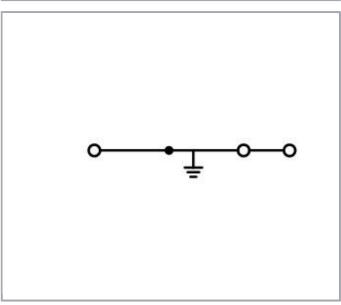
# Data sheet | Item number: 280-687

3-conductor ground terminal block; 2.5 mm<sup>2</sup>; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP<sup>®</sup>; 2,50 mm<sup>2</sup>; green-yellow







# → 32 mm/1.26 in ► → 64 mm/2.52 in →

# Item description

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 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<sup>®</sup> 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::  $2.5 \text{ mm}^2 = 16 \text{ A}$  $4 \text{ mm}^2 = 22 \text{ A}$ 

# Data Electrical data

#### Ratings per IEC/EN 60664-1

Ratings per

IEC/EN 60947-7-2

## Connection data

CAGE CLAMP <sup>®</sup>
Operating tool
Copper Aluminum
0,08 2,5 mm² / 28 12 AWG
0,08 2,5 mm² / 28 12 AWG
8 9 mm / 0.31 0.35 inch
3
1
1
Front-entry wiring
12 AWG: THHN, THWN



# **Geometrical Data**

Width	5 mm / 0.197 inch
Height from upper-edge of DIN-rail	28 mm / 1.102 inch
Depth	64 mm / 2.52 inch

## Mechanical data

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

# Material Data

Color	green-yellow
Insulation material	Polyamide 66 (PA 66)
Fire load	0.11 MJ
Weight	11.3 g

# Commercial data

Product Group	1 (Rail Mounted Terminal Blocks)
Packaging type	BOX
Country of origin	DE
GTIN	4045454100148
Customs tariff number	85369010000

# Approvals / Certificates

# **Country specific Approvals**

Logo	Approval	Additional Approval Text	Certificate name
KEMA	CCA DEKRA Certification B.V.	EN 60947	2157201.01
SP	<b>CSA</b> DEKRA Certification B.V.	C22.2	1536071
Ship Approv	als		

Certificate

Logo	Approval		<b>A</b> ge
		Additional Approval Text	name
ABS.	ABS American Bureau of Shipping	EN 60947	20- HG1941090- PDA
	<b>BV</b> Bureau Veritas S.A.	EN 60947	07436/E0 BV
DNV-GL	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
	LR Lloyds Register	EN 60947	91/20112 (E9)

Logo		Approval	Additional Approval Text	Certificate name
7	*	<b>UL</b> UL International Germany GmbH	UL 1059	20190731- E45172

# Counterpart

## **Compatible products**

Jumper



$\mathcal{M}$	Item no.: 210-103 Wire commoning chain; insulated; 50 connections; black
$\gamma\gamma\gamma$	Item no.: 210-123 Wire commoning chain; insulated; 50 connections
$\bigcirc$	<b>Item no.: 249-123</b> Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm <sup>2</sup>
$\bigcirc$	<b>Item no.: 249-125</b> Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm²
$\bigcirc$	<b>Item no.: 249-126</b> Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm <sup>2</sup>
$\bigcirc$	<b>Item no.: 249-127</b> Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm <sup>2</sup>
G	Item no.: 280-402 Adjacent jumper; insulated; IN = IN terminal block; gray
1	<b>Item no.: 280-409</b> Alternate jumper; insulated; IN = IN terminal block; gray
1	<b>Item no.: 280-422</b> Adjacent jumper; insulated; IN = IN terminal block; yellow-green
Π	<b>Item no.: 280-482</b> Comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray
m	<b>Item no.: 280-483</b> Comb-style jumper bar; insulated; 3-way; IN = IN terminal block; gray
m	<b>Item no.: 280-484</b> Comb-style jumper bar; insulated; 4-way; IN = IN terminal block; gray
11111	<b>Item no.: 280-485</b> Comb-style jumper bar; insulated; 5-way; IN = IN terminal block; gray
1111111	<b>Item no.: 280-490</b> Comb-style jumper bar; insulated; 10-way; IN = IN terminal block; gray
П	<b>Item no.: 280-492</b> Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray
$\mathcal{M}$	<b>Item no.: 709-110</b> Wire commoning chain; insulated; 4 connections; 3 x 110 mm; black
$\cap$	<b>Item no.: 709-111</b> Wire commoning chain; insulated; 3 connections; 2 x 120 mm; black
$\cap$	<b>Item no.: 709-112</b> Wire commoning chain; insulated; 3 connections; 2 x 170 mm; black



