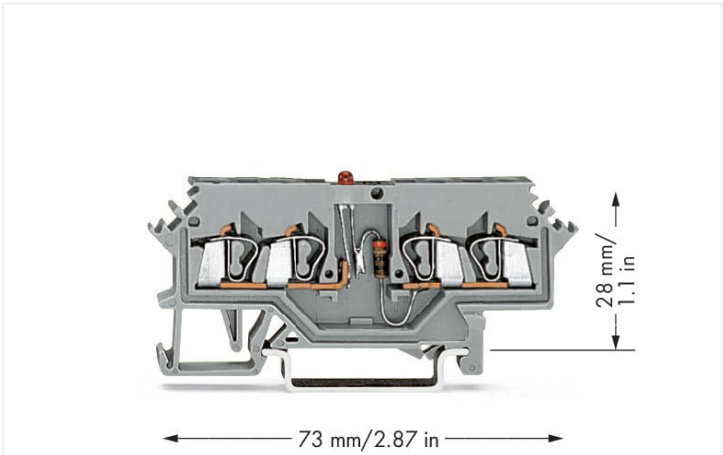
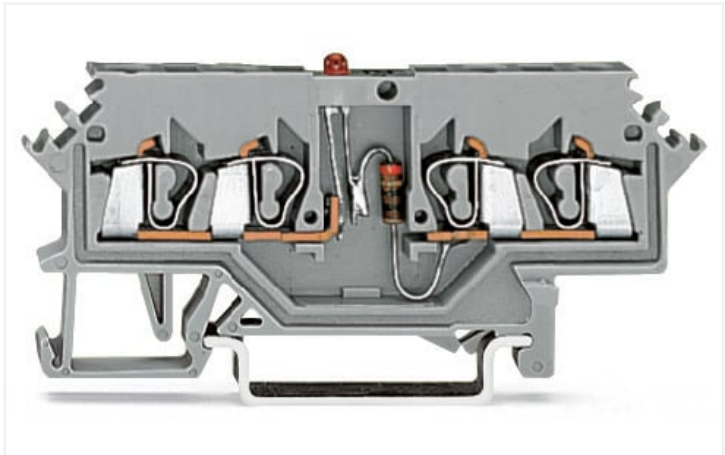


**Data Sheet | Item Number: 280-624/281-413**  
Component terminal block; 4-conductor; LED (red); 24 VDC; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; gray  
<https://www.wago.com/280-624/281-413>

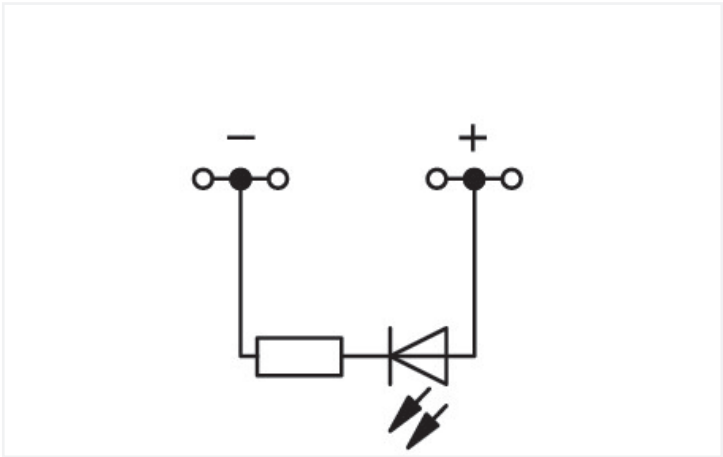


Color: ■ gray

Similar to illustration



Similar to illustration



Electrical data					General information	
Ratings per		IEC/EN 60947-7-1				
Overvoltage category		III	III	II	Voltage type 1	DC
Pollution degree		3	2	2	Nominal voltage	24 V
Nominal voltage		-	-	-		
Rated surge voltage		-	-	-		
Rated current		-	-	-		

