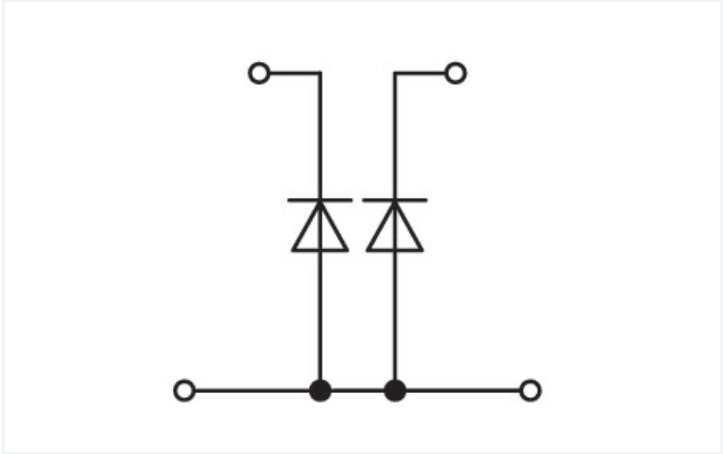


Color: ■ gray



Double-deck terminal block, 280 Series, operating tool

This double-deck terminal block (item number 280-942/281-487) simplifies electrical installations. The double-deck terminal block also functions as component terminal block with diode. Conductors can only be connected to this double-deck terminal block if their strip length is between 8 mm and 9 mm. This product features conductor terminals and utilizes CAGE CLAMP®. Our trusted universal connection known as CAGE CLAMP® is the industry standard for 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 has two levels. You can connect two potentials using the four clamping points. 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			General information	
Overvoltage category	III	III	II		Nominal voltage	250 V
Pollution degree	3	2	2		Reverse voltage	1000 V
Nominal voltage	-	-	-			
Rated surge voltage	-	-	-			
Rated current	-	-	-			



Connection data		
Clamping units	4	
Total number of potentials	2	
Number of levels	2	
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> <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 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:: 2.5 mm² = 16 A 4 mm² = 22 A</p>	
Solid conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG	
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG	
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches	
Wiring direction	Front-entry wiring	

Physical data		
Width	5 mm / 0.197 inches	
Height	64 mm / 2.52 inches	
Depth from upper-edge of DIN-rail	58.5 mm / 2.303 inches	

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



Material data	
Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.262 MJ
Weight	10.3 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	4045454196776
Customs tariff number	85369010000

Product classification	
UNSPSC	39121410
eCl@ss 10.0	27-14-11-27
eCl@ss 9.0	27-14-11-27
ETIM 9.0	EC000903
ETIM 8.0	EC000903
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
CAS-No.	7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	2e06afc6-1a5b-41a4-94db-922a13842577
SCIP notification number (Belgium)	034255c6-2d42-46b6-b614-0bbff779bf04
SCIP notification number (Bulgaria)	69e59ed1-ddc0-4c50-88a8-c6df07c58581
SCIP notification number (Czech Republic)	814b4ad8-d7db-43ca-a47a-744adc315b5e
SCIP notification number (Denmark)	44def4d3-e563-48cd-9f3e-383a371b09c7
SCIP notification number (Finland)	3acb43bb-7e2d-438b-a3e1-6ca7f5857877
SCIP notification number (France)	d94820fb-c591-4073-8e74-035fd02f7533
SCIP notification number (Germany)	127c9f77-eb32-4045-be4d-b9dc98560be2
SCIP notification number (Hungary)	434e8b2c-6c62-4fec-9850-8d1736af406e
SCIP notification number (Italy)	87c1b80a-5c86-4546-b7c2-2cab159db94f
SCIP notification number (Netherlands)	6e02dca6-e256-4b9f-8d2e-18745a8f1518
SCIP notification number (Poland)	591a2d89-aa60-4900-893a-78b6c28795fd
SCIP notification number (Romania)	1ae15365-d091-4d36-bf3c-1214a09289f2
SCIP notification number (Sweden)	2e2f86d4-46e2-435a-b23b-2e9c596728ef



