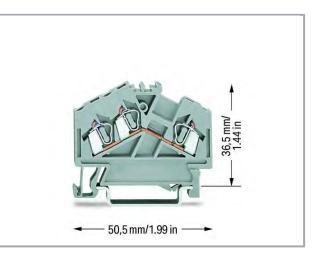
Data sheet | Item number: 280-641

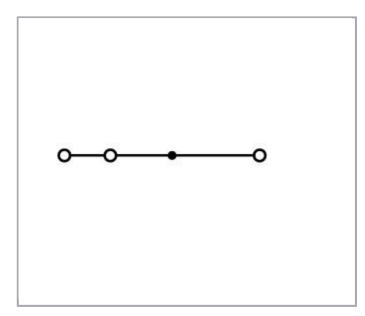
3-conductor through terminal block; 2.5 mm²; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP[®]; 2,50 mm²; gray











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.

Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors:: 2.5 mm² = 16 A $4 \text{ mm}^2 = 22 \text{ A}$

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	36,5 mm / 1.437 inch	
Depth	50,5 mm / 1.988 inch	

Mechanical data

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

Material Data

Color	gray
Insulation material	Polyamide 66 (PA 66)
Fire load	0.121 MJ
Weight	6.7 g



Commercial data

Product Group	1 (Rail Mounted Terminal Blocks)
Packaging type	BOX
Country of origin	DE
GTIN	4044918325806
Customs tariff number	85369010000

Approvals / Certificates

Country specific Approvals

			Certificate
Logo	Approval	Additional Approval Text	name
	CCA	EN 60947	2157201.01
KEUR	DEKRA Certification B.V.		
SP	CSA DEKRA Certification B.V.	C22.2	1536071

Ship Approvals

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

UL-Approvals



Logo	Approval	Additional Approval Text	Certificate name
91	UL UL International Germany GmbH	UL 1059	20190731- E45172

Counterpart

Compatible products

Carrier rail

Carrier rail	
O mage carriers seek	Item no.: 210-112 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm
1	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 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715
1122200 B	Item no.: 210-115 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm
	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 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver- colored
-	Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715
	Item no.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-



	colored
li)	Item no.: 210-504 Steel carrier rail; 35 x 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
P	Item no.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715
-	Item no.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715
Female plug	
	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
1994 - Angel -	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
	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
	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
	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
	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
	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 the second s	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 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 7-pole; gray
	Item no.: 232-138/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 8-pole; gray
	Item no.: 232-138/005-000/039-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 8-pole; gray
and the second s	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
and the second se	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
and the second se	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
	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
and the second s	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
	Item no.: 232-147/005-000/039-000

Subject to changes.



A A A A A A A A A A A A A A A A A A A	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 17-pole; gray
	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 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 20-pole; gray
STAL .	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
SHE	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
No. of Contraction	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
S.M.	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
S.M.	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
Call I	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
and the second	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



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Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 7-pole; gray

S.M.	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
S.M.	Item no.: 232-239/005-000 Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 9-pole; gray
S.M.	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
(III)	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
	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
a series	Item no.: 232-732/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray
5.119	Item no.: 232-733/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray



is not	Item no.: 232-734/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray
An and a second	Item no.: 232-734/005-000/039-000 THT female header; 0.6 x 1.0 mm solder pin; gray
is the	Item no.: 232-735/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray
and the second	Item no.: 232-735/005-000/039-000 THT female header; 0.6 x 1.0 mm solder pin; gray
A LEAD	Item no.: 232-736/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray
and the second s	Item no.: 232-736/005-000/039-000 THT female header; 0.6 x 1.0 mm solder pin; gray
a ton	Item no.: 232-738/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray
S. Mark	Item no.: 232-740/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray
a new second	Item no.: 232-742/005-000 THT female header; 0.6 x 1.0 mm solder pin; gray
a state	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
A service	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
(COM)	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
1. mar	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
	THT female header; 0.6 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 6-pole; gray



1 and a start

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

1. ange	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
A.T.	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
and the second	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
and a	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
and the second s	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
and a	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
and the second s	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
and a	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
and a	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
All and a second	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

Subject to changes.



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Server .	

