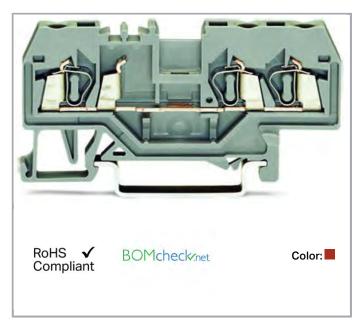
Data sheet | Item number: 280-653

3-conductor through terminal block; 2.5 mm²; center marking; for DIN-rail 35 \times 15 and 35 \times 7.5; CAGE CLAMP[®]; 2,50 mm²; red





Item description

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 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.

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

Web: https://www.bolenscontrol.com/ - Phone: (800) 658-5241 - Email: sales@bolenscontrol.com



 $Please \ note \ that \ the \ nominal \ currents \ must \ be \ adapted \ to \ the \ reduced \ conductivity \ of \ the \ aluminum \ conductors::$

2.5 mm² = 16 A

4 mm² = 22 A

Data

Electrical data

Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60947-7-1
Nominal voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
Rated current	24 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Connection data

Connection technology	CAGE CLAMP [®]
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum
Solid conductor	0,08 2,5 mm² / 28 12 AWG
Fine-stranded conductor	0,08 2,5 mm² / 28 12 AWG
Strip length	8 9 mm / 0.31 0.35 inch
Total number of connection points	3
Total number of potentials	1
Number of levels	1
Wiring type	Front-entry wiring
Note (conductor cross-section)	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

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



TAE00001V2

Material Data

Color		red		
Insulation material Fire load		Polyamide 66 (PA 66)		
		0.123 MJ		
Weight		7.6 g		
Commercia	al data			
Packaging t	ype	вох		
Country of	origin	DE		
GTIN		4044918391184		
Customs ta	riff number	85369010000		
	/ Certificates			
Country spec	cific Approvals		Certificate	
Logo	Approval	Additional Approval Text	name	
	CCA	EN 60947	2157201.01	
KEMA	DEKRA Certification B.V.			
(1)	CSA DEKRA Certification B.V.	C22.2	1536071	
Ship Approva	als			
Logo	Approval	Additional Approval Text	Certificate name	
ABS.	ABS	EN 60947	20-	
THE TOTAL PROPERTY.	American Bureau of Shipping		HG1941090- PDA	
CA	BV	EN 60947	07436/E0 BV	
	Bureau Veritas S.A.			
BUREAU				

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

Det Norske Veritas, Germanischer Lloyd



THE STREET

LR Lloyds Register EN 60947

91/20112 (E9)

UL-Approvals

Logo Approval Additional Approval Text name

UL UL 1059 20170731Underwriters Laboratories Inc. Certificate name

E45172



Counterpart

Compatible products

Carrier rail



Item no.: 210-112

Steel carrier rail; 35×7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm



Item no.: 210-113

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715



Item no.: 210-114

Steel carrier rail; 35×15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715



Item no.: 210-115

Steel carrier rail; 35×7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm



Item no.: 210-118

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715

Item no.: 210-196



	Aluminum carrier rail; 35×8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored		
0	Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715	-	
	Item no.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; coppercolored	-	
1	Item no.: 210-504 Steel carrier rail; 35×7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715		
	Item no.: 210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715	-	
6	Item no.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715	-	
1	Item no.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715	-	
check			
	Item no.: 209-170 Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm² - 10 mm² tbs; gray		
9	Item no.: 249-106 B-type test plug module; modular; 1,50 mm²; gray	-	
	Item no.: 249-107 B-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray	-	
P	Item no.: 249-141 L-type test plug module; modular; with spring-loaded contact pin; Center module; 1,50 mm²; gray	-	
	Item no.: 280-404 Test plug adapter; 5 mm wide; for test plug 210-137 (2.3 mm Ø); suitable for 1.5 mm² - 4 mm² tbs; gray	-	
	Item no.: 280-418 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	Item no.: 280-419 Spacer module; modular; bridging commoned terminal blocks; gray	-	
ferrule			
	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated		
I	Item no.: 216-102 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated	-	
I	Item no.: 216-103 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated	-	



I	Item no.: 216-104 Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated	
1	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white	-
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	-
	Item no.: 216-203 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	-
1	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black	-
	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; green	-
tools		
/	Item no.: 210-657 Operating tool; Blade: 3.5×0.5 mm; with a partially insulated shaft; short	
1	Item no.: 210-658 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short	-
1	Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	-
Insulation stop		
00000	Item no.: 280-470 Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white	
00000	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	-
End plate		
	Item no.: 280-324 End and intermediate plate; 2.5 mm thick; gray	
	Item 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	-