	<b>Item no.: 780-452</b> Staggered jumper; insulated; from 1 to 2; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	
	<b>Item no.: 780-453</b> Staggered jumper; insulated; from 1 to 3; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	
	<b>Item no.: 780-454</b> Staggered jumper; insulated; from 1 to 4; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	
(	<b>Item no.: 780-455</b> Staggered jumper; insulated; from 1 to 5; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	
1	<b>Item no.: 780-456</b> Staggered jumper; insulated; from 1 to 6; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	
1	<b>Item no.: 780-457</b> Staggered jumper; insulated; from 1 to 7; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	
	<b>Item no.: 780-458</b> Staggered jumper; insulated; from 1 to 8; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	
assembling		
Ċ	<b>Item no.: 209-106</b> Mounting carrier; for isolated mounting on DIN 35 rails; gray	
-	<b>Item no.: 709-153</b> Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent	
check		
	<b>Item no.: 209-170</b> Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm² - 10 mm² tbs; gray	
7	ltem no.: 249-106 B-type test plug module; modular; 1,50 mm²; gray	
	<b>Item no.: 249-107</b> B-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray	
P	<b>Item no.: 249-141</b> L-type test plug module; modular; with spring-loaded contact pin; Center module; 1,50 mm²; gray	
	<b>Item no.: 280-404</b> Test plug adapter; 5 mm wide; for test plug 210-137 (2.3 mm Ø); suitable for 1.5 mm² - 4 mm² tbs; gray	
54	<b>Item no.: 280-418</b> Test plug module; modular; suitable for all WAGO 280 and 780 Series rail-mounted terminal blocks with jumper slots in the current bar; gray	
1	<b>Item no.: 280-419</b> Spacer module; modular; bridging commoned terminal blocks; gray	
ferrule		
	ltem no.: 216-101	

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated



I	<b>Item no.: 216-102</b> Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated
I	<b>Item no.: 216-103</b> Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated
]	<b>Item no.: 216-104</b> Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated
	<b>Item no.: 216-201</b> Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white
	<b>Item no.: 216-202</b> Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray
	<b>Item no.: 216-203</b> Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red
l	<b>Item no.: 216-204</b> Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black
	<b>Item no.: 216-301</b> Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow
	<b>Item no.: 216-302</b> Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green
General ac	ccessories
Sand	<b>Item no.: 231-162/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 2-pole; gray
Sant	<b>Item no.: 231-163/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 3-pole; gray
Sand	<b>Item no.: 231-164/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 4-pole; gray
Sand	<b>Item no.: 231-165/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 5-pole; gray
Sann	<b>Item no.: 231-166/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 6-pole; gray
	<b>Item no.: 231-167/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 7-pole; gray
<b>.</b>	ale and a second s

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



Sunt	<b>Item no.: 231-168/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 8-pole; gray
Sunt	<b>Item no.: 231-169/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 9-pole; gray
Sam	<b>Item no.: 231-170/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 10-pole; gray
Sant	<b>Item no.: 231-171/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 11-pole; gray
5	<b>Item no.: 231-172/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 12-pole; gray
5	<b>Item no.: 231-176/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 16-pole; gray
Sant	<b>Item no.: 231-180/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 20-pole; gray
÷>-*	<b>Item no.: 231-668</b> Lockout caps; for covering unused clamping units; gray
\$ 1 - N	Item no.: 231-669 Lockout caps; for covering unused clamping units; orange
19977	<b>Item no.: 721-162/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 2-pole; light gray
hant	<b>Item no.: 721-163/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 3-pole; light gray
want	<b>Item no.: 721-164/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 4-pole; light gray
want	<b>Item no.: 721-165/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 5-pole; light gray
1000	<b>Item no.: 721-166/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 6-pole; light gray



