ² "f-st"); 5 pieces/strip; white	www.wago.com/280-470
	Item no.: 280-471 Insulation stop; 0.25 - 0.5 mm ² ; 5 pieces/strip; light gray	www.wago.com/280-471
Jumpers		
Jumper		
	Item no.: 210-123 Wire commoning chain; insulated; blue	www.wago.com/210-123
	Item no.: 280-402 Jumper; insulated; gray	www.wago.com/280-402
	Item no.: 210-103 Wire commoning chain; insulated; black	www.wago.com/210-103
	Item no.: 281-421 Vertical jumper; insulated; gray	www.wago.com/281-421
	Item no.: 280-492 Jumper; 2-way; insulated; gray	www.wago.com/280-492
	Item no.: 280-409 Jumper; insulated; gray	www.wago.com/280-409
	Item no.: 280-482 Jumper; 2-way; insulated; gray	www.wago.com/280-482
	Item no.: 280-484 Jumper; 4-way; insulated; gray	www.wago.com/280-484

Subject to changes. Please also observe the further product documentation!



Item no.: 280-490
Jumper; 10-way; insulated; gray

www.wago.com/280-490



Item no.: 280-485
Jumper; 5-way; insulated; gray

www.wago.com/280-485



Item no.: 280-483
Jumper; 3-way; insulated; gray

www.wago.com/280-483



Item no.: 709-110
Wire commoning chain; 2.5 mm²; insulated; black

www.wago.com/709-110



Item no.: 709-112
Wire commoning chain; 2.5 mm²; insulated; black

www.wago.com/709-112



Item no.: 709-111
Wire commoning chain; 2.5 mm²; insulated; black

www.wago.com/709-111



Item no.: 780-454
Staggered jumper; from 1 to 4; insulated; gray

www.wago.com/780-454



Item no.: 780-452
Staggered jumper; from 1 to 2; insulated; gray

www.wago.com/780-452



Item no.: 780-453
Staggered jumper; from 1 to 3; insulated; gray

www.wago.com/780-453



Item no.: 780-457
Staggered jumper; from 1 to 7; insulated; gray

www.wago.com/780-457



Item no.: 780-456
Staggered jumper; from 1 to 6; insulated; gray

www.wago.com/780-456



Item no.: 780-455
Staggered jumper; from 1 to 5; insulated; gray

www.wago.com/780-455



Item no.: 780-458
Staggered jumper; from 1 to 8; insulated; gray

www.wago.com/780-458

Marking accessories

Marker



Item no.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-115



Item no.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white

www.wago.com/793-501

Item no.: 793-5501

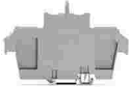
Subject to changes. Please also observe the further product documentation!



WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white www.wago.com/793-5501

Mounting

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 TOPJOB® 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

www.wago.com/709-168

Cover



Item no.: 709-154

Cover; Type 2; suitable for cover carrier, type 2; 1 m long; transparent

www.wago.com/709-154

Mounting accessories



Item no.: 209-106

Mounting carrier; for isolated mounting on DIN 35 rails; gray

www.wago.com/209-106



Item no.: 249-116

Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

www.wago.com/249-116

Carrier rail

Mounting accessories



Item no.: 210-197

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored

www.wago.com/210-197



Item no.: 210-198

Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored

www.wago.com/210-198



Item no.: 210-504

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored

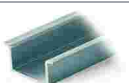
www.wago.com/210-504



Item no.: 210-505

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

www.wago.com/210-505



Item no.: 210-506

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored

www.wago.com/210-506



Item no.: 210-508

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored

www.wago.com/210-508



Item no.: 210-113

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

www.wago.com/210-113

Subject to changes. Please also observe the further product documentation!

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Item no.: 210-118

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

www.wago.com/210-118



Item no.: 210-112

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored

www.wago.com/210-112



Item no.: 210-114

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored

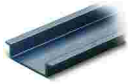
www.wago.com/210-114



Item no.: 210-115

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored

www.wago.com/210-115



Item no.: 210-196

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored

www.wago.com/210-196

Testing and measuring

Testing accessories



Item no.: 249-141

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

www.wago.com/249-141



Item no.: 249-142

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

www.wago.com/249-142

Downloads

Documentation

Bid Text

280-510 X81 - Datei	2019 Feb 19	xml 3.7 kB	Download
280-510 doc - Datei	2017 Mar 2	doc 25.6 kB	Download

Additional Information

Technical Section Technical explanations	pdf 2.2 MB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 280-510	URL	Download
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Subject to changes. Please also observe the further product documentation!