Approvals / Certificates

General approvals



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

Declarations of conformity and manufacturer's declarations

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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 280-942/281-487	↓
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Documentation

Bid Text

280-942/281-487	19.02.2019	xml 3.23 KB	↓
280-942/281-487	27.04.2017	doc 24.50 KB	↓



























CAD/CAE-Data

CAD data

2D/3D Models 280-942/281-487	↓
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CAE data

EPLAN Data Portal 280-942/281-487	↓
WSCAD Universe 280-942/281-487	↓
ZUKEN Portal 280-942/281-487	↓

1 Compatible Products			
1.1 Required Accessories			
1.1.1 End plate			
1.1.1.1 End plate			
			
Item No.: 280-340 End and intermediate plate; 2.5 mm thick; gray	Item No.: 280-341 End and intermediate plate; 2.5 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; unslotted; similar to EN 60715; silver-colored	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	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	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
			
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	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	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	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
			
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	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	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	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
1.2.2 Female connector			
1.2.2.1 Female connector/socket			
			
Item No.: 722-240/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 10-pole; light gray	Item No.: 722-242/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 12-pole; light gray	Item No.: 722-244/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 14-pole; light gray	Item No.: 722-246/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 16-pole; light gray
			
Item No.: 722-232/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 2-pole; light gray	Item No.: 722-233/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 3-pole; light gray	Item No.: 722-234/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 4-pole; light gray	Item No.: 722-235/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 5-pole; light gray
			
Item No.: 722-236/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 6-pole; light gray	Item No.: 722-237/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 7-pole; light gray	Item No.: 722-239/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 9-pole; light gray	Item No.: 722-240/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Pin spacing 5 mm; 10-pole; light gray



1.2.2.1 Female connector/socket



Item No.: 232-133/005-000
Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 3-pole; gray



Item No.: 232-134/005-000
Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 4-pole; gray



Item No.: 232-135/005-000
Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 5-pole; gray



Item No.: 232-136/005-000
Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 6-pole; gray



Item No.: 232-137/005-000
Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 7-pole; gray



Item No.: 232-138/005-000
Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 8-pole; gray



Item No.: 232-139/005-000
Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 9-pole; gray

1.2.3 Ferrule

1.2.3.1 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

1.2.4 Installation

1.2.4.1 Cover



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

1.2.4.2 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



1.2.4.3 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

1.2.5 Insulation stop

1.2.5.1 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

1.2.6 Jumper

1.2.6.1 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.: 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

1.2.7 Male connector

1.2.7.1 Male connector/plug



Item No.: 231-170/003-000
Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 10-pole; gray



Item No.: 231-171/003-000
Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 11-pole; gray



Item No.: 231-172/003-000
Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 12-pole; gray



Item No.: 231-176/003-000
Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 16-pole; gray



Item No.: 231-162/003-000
Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 2-pole; gray



Item No.: 231-163/003-000
Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 3-pole; gray



Item No.: 231-164/003-000
Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 4-pole; gray



Item No.: 231-165/003-000
Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 5-pole; gray



Item No.: 231-166/003-000
Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 6-pole; gray



Item No.: 231-167/003-000
Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 7-pole; gray



Item No.: 231-168/003-000
Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 8-pole; gray



Item No.: 231-169/003-000
Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 9-pole; gray



1.2.8 Marking

1.2.8.1 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



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

1.2.9 Protective warning marker

1.2.9.1 Cover



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

1.2.10 Tool

1.2.10.1 Operating tool



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

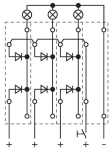


Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



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

Installation Notes



Lamp test circuits can be created using the following terminal blocks:
280-942/281-487 or 280-942/281-488