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

-1	Item no.: 722-137/005-000/039-000
Anna	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
and the second second	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
stil	Item no.: 722-138/005-000/039-000
(11) and	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
	Item no.: 722-139/005-000
ALAMANT"	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
- out	Item no.: 722-139/005-000/039-000
Augusta .	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
	Item no.: 722-140/005-000
alianter.	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
August	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
and a state of the	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 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
anil	Item no.: 722-142/005-007/039-000
ALL AND THE REAL	Female connector for rail-mount terminal blocks; gray
1	Item no.: 722-143/005-000
aliant'	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
	Item no.: 722-144/005-000
alistic .	Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against
100 C	mismating; Pin spacing 5 mm; 14-pole; light gray

Item no.: 722-144/005-000/039-000



(and

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

; 0.6 x 1 mm pins; straight; 100% protected against
; 0.6 x 1 mm pins; straight; 100% protected against
; 0.6 x 1 mm pins; straight; 100% protected against bole; light gray
; 0.6 x 1 mm pins; straight; 100% protected against
; 0.6 x 1 mm pins; straight; 100% protected against pole; light gray
; 0.6 x 1 mm pins; angled; 100% protected against
; 0.6 x 1 mm pins; angled; 100% protected against ble; light gray
; 0.6 x 1 mm pins; angled; 100% protected against
; 0.6 x 1 mm pins; angled; 100% protected against ble; light gray
; 0.6 x 1 mm pins; angled; 100% protected against
; 0.6 x 1 mm pins; angled; 100% protected against ble; light gray
; 0.6 x 1 mm pins; angled; 100% protected against





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
	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
<u> </u>	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
<u>.</u>	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
<u>.</u>	Item no.: 722-240/005-000 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
	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
594 -	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

and a	ltem no.: 722-244/005-000
by and and	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
Ser.	ltem no.: 722-244/005-000/039-000
1 Same	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
and a star	ltem no.: 722-246/005-000
W. and and	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
fine .	ltem no.: 722-246/005-000/039-000
1. Same	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
	ltem no.: 722-250/005-000
by 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
tools	
1	ltem no.: 210-657
	Operating tool; Blade: 3.5 x 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
	Item no.: 210-720
	Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft
Jumper	
$(\gamma \gamma)$	V Item no.: 210-103 Wire commoning chain; insulated; 50 connections; black
The second	
\sim	1tem no.: 210-123
1 I	Wire commoning chain; insulated; 50 connections
\bigcirc	ltem no.: 249-123
	Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm ²
\frown	ltem no.: 249-125
	Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm ²
\frown	-
()	Item no.: 249-126 Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm ²
	r ush-in type wire jumper, insulated, wire lengur 110 min, Conductor cross section 0.75 min-
\bigcap	ltem no.: 249-127
5 C	Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm ²



G	Item no.: 280-402 Adjacent jumper; insulated; IN = IN terminal block; gray
1	Item no.: 280-409 Alternate jumper; insulated; IN = IN terminal block; gray
9	Item no.: 280-422 Adjacent jumper; insulated; IN = IN terminal block; yellow-green
П	Item no.: 280-482 Comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray
11	Item no.: 280-483 Comb-style jumper bar; insulated; 3-way; IN = IN terminal block; gray
11	Item no.: 280-484 Comb-style jumper bar; insulated; 4-way; IN = IN terminal block; gray
1111	Item no.: 280-485 Comb-style jumper bar; insulated; 5-way; IN = IN terminal block; gray
1111111	Item no.: 280-490 Comb-style jumper bar; insulated; 10-way; IN = IN terminal block; gray
Π	Item no.: 280-492 Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray
\mathcal{M}	Item no.: 709-110 Wire commoning chain; insulated; 4 connections; 3 x 110 mm; black
\cap	Item no.: 709-111 Wire commoning chain; insulated; 3 connections; 2 x 120 mm; black
\cap	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
	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



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Item no.: 780-458 Staggered jumper; insulated; from 1 to 8; Spacing: 5 mm; suitable for 2-conductor female plugs; gray

ferrule		
I	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	
A	Item no.: 216-104 Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated	
I	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white	
1	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	
L	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	
End plate		
	Item no.: 280-312 End and intermediate plate; 2.5 mm thick; gray	
	Item no.: 280-313 End and intermediate plate; 2.5 mm thick; orange	
	Item no.: 280-318 Separator plate; 2.5 mm thick; oversized; orange	
1	Item no.: 280-348 Separator plate; 2.5 mm thick; oversized; gray	
General acce	essories	
Sant	Item no.: 231-162/003-000 Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; Pin spacing 5 mm; 2-pole; gray	



Sum	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
hant	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
Sand	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
Same	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
and	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
Securit	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
anat	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
hant	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
and	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
and the	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
anne	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
Securit	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
r » ->	Item no.: 231-668 Lockout caps; for covering unused clamping units; gray
\$~ _ ~ ~	Item no.: 231-669 Lockout caps; for covering unused clamping units; orange



	Item no.: 281-407 Test plug; 6 mm wide; Nominal current 24 A; for 0.08 mm² - 2.5 mm²; 2,50 mm²; gray
-	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
hang	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
want	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
want	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
1990	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
19997	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
19997	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
19997	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
19997	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
1999	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
want	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
Lines P.	Item no.: 721-173/003-000 Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 13-pole; light gray