Item no.: 284-334

Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks; gray



tem no.: 284-344

Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks; orange

	Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks; orange
Female plug	
A STATE OF THE PARTY OF THE PAR	Item no.: 232-132/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 2-pole; gray
	Item no.: 232-132/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 2-pole; gray
	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.: 232-133/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 3-pole; gray
and a	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
(GILL)	Item no.: 232-134/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 4-pole; gray
AND	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
(all)	Item no.: 232-135/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 5-pole; gray
all a	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.: 232-136/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 6-pole; gray
AND	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.: 232-137/005-000/039-000

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

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing



THE STATE OF THE S	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.: 232-138/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 8-pole; gray
A STATE OF THE PARTY OF THE PAR	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
	Item no.: 232-139/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 9-pole; gray
A STATE OF THE PARTY OF THE PAR	Item no.: 232-140/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 10-pole; gray
	Item no.: 232-140/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 10-pole; gray
A STATE	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
AGIIII.	Item no.: 232-142/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 12-pole; gray
A SHAPE	Item no.: 232-146/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 16-pole; gray
	Item no.: 232-146/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 16-pole; gray
AGUITA.	Item no.: 232-147/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 17-pole; gray
ATTO AND ADDRESS OF THE ADDRESS OF T	Item no.: 232-150/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 20-pole; gray

Item no.: 232-150/005-000/039-000

5 mm; 7-pole; gray



	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 20-pole; gray
	Item no.: 232-232/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 2-pole; gray
	Item no.: 232-232/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 2-pole; gray
S.M.	Item no.: 232-233/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 3-pole; gray
	Item no.: 232-233/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 3-pole; gray
	Item no.: 232-234/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 4-pole; gray
	Item no.: 232-234/005-000/039-000 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 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 5-pole; gray
	Item no.: 232-235/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 5-pole; gray
	Item no.: 232-236/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 6-pole; gray
	Item no.: 232-236/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 6-pole; gray
	Item no.: 232-237/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 7-pole; gray
	Item no.: 232-238/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 8-pole; gray

Item no.: 232-239/005-000



N. S.	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 9-pole; gray
	Item no.: 232-240/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 10-pole; gray
	Item no.: 232-240/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 10-pole; gray
N. W.	Item no.: 232-242/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 12-pole; gray
	Item no.: 232-242/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 12-pole; gray
	Item no.: 232-246/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 16-pole; gray
	Item no.: 232-246/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 16-pole; gray
N. S.	Item no.: 232-250/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 20-pole; gray
	Item no.: 232-250/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Locking lever; Pin spacing 5 mm; 20-pole; gray
	Item no.: 232-732/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray
N. C.	Item no.: 232-733/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray
	Item no.: 232-734/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray
A STATE OF THE PARTY OF THE PAR	Item no.: 232-734/005-000/039-000 THT female header; 0.6 x 1.0 mm solder pin; gray



Item no.: 232-735/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray Item no.: 232-735/005-000/039-000 THT female header; 0.6 x 1.0 mm solder pin; gray Item no.: 232-736/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray Item no.: 232-736/005-000/039-000 THT female header; 0.6 x 1.0 mm solder pin; gray Item no.: 232-738/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray Item no.: 232-740/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray Item no.: 232-742/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray Item no.: 232-832/005-000 THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 2-pole; gray Item no.: 232-833/005-000 THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 3-pole; gray Item no.: 232-834/005-000 THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 4-pole; gray Item no.: 232-836/005-000 THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 6-pole; gray Item no.: 232-836/005-000/039-000 THT female header; 0.6 x 1.0 mm solder pin; angled; Locking lever; Pin spacing 7.5 mm; 6-pole; gray Item no.: 232-840/005-000 THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 10-pole; gray





Item no.: 232-842/005-000

THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 12-pole; gray



Item no.: 722-132/005-000

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



Item no.: 722-132/005-000/039-000

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



Item no.: 722-133/005-000

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



Item no.: 722-133/005-000/039-000

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



Item no.: 722-134/005-000

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



Item no.: 722-134/005-000/039-000

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

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



Item no.: 722-135/005-000/039-000

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



Item no.: 722-136/005-000

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



Item no.: 722-136/005-000/039-000

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



Item no.: 722-137/005-000

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



Item no.: 722-137/005-000/039-000

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

Item no.: 722-138/005-000



Add to	Female connector for rail-mount terminal blocks; 0.6×1 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 8-pole; light gray
(STEEL)	Item no.: 722-138/005-000/039-000 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
and the same of th	Item no.: 722-139/005-000 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
(and	Item no.: 722-139/005-000/039-000 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
ALMAY.	Item no.: 722-140/005-000 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
	Item no.: 722-140/005-000/039-000 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
	Item no.: 722-141/005-000 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
ALAMAY.	Item no.: 722-142/005-000 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
	Item no.: 722-142/005-007/039-000 Female connector for rail-mount terminal blocks; gray
	Item no.: 722-143/005-000 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
ALAMA.	Item no.: 722-144/005-000 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
(am)	Item no.: 722-144/005-000/039-000 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
	Item no.: 722-145/005-000 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

