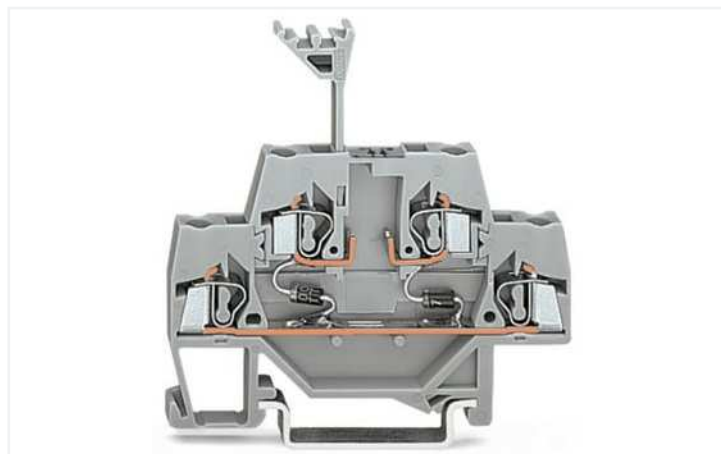
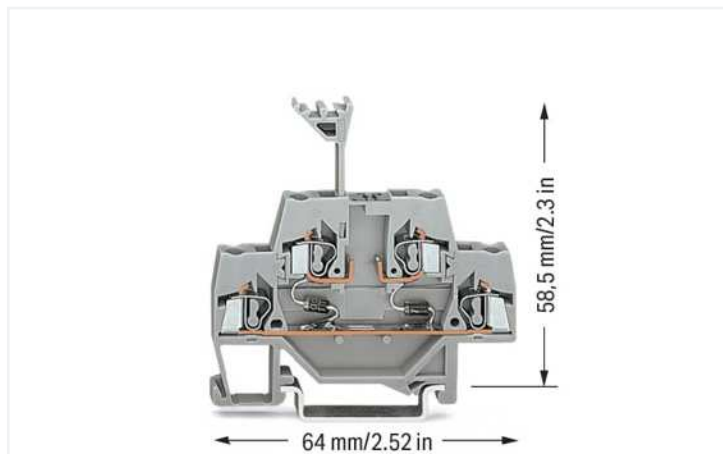


# Data Sheet | Item Number: 280-942/281-487

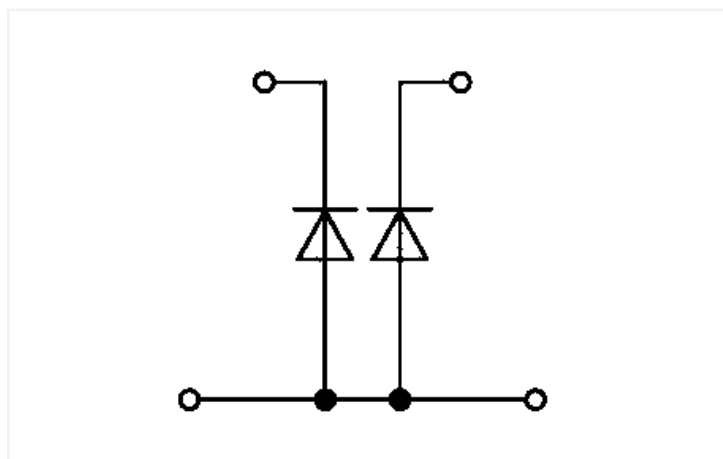
Component terminal block; double-deck; with 2 diodes 1N4007; Bottom anode; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray



<https://www.wago.com/280-942/281-487>



Color: ■ gray



280-942/281-487

## Electrical data

Ratings per	IEC/EN 60947-7-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	-	-	-
Rated surge voltage	-	-	-
Rated current	-	-	-

## General

Nominal voltage	250 V
Reverse voltage	1000 V

## Connection data

Connection points	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

## Connection 1

Connectable conductor materials (note)

### Terminating Aluminum Conductors

WAGO spring clamp terminal blocks are suitable for solid aluminum conductors up to 4 mm<sup>2</sup>/12 AWG if WAGO "Alu-Plus" Contact Paste [249-130](https://www.wago.com/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 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 mm<sup>2</sup> = 16 A

4 mm<sup>2</sup> = 22 A

Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 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)	<a href="#">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	0.26 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)
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)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454196776
Customs tariff number	85369010000

### 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	6(c) 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
CCA DEKRA Certification B.V.	EN 60947	2157201.01

#### 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
LR Lloyds Register	EN 60947	91/20112 (E9)

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 280-942/281-487 <a href="#">↓</a>

Documentation

Additional Information		
Technical Section	pdf 2142.18 KB	<a href="#">↓</a>

Bid Text				
280-942/281-487	19.02.2019	xml 3.23 KB	<a href="#">↓</a>	
280-942/281-487	27.04.2017	doc 24.50 KB	<a href="#">↓</a>	

CAD/CAE-Data

CAD data
2D/3D Models 280-942/281-487 <a href="#">↓</a>

CAE data	
EPLAN Data Portal 280-942/281-487	<a href="#">↓</a>
WSCAD Universe 280-942/281-487	<a href="#">↓</a>
ZUKEN Portal 280-942/281-487	<a href="#">↓</a>

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



**Item No.: 722-241/005-000**

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Pin spacing 5 mm; 11-pole; light gray



**Item No.: 722-242/005-000**

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Pin spacing 5 mm; 12-pole; light gray



**Item No.: 722-243/005-000**

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Pin spacing 5 mm; 13-pole; light gray



**Item No.: 722-244/005-000**

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Pin spacing 5 mm; 14-pole; light gray





1.2.2.1 Female connector/socket



**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 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-302**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-201**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



**Item No.: 216-101**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-202**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-102**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-203**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-103**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated



**Item No.: 216-204**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



**Item No.: 216-104**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / 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 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

1.2.6 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 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

1.2.7 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.: 231-180/003-000**

Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 20-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

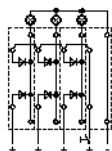
**Item No.: 210-720**

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