-	<b>Item no.: 721-167/003-000</b> Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against
Watte	mismating; Pin spacing 5 mm; 7-pole; light gray
-	Item no.: 721-168/003-000
11177	Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 8-pole; light gray
at when the	Item no.: 721-169/003-000
100007	Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 9-pole; light gray
and the second s	Item no.: 721-170/003-000
11000	Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 10-pole; light gray
and a	Item no.: 721-171/003-000
42222	Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 11-pole; light gray
and the	Item no.: 721-172/003-000
11111	Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against
	mismating; Pin spacing 5 mm; 12-pole; light gray
and a	ltem no.: 721-173/003-000
10110	Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 13-pole; light gray
-	Item no.: 721-174/003-000
WARD?	Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against
	mismating; Pin spacing 5 mm; 14-pole; light gray
apart	ltem no.: 721-175/003-000
12122	Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 15-pole; light gray
-	Item no.: 721-176/003-000
and the second	Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against
	mismating; Pin spacing 5 mm; 16-pole; light gray
apprend?	ltem no.: 721-180/003-000
10100	Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 20-pole; light gray
Carrier rail	
	Item no.: 210-112
in gie carrière secon	Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm
A	Item no.: 210-113
/	Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715
	ltem no.: 210-114



-	Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715
12222	<b>Item no.: 210-115</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm
	<b>Item no.: 210-118</b> Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715
	<b>Item no.: 210-196</b> Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver- colored
-	<b>Item no.: 210-197</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715
	<b>Item no.: 210-198</b> Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper- colored
le)	<b>Item no.: 210-504</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715
1	<b>Item no.: 210-505</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to
P	<b>Item no.: 210-506</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715
Comela alua	<b>Item no.: 210-508</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715
Female plug	<b>Item no.: 232-132/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 2-pole; gray
	<b>Item no.: 232-132/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 2-pole; gray
and the second se	<b>Item no.: 232-133/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 3-pole; gray
	<b>Item no.: 232-133/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 3-pole; gray
	<b>Item no.: 232-134/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 4-pole; gray

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



	<b>Item no.: 232-134/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 4-pole; gray
and the second s	<b>Item no.: 232-135/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 5-pole; gray
	<b>Item no.: 232-135/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 5-pole; gray
	<b>Item no.: 232-136/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 6-pole; gray
	<b>Item no.: 232-136/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 6-pole; gray
and the second se	<b>Item no.: 232-137/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 7-pole; gray
	<b>Item no.: 232-137/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 7-pole; gray
and the second se	<b>Item no.: 232-138/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 8-pole; gray
	<b>Item no.: 232-138/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 8-pole; gray
	<b>Item no.: 232-139/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 9-pole; gray
	<b>Item no.: 232-139/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 9-pole; gray
	<b>Item no.: 232-140/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 10- pole; gray
	<b>Item no.: 232-140/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 10-pole; gray
	Item no.: 232-142/005-000



	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 12- pole; gray
	<b>Item no.: 232-142/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 12-pole; gray
	<b>Item no.: 232-146/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 16- pole; gray
	<b>Item no.: 232-146/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 16-pole; gray
	<b>Item no.: 232-147/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 17-pole; gray
	<b>Item no.: 232-150/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 20- pole; gray
	<b>Item no.: 232-150/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 20-pole; gray
S.S.S.	<b>Item no.: 232-232/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 2-pole; gray
1	<b>Item no.: 232-232/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 2-pole; gray
199	<b>Item no.: 232-233/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 3-pole; gray
	<b>Item no.: 232-233/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 3-pole; gray
S.S.S.	<b>Item no.: 232-234/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 4-pole; gray
	<b>Item no.: 232-234/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 4-pole; gray

#### Item no.: 232-235/005-000



N. C.

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 5-pole; gray

	<b>Item no.: 232-235/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 5-pole; gray
Self.	<b>Item no.: 232-236/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 6-pole; gray
	<b>Item no.: 232-236/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 6-pole; gray
	<b>Item no.: 232-237/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 7-pole; gray
	<b>Item no.: 232-238/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 8-pole; gray
	<b>Item no.: 232-239/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 9-pole; gray
	<b>Item no.: 232-240/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 10-pole; gray
	<b>Item no.: 232-240/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 10-pole; gray
	<b>Item no.: 232-242/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 12-pole; gray
	<b>Item no.: 232-242/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 12-pole; gray
	<b>Item no.: 232-246/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 16-pole; gray
	<b>Item no.: 232-246/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 16-pole; gray
	ltem no.: 232-250/005-000