Item no.: 722-146/005-000



aliant."	mismating; Pin spacing 5 mm; 16-pole; light gray
(010)	Item no.: 722-146/005-000/039-000 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
addition.	Item no.: 722-150/005-000 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	Item no.: 722-150/005-000/039-000 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
	Item no.: 722-232/005-000 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
	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 mismating; Locking lever; Pin spacing 5 mm; 2-pole; light gray
R. S.	Item no.: 722-233/005-000 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
	Item no.: 722-234/005-000 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
	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 mismating; Locking lever; Pin spacing 5 mm; 4-pole; light gray
	Item no.: 722-235/005-000 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
Total Control	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 mismating; Locking lever; Pin spacing 5 mm; 5-pole; light gray
	Item no.: 722-236/005-000 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

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against

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 mismating; Locking lever; Pin spacing 5 mm; 6-pole; light gray
Item no.: 722-237/005-000
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
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
mismating; Locking lever; Pin spacing 5 mm; 7-pole; light gray
Item no.: 722-238/005-000
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
Item no.: 722-239/005-000
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
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
mismating; 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

Item no.: 722-240/005-000/039-000

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

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

Item no.: 722-241/005-000
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

Item no.: 722-242/005-000

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

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

Item no.: 722-243/005-000
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
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

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 mismating; Locking lever; Pin spacing 5 mm; 14-pole; light gray



Item no.: 722-246/005-000

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

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

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

Protective Warning Marker



Item no.: 280-415

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

assembling



Item no.: 209-106

Mounting carrier; for isolated mounting on DIN 35 rails; gray



Item no.: 709-153

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

General accessories



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; grav



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



Same	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
Sant	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
Same.	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
Sant .	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
Sant.	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
Sant.	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
2000	Item no.: 231-668 Lockout caps; for covering unused clamping units; gray
200	Item no.: 231-669 Lockout caps; for covering unused clamping units; orange
47777	Item no.: 721-162/003-000 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
wante	Item no.: 721-163/003-000 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
47777	Item no.: 721-164/003-000 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
49007	Item no.: 721-165/003-000 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
42027	Item no.: 721-166/003-000 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



3	Item no.: 2009-115/000-002
₩	Item no.: 2009-115 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white
Marking acc	
	mismating; Pin spacing 5 mm; 20-pole; light gray
4000	Item no.: 721-180/003-000 Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against
49777	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
	Item no.: 721-176/003-000
4227	Item no.: 721-175/003-000 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
47-17	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
	mismating; Pin spacing 5 mm; 13-pole; light gray Item no.: 721-174/003-000
41117	Item no.: 721-173/003-000 Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against
47-177	Item no.: 721-172/003-000 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
47-177	Item no.: 721-171/003-000 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
47-177	Item no.: 721-170/003-000 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
497977	Item no.: 721-169/003-000 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
49777	Item no.: 721-168/003-000 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
197777	Item no.: 721-167/003-000 Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 7-pole; light gray

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; 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.: 2009-115/000-012 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange		
•	Item no.: 2009-115/000-017 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; lig green		
•	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.: 2009-115/000-024 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet		
AA	Item no.: 209-128 Adaptor; gray		
F	Item no.: 209-140 Group marker carrier; gray		
F	Item no.: 209-141 Group marker carrier; gray		
F	Item no.: 209-142 Group marker carrier; gray		
200	Item no.: 209-185 Adaptor; gray		
	Item no.: 210-612 Marking strips; for self-marking; plain; Self-adhesive; transparent		
	Item no.: 249-105 Group marker carrier; gray		
MARKATA	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		



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Item no.: 793-501/000-005

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

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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.: 793-501/000-012

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



Item no.: 793-501/000-017

WMB marking card; as card; not stretchable; 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.: 793-501/000-024

WMB marking card; as card; not stretchable; 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; snapon 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; snapon type; yellow



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; snapon type; red



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; snapon 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; snapon type; gray



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; snapon type; orange

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; snapon type; green



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; light 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; snapon type; violet

