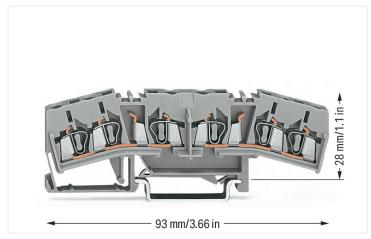
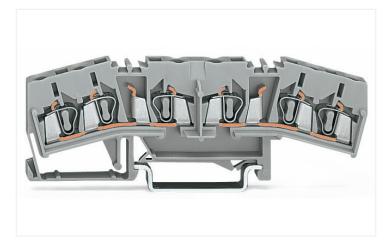
Double potential terminal block;  $2.5 \text{ mm}^2$ ; center marking; for DIN-rail  $35 \times 15$  and  $35 \times 7.5$ ; CAGE CLAMP®;  $2.50 \text{ mm}^2$ ; gray



https://www.wago.com/280-675





Color: ■ gray

- 1	otes	
N	OTO:	

Safety information

Safety information 2

Notice: This 3-conductor double-potential terminal block cannot be commoned via adjacent jumpers.

When used as disconnect terminal block or 500V/6kV/3 potential multiplier between the current bars  $\,$ 

# Electrical data Ratings per IEC/EN Nominal voltage (III/3) 800 V Rated impulse voltage (III/3) 8 kV Rated current 18 A Legend (ratings) (III / 3) ≜ Overvoltage category III / Pollution degree 3

Power Loss	
Power loss, per pole (potential)	0.4309 W
Rated current $I_N$ for specified power loss	18 A
Resistance value for specified, current- dependent power loss	0.00133 Ω

Connection data		
Connection points	6	
Total number of potentials	2	
Number of levels	1	

Connection 1	
Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum

# W/AGO

### Connection 1

Connectable conductor materials (note)

### **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 <a href="https://www.wa-go.com/249-130">249-130</a> 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 mm² = 16 A 4 mm² = 22 A

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 Front-entry wiring

Physical data	
Width	5 mm / 0.197 inches
Height	93 mm / 3.661 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	Center 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	0.237 MJ
Weight	12.4 g

https://www.wago.com/280-675



### **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)	50 pcs
Packaging type	Вох
Country of origin	DE
GTIN	4044918465069
Customs tariff number	85369010000

### **Environmental Product Compliance**

Compliant, No Exemption RoHS Compliance Status

### Approvals / Certificates

### General approvals



Approvai	Standard	Certificate Name

UL UL 1059 E45172

Underwriters Laboratories

Inc.

### **Downloads**

### **Environmental Product Compliance**

Compliance Search

**Environmental Product** 

Compliance 280-675



### Documentation

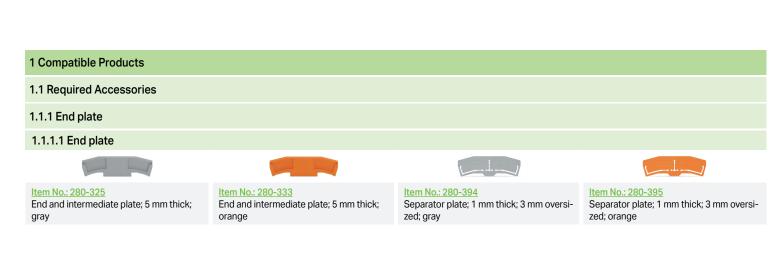
Additional Information		
Technical Section	pdf 2240.62 KB	$\underline{\downarrow}$

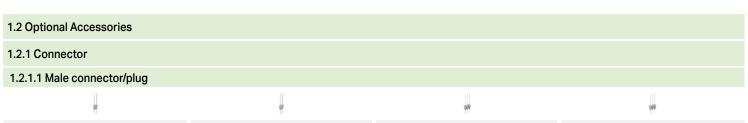
Bid Text			
280-675	19.02.2019	xml 3.58 KB	<u>↓</u>
280-675	21.02.2019	docx 15.41 KB	$\downarrow$

https://www.wago.com/280-675



# CAD/CAE-Data CAD data CAE data 2D/3D Models 280-675 **EPLAN Data Portal** 280-675 WSCAD Universe 280-675 ZUKEN Portal 280-675





Item No.: 280-473 Item No.: 280-475 Item No.: 280-474 Item No.: 280-476 Pin module; 0.8 x 2.4 mm; for assembly on Pin module; 0.8 x 2.4 mm; for assembly Pin module; 0.8 x 2.4 mm; for assembly Pin module; 0.8 x 2.4 mm; for assembly on all 280 Series front-entry rail-mounted on all 280 Series front-entry rail-mounted on all 280 Series front-entry rail-mounted all 280 Series front-entry rail-mounted terminal blocks; for Termi-Point connectiterminal blocks; for Termi-Point connectiterminal blocks; for Termi-Point connectiterminal blocks; for Termi-Point connection; 2-pole; gray on; 2-pole; gray on; 3-pole; gray on; 3-pole; gray

