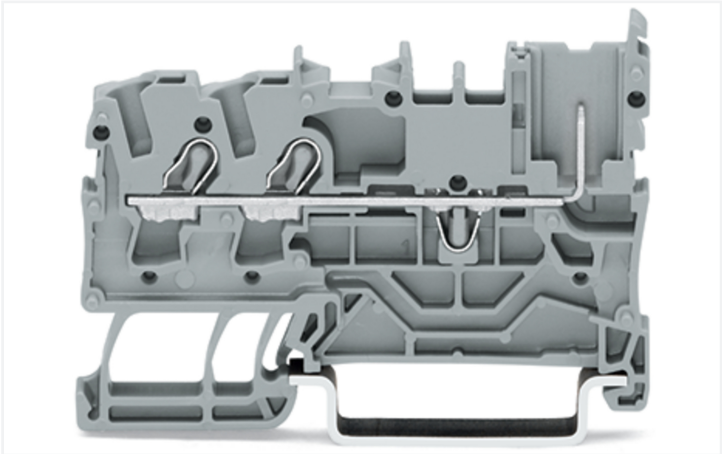
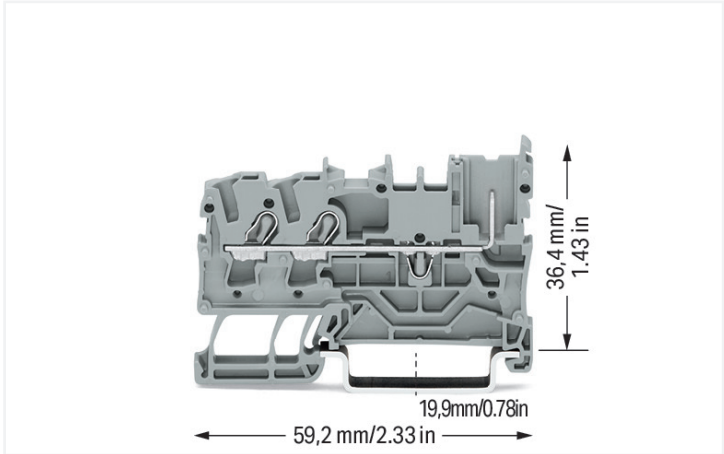


Data Sheet | Item Number: 2022-1301
2-conductor/1-pin carrier terminal block; 2.5 mm²; for DIN-rail 35 x 15 and 35 x 7.5;
Push-in CAGE CLAMP®; 2,50 mm²; gray
<https://www.wago.com/2022-1301>



Color: ■ gray

2-conductor/1-pin carrier terminal block, 2022 Series, operating tool

Enjoy easy electrical installations with 2-conductor/1-pin carrier terminal block (item number 2022-1301). Ensure that the strip lengths are between 10 and 12 mm when connecting conductors to 2-conductor/1-pin carrier terminal block. Pluggable rail-mount terminal blocks are primarily found in switchgear units and control systems, most notably in railroad technology. These innovative systems combine the benefits of rail-mount terminal blocks and connectors for a flexible and reliable wiring system. You also have the option of pre-assembling installations, which not only makes production but also installation, operation, and maintenance more efficient and cost-effective. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. Solid and fine-stranded conductors with ferrules can be pushed in without needing to use any tools—all thanks to its pluggable design. Depending on the type of conductor, 2-conductor/1-pin carrier terminal block is designed for conductor cross sections ranging from 0.25 mm² to 4 mm².

This pluggable rail-mount terminal block is operated with an operating tool.

Notes	
Safety Information	A separator plate (Item No. 209-191) or a 10 mm end stop (Item No. 249-117) must be placed at the end of a WAGO X-COM®S-SYSTEM terminal strip.

Electrical data						
Ratings per		IEC/EN 60947-7-1			Approvals per	
					UL 1059	
Overvoltage category		III	III	II	Use group	B C D
Pollution degree		3	2	2	Rated voltage	600 V 600 V -
Nominal voltage		690 V	-	-	Rated current	20 A 20 A -
Rated impulse withstand voltage		6 kV	-	-		
Rated current		24 A	-	-		
Current at conductor cross-section (max.) mm ²		32 A	-	-		



Approvals per		CSA 22.2 No 158		
Use group	B	C	D	
Rated voltage	-	600 V	-	
Rated current	-	20 A	-	

Power Loss	
Power loss, per pole (potential)	0.7661 W
Rated current I _N for power loss specification	24 A
Resistance value for specified, current-dependent power loss	0.00133 Ω

General information	
Wiring direction	Front-entry wiring

Connection Data	
Clamping units	2
Female plug slots	1
Total number of potentials	1
Number of levels	1

Connection 1	
Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	2.5 mm²
Solid conductor	0.25 ... 4 mm² / 22 ... 12 AWG
Solid conductor; push-in termination	1 ... 4 mm² / 18 ... 12 AWG
Fine-stranded conductor	0.25 ... 4 mm² / 22 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm² / 22 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm² / 18 ... 14 AWG
Note (conductor cross-section)	Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination.
Strip length	10 ... 12 mm / 0.39 ... 0.47 inches
Wiring direction	Front-entry wiring