Item no.: 721-174/003-000



www

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

with the second	Item no.: 721-175/003-000 Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against	
1	mismating; Pin spacing 5 mm; 15-pole; light gray	
-	Item no.: 721-176/003-000	
HALL	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.: 721-180/003-000	-
100077	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	
Insulation sto	p	
-000	Item no.: 280-470	
C. S. S.	Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white	
00000	Item no.: 280-471	
Gut	Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray	
-	ltem no.: 280-472	-
	Insulation stop; 0.75 - 1 mm²; 5 pieces/strip	
check		
	ltem no.: 209-170	
R.	Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm² - 10 mm² tbs; gray	
0	Item no.: 249-106	
T.	B-type test plug module; modular; 1,50 mm²; gray	
1	ltem no.: 249-107	-
	B-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray	
0	ltem no.: 249-141	-
Ψ.	L-type test plug module; modular; with spring-loaded contact pin; Center module; 1,50 mm²; gray	
0	ltem 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	
10	Item no.: 280-418	-
Ť.	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	
1.	Spacer module; modular; bridging commoned terminal blocks; gray	
Protective Wa	arning Marker	
	Item no.: 280-415	
	Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks; yellow	

Marking accessories



æ	Item no.: 2009-115 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white
•	Item no.: 2009-115/000-002 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow
æ	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
æ	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
æ	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
æ	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
æ	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
æ	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
à.	Item no.: 209-128 Adaptor; gray
P	Item no.: 209-140 Group marker carrier; gray
F	Item no.: 209-141 Group marker carrier; gray
P	Item no.: 209-142 Group marker carrier; gray
C	Item no.: 209-185 Adaptor; gray
1	Item no.: 210-612 Marking strips; for self-marking; plain; Self-adhesive; transparent
-	Item no.: 249-105 Group marker carrier; gray



mmm	Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white
	Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type; yellow
	Item no.: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type; red
	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
THINTIN	Item no.: 793-5501 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; white
	Item no.: 793-5501/000-002 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; yellow
	Item no.: 793-5501/000-005 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; red
	Item no.: 793-5501/000-006 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; blue
	Item no.: 793-5501/000-007 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap- on type; gray
Subject to cha	anges. Please also observe the further product documentation!

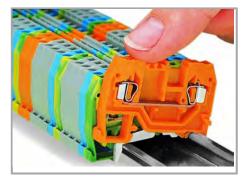


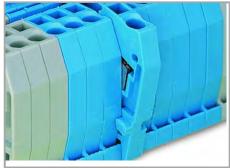
	Item no.: 793-5501/000-012 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap
	on type; orange
	Item no.: 793-5501/000-017
	WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap on type; green
-	Item no.: 793-5501/000-023
	WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap on type; light green
	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; snap on type; violet
assembling	
(in the second	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
Downloads	
Documenta	ation
Additional Info	ormation
Technical exp	planations Apr 3, 2019
CAD/CAE-D	Data
CAD data	
2D/3D Model	s 280-641
CAE data	
EPLAN Data F	Portal 280-641
WSCAD Unive	erse 280-641
Installation	Notes

Installation Notes

Assembly







Removing a terminal block from the

assembly.

Snapping a terminal block onto the carrier rail.

Quick assembly keys prevent reverse mounting.

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

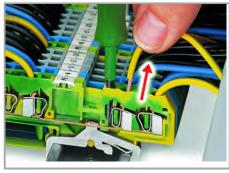


CAGE CLAMP® connection

Inserting a conductor.







CAGE CLAMP[®] connection

CAGE CLAMP® connection Removing a conductor.



Inserting insulation stops.

Inserting a conductor.

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

Commoning

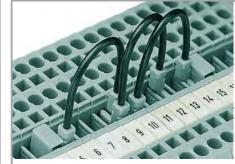


Commoning using an adjacent jumper (280-402).

Push jumper down until fully inserted.



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.





4-conductor through terminal blocks, angled type –

formation of groups with 3-way, comb-style jumper bars

Testing

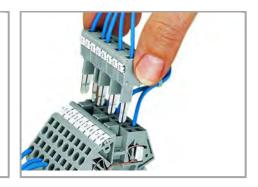


Testing with a test plug

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

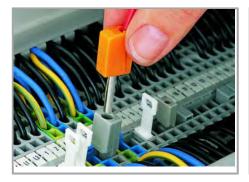


L-type test plug modules fitted with CAGE CLAMP®



B-type test plug modules fitted with CAGE CLAMP®





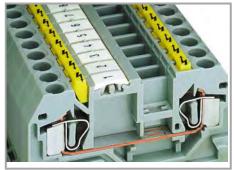


Testing with a test plug

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.