# 1.2.2 DIN-rail 1.2.2.1 Mounting accessories

Item No.: 210-196 Item No.: 210-508 Item No.: 210-197 Item No.: 210-198 Steel carrier rail; 35 x 15 mm; 1.5 mm Steel carrier rail; 35 x 15 mm; 1.5 mm Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to thick; 2 m long; slotted; similar to EN thick; 2 m long; unslotted; similar to EN thick; 2 m long; slotted; galvanized; simi-60715; silver-colored EN 60715; copper-colored lar to EN 60715; silver-colored 60715; silver-colored Item No.: 210-114 Item No.: 210-118 Item No.: 210-115 Item No.: 210-506

Steel carrier rail; 35 x 15 mm; 1.5 mm Steel carrier rail; 35 x 15 mm; 1.5 mm Steel carrier rail; 35 x 15 mm; 2.3 mm Steel carrier rail; 35 x 7.5 mm; 1 mm thick; thick; 2 m long; unslotted; galvanized; sithick; 2 m long; unslotted; similar to EN thick; 2 m long; unslotted; according to 2 m long; slotted; according to EN 60715; milar to EN 60715; silver-colored 60715; silver-colored EN 60715; silver-colored "Hole width 18 mm; silver-colored

Item No.: 210-505 Item No.: 210-112 Item No.: 210-504 Item No.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; Steel carrier rail; 35 x 7.5 mm; 1 mm thick; Steel carrier rail; 35 x 7.5 mm; 1 mm thick; Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; 2 m long; slotted; galvanized; according 2 m long; unslotted; according to EN 2 m long; unslotted; galvanized; according "Hole width 25 mm; silver-colored to EN 60715; silver-colored 60715; silver-colored to EN 60715; silver-colored

https://www.wago.com/280-675



### 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 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 mm² / AWG 22; uninsulated; 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 mm² / AWG 20; uninsulated; 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; uninsulated; electro-tin plated



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; uninsulated; electro-tin plated; silver-colored

### 1.2.4 Installation

### 1.2.4.1 Cover



### Item No.: 709-153

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

### 1.2.4.2 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

### 1.2.4.3 Mounting accessories



### 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





Item No.: 280-482

Jumper; 2-way; insulated; gray



Item No.: 280-492

Jumper; 2-way; insulated; gray



Jumper; 2-way; insulated; orange



Item No.: 280-483

Jumper; 3-way; insulated; gray

Jumper; 10-way; insulated; gray

Item No.: 280-484

Jumper; 4-way; insulated; gray



Jumper; 5-way; insulated; gray

Item No.: 709-110

Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black





Item No.: 210-123

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

Wire commoning chain; insulated; blue

### 1.2.7 Marking

### 1.2.7.1 Group marker carrier



Item No.: 249-105

Group marker carrier; gray

### 1.2.7.2 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.: 793-5501/000-012

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.: 793-5501/000-002

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.: 793-501/000-012

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



# 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.: 793-5501/000-005 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.: 793-501/000-007

WMB marking card; as card; not stretchable; 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.: 793-5501/000-024 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

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.: 793-501/000-023

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



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

Item No.: 793-5501/000-017

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



### 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



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

https://www.wago.com/280-675



### 1.2.7.2 Marker



### 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



# 4

### 



### 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; snapon type; yellow

### 1.2.8 Protective warning marker

### 1.2.8.1 Cover



### Item No.: 280-415

Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

### 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

# Item No.: 280-440

Operating tool; made of insulating material: 10-way



### Item No.: 280-432

Operating tool; made of insulating material; 2-way; white

Item No.: 280-433 Operating tool; made of insulating materi-

### Item No.: 280-434

Operating tool; made of insulating material; 4-way

### Item No.: 280-435

Operating tool; made of insulating material; 5-way; gray

### **Installation Notes**

### Installation



Please note that due to the protruding rods, the terminal blocks can only be inserted or removed from the assembly after sliding adjacent terminal blocks on the rail

Removal: Separate terminal strip, slide terminal block to disconnect and then remove from the DIN-rail.



### Conductor termination



CAGE CLAMP® connection

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



Terminal Blocks for Matrix Patching Inserting/removing a conductor in the terminal block's center.

### Commoning



Multiplying potentials Insertion of a 10-way comb-style jumper bar (only possible in the center).



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

### Commoning



Using terminal blocks for matrix patching as disconnect terminal blocks via disconnect jumpers.

### Installation



Terminal blocks are divided by a protruding separator plate.

https://www.wago.com/280-675



 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$