Jumper

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Item no.: 210-103

Wire commoning chain; insulated; 50 connections; black

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Item no.: 210-123

Wire commoning chain; insulated; 50 connections

Item no.: 249-123

Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm²

Item no.: 249-125

Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm²

Item no.: 249-126

Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm²

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Item no.: 249-127

Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm²

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Item no.: 280-402

Adjacent jumper; insulated; IN = IN terminal block; gray

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Item no.: 280-409

Alternate jumper; insulated; IN = IN terminal block; gray

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Item no.: 280-422

Adjacent jumper; insulated; IN = IN terminal block; yellow-green

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Item no.: 280-482

Comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray

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Item no.: 280-483

Comb-style jumper bar; insulated; 3-way; IN = IN terminal block; gray

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Item no.: 280-484

Comb-style jumper bar; insulated; 4-way; IN = IN terminal block; gray

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Item no.: 280-485

Comb-style jumper bar; insulated; 5-way; IN = IN terminal block; gray

Item no.: 280-490

Comb-style jumper bar; insulated; 10-way; IN = IN terminal block; gray



Hillian	
	Item no.: 280-492 Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray
7	Item no.: 283-414 Step-down jumper; insulated; from 16 mm² to 4 mm²; Nominal current 32 A; gray
TR.	Item no.: 284-414 Step-down jumper; insulated; from 10/6 mm² to 4/2.5/1.5 mm²; Nominal current 15 A; gray
M	Item no.: 709-110 Wire commoning chain; insulated; 4 connections; 3 x 110 mm; black
\bigcap	Item no.: 709-111 Wire commoning chain; insulated; 3 connections; 2 x 120 mm; black
M	Item no.: 709-112 Wire commoning chain; insulated; 3 connections; 2 x 170 mm; black
	Item no.: 780-452 Staggered jumper; insulated; from 1 to 2; Spacing: 5 mm; suitable for 2-conductor female plugs; gray
	Item no.: 780-453 Staggered jumper; insulated; from 1 to 3; Spacing: 5 mm; suitable for 2-conductor female plugs; gray
	Item no.: 780-454 Staggered jumper; insulated; from 1 to 4; Spacing: 5 mm; suitable for 2-conductor female plugs; gray
1	Item no.: 780-455 Staggered jumper; insulated; from 1 to 5; Spacing: 5 mm; suitable for 2-conductor female plugs; gray
	Item no.: 780-456 Staggered jumper; insulated; from 1 to 6; Spacing: 5 mm; suitable for 2-conductor female plugs; gray
	Item no.: 780-457 Staggered jumper; insulated; from 1 to 7; Spacing: 5 mm; suitable for 2-conductor female plugs; gray
	Item no.: 780-458

Downloads Documentation

Additional Information

Technical explanations Apr 3, 2019

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

Staggered jumper; insulated; from 1 to 8; Spacing: 5 mm; suitable for 2-conductor female plugs; gray



CAD/CAE-Data

CAD data

2D/3D Models 280-653

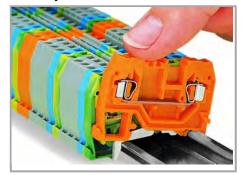
CAE data

EPLAN Data Portal 280-653

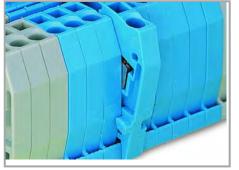
WSCAD Universe 280-653

Installation Notes

Assembly



Snapping a terminal block onto the carrier rail.



Quick assembly keys prevent reverse mounting.



Removing a terminal block from the assembly.



Steel carrier rails are not suited for PEN (ground and N-conductor) applications per EN 60947-7-2 (VDE 0611, Part 3).



Inserting a conductor







CAGE CLAMP® connection



Inserting insulation stops.

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.



CAGE CLAMP® connection Removing a conductor.

Commoning





Commoning using an adjacent jumper (280-402).

Push jumper down until fully inserted.

emmoning using an adjacent jumper

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 mm²/12 AWG)

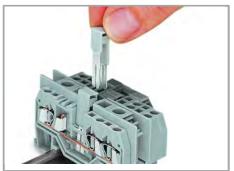
They are available in three conductor lengths (60, 110 and 250 mm), allowing up to 60 terminal blocks to be commoned depending on their width (see table on the right).



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.



Commoning terminal blocks of different sizes via step-down jumpers.

Testing



Testing with a test plug



L-type test plug modules fitted with CAGE CLAMP®



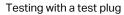
B-type test plug modules fitted with CAGE CLAMP®

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

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





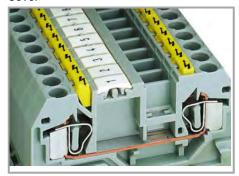




The test plug modules are directly plugged into the jumper contact slot of the current bar.

(picture shows 209-170 Test Plug Adapter).

Cover



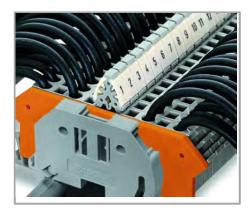
Protective warning markers inserted into the operating slots.

Marking



Marking via WMB Multi Marking System.





Terminal block marking with double marker carriers (209-128) for terminal blocks with side marking