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



Connection 1	
Connectable conductor materials (note)	<p><b>Terminating Aluminum Conductors</b></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 <a href="https://www.wago.com/249-130">249-130</a> is used for termination.</p> <p>“Alu-Plus” Contact Paste Advantages:</p> <ul style="list-style-type: none"><li>• Automatically destroys the oxide film during clamping.</li><li>• Prevents fresh oxidation at the clamping point.</li><li>• Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block).</li><li>• Provides long-term protection against corrosion.</li></ul> <p>Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, <b>aluminum conductors must first be cleaned with a blade</b> 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” <b>additionally</b> 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 ... 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	73 mm / 2.874 inches
Depth from upper-edge of DIN-rail	28 mm / 1.102 inches

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

Material data	
Note (material data)	<a href="https://www.wago.com/us/material-specifications">Information on material specifications can be found here</a>
Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.155 MJ
Weight	8.4 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	27-14-11-27
eCl@ss 9.0	27-14-11-27
ETIM 8.0	EC000903
ETIM 7.0	EC000903
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454331184
Customs tariff number	85369010000

Environmental Product Compliance	
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(c)-I

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	2157201.01	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UR UL International Germany GmbH	UL 1059	E45172	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	280-624/281-413	

Documentation		
Additional Information		
Technical Section	pdf 2240.62 KB	

CAD/CAE-Data		
CAD data		
2D/3D Models	280-624/281-413	
CAE data		
EPLAN Data Portal	280-624/281-413	
WSCAD Universe	280-624/281-413	
ZUKEN Portal	280-624/281-413	

1 Compatible Products			
1.1 Required Accessories			
1.1.1 End plate			
1.1.1.1 End plate			
<a href="#">Item No.: 280-316</a> End and intermediate plate; 2.5 mm thick; gray	<a href="#">Item No.: 280-317</a> End and intermediate plate; 2.5 mm thick; orange	<a href="#">Item No.: 280-337</a> Separator plate; 2 mm thick; oversized; gray	<a href="#">Item No.: 280-327</a> Separator plate; 2 mm thick; oversized; orange

1.2 Optional Accessories			
1.2.1 DIN-rail			
1.2.1.1 Mounting accessories			
<a href="#">Item No.: 210-196</a> Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<a href="#">Item No.: 210-198</a> Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	<a href="#">Item No.: 210-508</a> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored	<a href="#">Item No.: 210-197</a> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored
<a href="#">Item No.: 210-506</a> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored	<a href="#">Item No.: 210-114</a> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<a href="#">Item No.: 210-118</a> Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	<a href="#">Item No.: 210-115</a> 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



1.2.1.1 Mounting accessories



**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 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; 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.: 709-153**  
Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent

1.2.3.2 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



1.2.3.3 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 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "f-st"); 5 pieces/strip; white



**Item No.: 280-471**  
Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray



**Item No.: 280-472**  
Insulation stop; 0.75 - 1 mm<sup>2</sup>; 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.: 709-110**  
Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black



**Item No.: 709-111**  
Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black



**Item No.: 709-112**  
Wire commoning chain; 2.5 mm<sup>2</sup>; 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 Protective warning marker

1.2.7.1 Cover



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

1.2.8 Test and measurement

1.2.8.1 Testing accessories



**Item No.: 249-142**  
L-type end module; modular; with rigid contact pin; End module; 1,50 mm<sup>2</sup>; gray



**Item No.: 249-143**  
L-type spacer module; modular; e.g., bridging commoned terminal blocks; gray



**Item No.: 249-141**  
L-type test plug module; modular; with spring-loaded contact pin; Center module; 1,50 mm<sup>2</sup>; gray

1.2.9 Tool

1.2.9.1 Operating tool



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



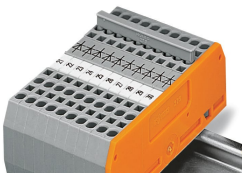
**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



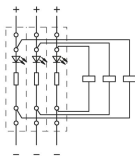
**Item No.: 210-657**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

Installation Notes

Commoning



Commoning using comb-style jumper bars:  
Push comb-style jumper bars down until fully inserted.



Circuit-related voltage indications can be created using the following terminal blocks:  
280-624/281-434 or 280-624/281-413