Item no.: 232-250/005-000



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Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 20-pole; gray

CON L	<b>Item no.: 232-250/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 20-pole; gray
COMP.	<b>Item no.: 232-732/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; gray
and the second second	<b>Item no.: 232-733/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; gray
anne.	<b>Item no.: 232-734/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; gray
and a	<b>Item no.: 232-734/005-000/039-000</b> THT female header; 0.6 x 1.0 mm solder pin; gray
a series	<b>Item no.: 232-735/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; gray
and a	<b>Item no.: 232-735/005-000/039-000</b> THT female header; 0.6 x 1.0 mm solder pin; gray
and the	<b>Item no.: 232-736/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; gray
and a	<b>Item no.: 232-736/005-000/039-000</b> THT female header; 0.6 x 1.0 mm solder pin; gray
in the	<b>Item no.: 232-738/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; gray
and .	<b>Item no.: 232-740/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; gray
C. Martin	<b>Item no.: 232-742/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; gray



a territ	<b>Item no.: 232-832/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 2-pole; gray
1 mar	<b>Item no.: 232-833/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 3-pole; gray
S. Martin	<b>Item no.: 232-834/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 4-pole; gray
and and a second	<b>Item no.: 232-836/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 6-pole; gray
(Class)	<b>Item no.: 232-836/005-000/039-000</b> THT female header; 0.6 x 1.0 mm solder pin; angled; Locking lever; Pin spacing 7.5 mm; 6-pole; gray
N and	<b>Item no.: 232-840/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 10-pole; gray
Caner.	<b>Item no.: 232-842/005-000</b> THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 12-pole; gray
and the second se	<b>Item no.: 722-132/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 2-pole; light gray
	<b>Item no.: 722-132/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 2-pole; light gray
and the second se	<b>Item no.: 722-133/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 3-pole; light gray
	<b>Item no.: 722-133/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 3-pole; light gray
and the second se	<b>Item no.: 722-134/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 4-pole; light gray
	<b>Item no.: 722-134/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 4-pole; light gray
	Item no.: 722-135/005-000



TH.	
aller a	

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

	<b>Item no.: 722-135/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 5-pole; light gray
August	<b>Item no.: 722-136/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 6-pole; light gray
	<b>Item no.: 722-136/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 6-pole; light gray
III.	<b>Item no.: 722-137/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 7-pole; light gray
	<b>Item no.: 722-137/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 7-pole; light gray
	<b>Item no.: 722-138/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 8-pole; light gray
	<b>Item no.: 722-138/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 8-pole; light gray
	<b>Item no.: 722-139/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 9-pole; light gray
	<b>Item no.: 722-139/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 9-pole; light gray
The second	<b>Item no.: 722-140/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 10-pole; light gray
and a	<b>Item no.: 722-140/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 10-pole; light gray
and the second se	<b>Item no.: 722-141/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 11-pole; light gray

#### Item no.: 722-142/005-000



and the second

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

A STALL	<b>Item no.: 722-142/005-007/039-000</b> Female connector for rail-mount terminal blocks; gray
9	<b>Item no.: 722-143/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 13-pole; light gray
-	<b>Item no.: 722-144/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 14-pole; light gray
	<b>Item no.: 722-144/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 14-pole; light gray
<b></b>	<b>Item no.: 722-145/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 15-pole; light gray
	<b>Item no.: 722-146/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 16-pole; light gray
	<b>Item no.: 722-146/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 16-pole; light gray
	<b>Item no.: 722-150/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 20-pole; light gray
and the second s	<b>Item no.: 722-150/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 20-pole; light gray
	<b>Item no.: 722-232/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 2-pole; light gray
19	<b>Item no.: 722-232/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 2-pole; light gray
1	<b>Item no.: 722-233/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 3-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 mismating; Locking lever; Pin spacing 5 mm; 3-pole; light gray