CAE data

EPLAN Data Portal 280-510	URL	Download
WSCAD Universe 280-510	URL	Download
ZUKEN Portal 280-510	URL	Download

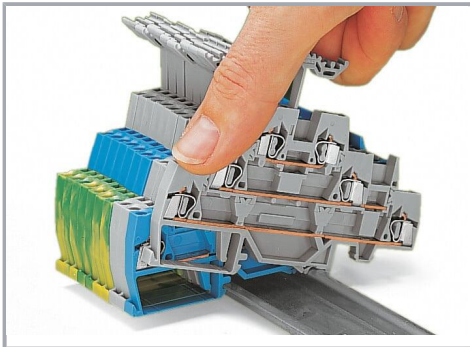
Environmental Product Compliance

Compliance Search

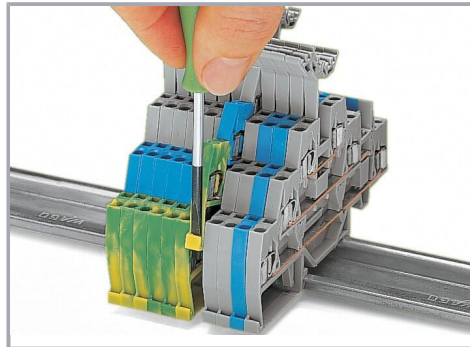
Environmental Product Compliance 280-510	URL	Download
Triple-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm ² ; CAGE CLAMP®; 2,50 mm ² ; green-yellow/blue/gray		

Installation Notes

Installation



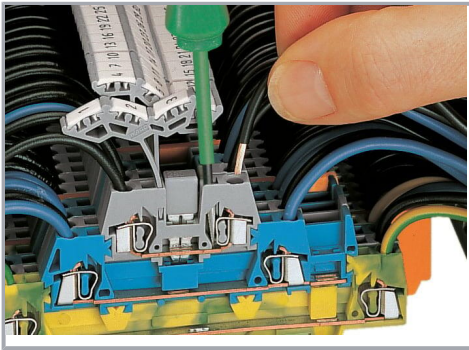
Snapping a terminal block onto the DIN-rail.



Removing a terminal block from the assembly.

Conductor termination

Subject to changes. Please also observe the further product documentation!

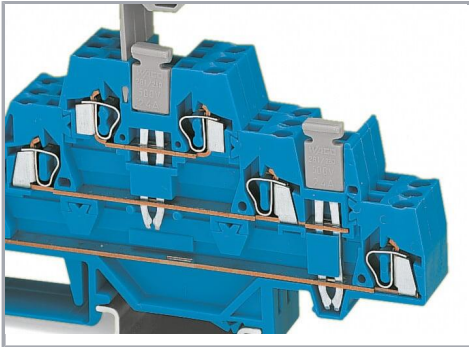


CAGE CLAMP® connection

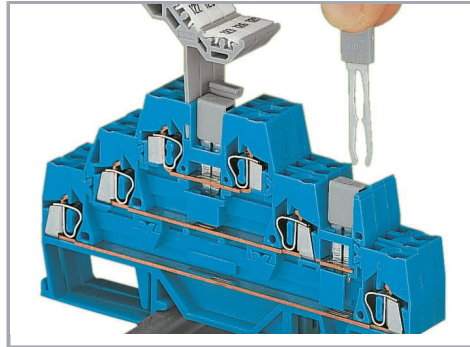
Inserting a conductor.

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

Commoning

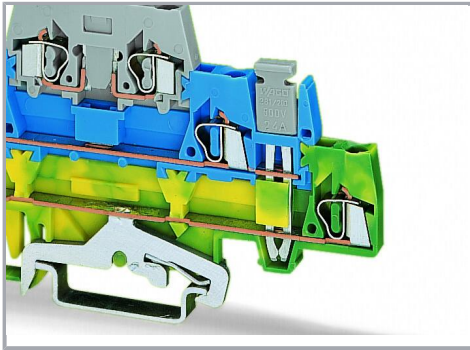


A vertical jumper commons the upper and lower decks, creating a 6-conductor feedthrough terminal block in one housing. Two adjacent triple-deck terminal blocks may be commoned together on the same deck using a push-in adjacent jumper.



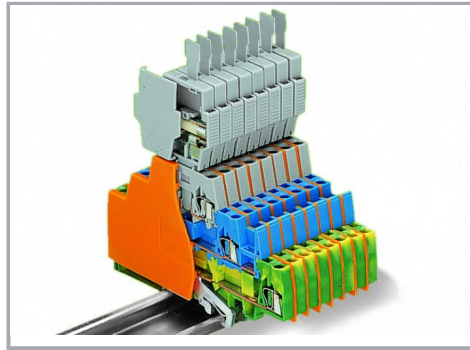
Combining vertical and adjacent jumpers.

Subject to changes. Please also observe the further product documentation!

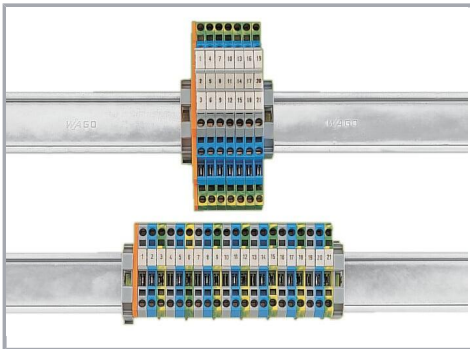


Grounding to DIN-rail:

Connecting N-level to ground level via vertical jumper.



When triple-deck terminal blocks are used with a fuse plug (6 mm wide) in the receptacle (top) level, the extra width of the 280 Series (5 mm wide) can be compensated for via intermediate plates (1.1 mm thick).



Use 67% less rail space with triple-deck terminal blocks.

Marking



Labeling via WMB Multi Marking System.

Subject to changes. Please also observe the further product documentation!



Product family

Classic

EPSITRON® CLASSIC POWER: The Robust Power Supply – with Integrated TopBoost (Optional)

[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!

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