	<b>Item no.: 722-234/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 4-pole; light gray
62	<b>Item no.: 722-234/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 4-pole; light gray
<u> </u>	<b>Item no.: 722-235/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 5-pole; light gray
<u>a</u>	<b>Item no.: 722-235/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 5-pole; light gray
	<b>Item no.: 722-236/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 6-pole; light gray
<u></u>	<b>Item no.: 722-236/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 6-pole; light gray
514 1	<b>Item no.: 722-237/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 7-pole; light gray
¢.	<b>Item no.: 722-237/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 7-pole; light gray
	<b>Item no.: 722-238/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 8-pole; light gray
514 1	<b>Item no.: 722-239/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 9-pole; light gray
	<b>Item no.: 722-239/005-000/039-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 9-pole; light gray
59 <sup>1</sup>	<b>Item no.: 722-240/005-000</b> Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 10-pole; light gray

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 mismating; Locking lever; Pin spacing 5 mm; 10-pole; light gray

1000	ltem no.: 722-241/005-000
N CALLAND	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 11-pole; light gray
1000	Item no.: 722-242/005-000
Sec. and Party	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 12-pole; light gray
	Item no.: 722-242/005-000/039-000
Sam	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 12-pole; light gray
	ltem no.: 722-243/005-000
in a land	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 13-pole; light gray
	Item no.: 722-244/005-000
W. ali ali	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 14-pole; light gray
far.	ltem no.: 722-244/005-000/039-000
8	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 14-pole; light gray
	ltem no.: 722-246/005-000
and the second	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 16-pole; light gray
-	Item no.: 722-246/005-000/039-000
52	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Locking lever; Pin spacing 5 mm; 16-pole; light gray
	Item no.: 722-250/005-000
in and the	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismating; Pin spacing 5 mm; 20-pole; light gray
Aarking acc	essories
æ	<b>Item no.: 2009-115</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white
	ltem no.: 2009-115/000-002
and the second se	WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow
æ	ltem no.: 2009-115/000-006
and the second se	WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



æ	<b>Item no.: 2009-115/000-007</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray
æ	<b>Item no.: 2009-115/000-012</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange
æ	<b>Item no.: 2009-115/000-017</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green
æ	<b>Item no.: 2009-115/000-023</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green
æ	<b>Item no.: 2009-115/000-024</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet
品	<b>Item no.: 209-128</b> Adaptor; gray
F	<b>Item no.: 209-140</b> Group marker carrier; gray
F	<b>Item no.: 209-141</b> Group marker carrier; gray
F	<b>Item no.: 209-142</b> Group marker carrier; gray
60 × 50	<b>Item no.: 209-185</b> Adaptor; gray
1	<b>Item no.: 210-612</b> Marking strips; for self-marking; plain; Self-adhesive; transparent
-	<b>Item no.: 249-105</b> Group marker carrier; gray
mmm	<b>Item no.: 793-501</b> WMB marking card; as card; not stretchable; plain; snap-on type; white
	<b>Item no.: 793-501/000-002</b> WMB marking card; as card; not stretchable; plain; snap-on type; yellow
	<b>Item no.: 793-501/000-005</b> WMB marking card; as card; not stretchable; plain; snap-on type; red
	<b>Item no.: 793-501/000-006</b> WMB marking card; as card; not stretchable; plain; snap-on type; blue
Subject to ch	anges. Please also observe the further product documentation!



	<b>Item no.: 793-501/000-007</b> WMB marking card; as card; not stretchable; plain; snap-on type; gray
	<b>Item no.: 793-501/000-012</b> WMB marking card; as card; not stretchable; plain; snap-on type; orange
	<b>Item no.: 793-501/000-017</b> WMB marking card; as card; not stretchable; plain; snap-on type; light green
	<b>Item no.: 793-501/000-023</b> WMB marking card; as card; not stretchable; plain; snap-on type; green
	<b>Item no.: 793-501/000-024</b> WMB marking card; as card; not stretchable; plain; snap-on type; violet
annann	<b>Item no.: 793-5501</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; white
	<b>Item no.: 793-5501/000-002</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; yellow
	<b>Item no.: 793-5501/000-005</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; red
	<b>Item no.: 793-5501/000-006</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; blue
	<b>Item no.: 793-5501/000-007</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; gray
	<b>Item no.: 793-5501/000-012</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; orange
	<b>Item no.: 793-5501/000-017</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; green
	<b>Item no.: 793-5501/000-023</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; light green
	ltem no.: 793-5501/000-024





WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snapon type; violet

FIOLECLIVE W	arning Marker	
1000	Item no.: 280-415	
	Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks; yellow	
End plate		
	Item no.: 280-324	
	End and intermediate plate; 2.5 mm thick; gray	
	ltem no.: 280-326	
	End and intermediate plate; 2.5 mm thick; orange	
	Item no.: 280-344	
	Separator plate; 2 mm thick; oversized; gray	
	Item no.: 280-346	
	Separator plate; 2 mm thick; oversized; orange	
nsulation sto	pp	
- and	ltem no.: 280-470	
Current	Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white	
000	ltem no.: 280-471	
000	Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray	
	ltem no.: 280-472	
C. S.	Insulation stop; 0.75 - 1 mm²; 5 pieces/strip	
ools		
1	ltem no.: 210-657	
	Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short	
1	ltem no.: 210-658	
	Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short	
1	ltem no.: 210-720	
/	Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	

Documentation

Additional Information Technical explanations

Apr 3, 2019



# CAD/CAE-Data

CAD data

2D/3D Models 280-687

CAE data

EPLAN Data Portal 280-687

WSCAD Universe 280-687

## Installation Notes

Assembly



By snapping a ground conductor terminal block onto the carrier rail, a direct electrical connection is automatically made to the rail.



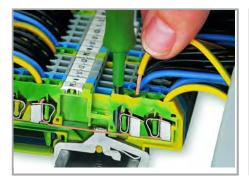
Quick assembly keys prevent reverse mounting.



Removing a terminal block from the assembly.

Inserting a conductor







CAGE CLAMP® connection



**CAGE CLAMP® connection** Removing a conductor.

Inserting a conductor.

Inserting a conductor.

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



Inserting insulation stops.

Jumpered





Commoning ground conductor terminal blocks with through terminal blocks is possible in one direction only (via rear side of terminal block) using adjacent jumpers. In addition to the required marking of these blocks, use yellow-green adjacent jumpers.



Staggered jumpers for sophisticated circuit requirements – push jumpers down until fully inserted.



Wire jumpers

When installing machines or control systems, it is often necessary to make an additional connection between two terminal blocks that are not next to each other on the rail. In such cases, WAGO's touch-proof, push-in type wire jumpers are the ideal solution.

These jumpers are compatible with the following rail-mount terminal blocks:

- 279 Series (1.5 mm²/16 AWG),
- 280/775/780 Series (2.5 mm²/14 AWG)
- 281/769/776/777/781 and 880
  Series (4 mm<sup>2</sup>/12 AWG)

They are available in three conductor lengths (60, 110 and 250 mm), allowing up to 60 terminal blocks to be commoned depending on their width (see table on the right).

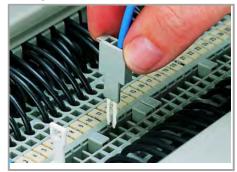


Compared with the 279 Series, the 280/775 /780 and 281/776/777/781 Series can also accommodate two wire jumpers, allowing the use of commoning chains. Furthermore, the 280/769/775/780/880 and 281/776/777 /781 Series allow both wire jumper and adjacent jumper to be simultaneously plugged into a same terminal block.



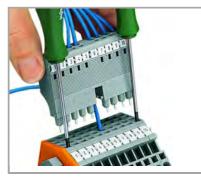
Commoning using comb-style jumper bars. Push comb-style jumper bars down until fully inserted.

#### Testing

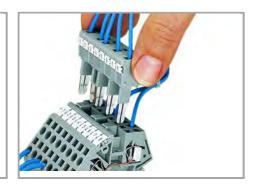


Testing with a test plug

(picture shows a test plug fitted with CAGE CLAMP®).



L-type test plug modules fitted with CAGE CLAMP®



B-type test plug modules fitted with CAGE CLAMP®





Testing with a test plug

(picture shows 209-170 Test Plug Adapter).

#### Marking



Marking via WMB Multi Marking System.