Physical data	
Width	5.2 mm / 0.205 inches
Height	59.2 mm / 2.331 inches
Depth from upper-edge of DIN-rail	36.4 mm / 1.433 inches

Mechanical data	
Mounting type	DIN-35 rail
Marking level	Center/side marking

Material data	
Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.123 MJ
Weight	6.3 g



Environmental requirements	
Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C

Commercial data	
Product Group	18 (X-COM-System)
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	CN
GTIN	4050821145127
Customs tariff number	85366990990

Product Classification	
UNSPSC	39121410
eCl@ss 10.0	27-14-11-41
eCl@ss 9.0	27-14-11-20
ETIM 9.0	EC000897
ETIM 10.0	EC000897
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates	
General approvals	Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR CCA NL-7864
CSA CSA Group	C22.2 No. 158	2437422
DEKRA DEKRA Certification B.V.	EN 60947	71-145809
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-116567
UL Underwriters Laboratories Inc.	UL 1059	E45172

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications		
  		
Approval	Standard	Certificate Name
ABS American Bureau of Shipping	EN 60947	24-0152298-PDA
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
PRS Polski Rejestr Statków	-	TE/1094/880590/23



Downloads

Environmental Product Compliance

Compliance Search			
Environmental Product Compliance 2022-1301			

Documentation

Bid Text			
2022-1301	19.02.2019	xml 4.01 KB	
2022-1301	14.05.2019	docx 15.34 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 2022-1301	

CAE data	
EPLAN Data Portal 2022-1301	
WSCAD Universe 2022-1301	
ZUKEN Portal 2022-1301	

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 2022-101 1-conductor female connector; Push-in CAGE CLAMP®; 4 mm²; Pin spacing 5.2 mm; 1-pole; 4,00 mm²; gray

1.2 Required Accessories

1.2.1 End plate

1.2.1.1 End plate



Item No.: 2022-1391 End and intermediate plate; 1 mm thick; gray
--



Item No.: 2022-1392 End and intermediate plate; 1 mm thick; or- ange



1.3 Optional Accessories

1.3.1 Coding

1.3.1.1 Coding



Item No.: 2022-100
Carrier with 6 coding pins; for coding of female plugs; orange

1.3.2 DIN-rail

1.3.2.1 Mounting accessories



Item No.: 210-196
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item No.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



Item No.: 210-197
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



Item No.: 210-114
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



Item No.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored



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



Item No.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

1.3.3 Ferrule

1.3.3.1 Ferrule



Item No.: 216-241
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-242
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-262
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-243
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-263
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-244
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-264
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-246
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-266
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

1.3.4 Insulation stop

1.3.4.1 Insulation stop


Item No.: 2002-171

Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray


Item No.: 2002-172

Insulation stop; 0.75 - 1 mm²; 5 pieces/strip; dark gray

1.3.5 Jumper

1.3.5.1 Jumper


Item No.: 2002-400

Continuous jumper; 2-way; insulated; light gray


Item No.: 2002-413

Continuous jumper; 3-way; insulated; light gray


Item No.: 2002-415

Continuous jumper; 5-way; insulated; light gray


Item No.: 2002-423/000-006

Continuous jumper; from 1 to 3; insulated; blue


Item No.: 2002-423

Continuous jumper; from 1 to 3; insulated; light gray


Item No.: 2002-423/000-005

Continuous jumper; from 1 to 3; insulated; red


Item No.: 2002-424/000-006

Continuous jumper; from 1 to 4; insulated; blue


Item No.: 2002-424

Continuous jumper; from 1 to 4; insulated; light gray


Item No.: 2002-424/000-005

Continuous jumper; from 1 to 4; insulated; red


Item No.: 2002-406/020-000

Delta jumper; insulated; light gray


Item No.: 2002-410/000-006

Jumper; 10-way; insulated; blue


Item No.: 2002-410

Jumper; 10-way; insulated; light gray


Item No.: 2002-410/000-005

Jumper; 10-way; insulated; red


Item No.: 2002-402/000-006

Jumper; 2-way; insulated; blue


Item No.: 2002-402

Jumper; 2-way; insulated; light gray


Item No.: 2002-402/000-005

Jumper; 2-way; insulated; red


Item No.: 2002-403/000-006

Jumper; 3-way; insulated; blue


Item No.: 2002-403

Jumper; 3-way; insulated; light gray


Item No.: 2002-403/000-005

Jumper; 3-way; insulated; red


Item No.: 2002-404/000-006

Jumper; 4-way; insulated; blue


Item No.: 2002-404

Jumper; 4-way; insulated; light gray


Item No.: 2002-404/000-005

Jumper; 4-way; insulated; red


Item No.: 2002-405/000-006

Jumper; 5-way; insulated; blue


Item No.: 2002-405

Jumper; 5-way; insulated; light gray


Item No.: 2002-405/000-005

Jumper; 5-way; insulated; red


Item No.: 2002-406/000-006

Jumper; 6-way; insulated; blue


Item No.: 2002-406

Jumper; 6-way; insulated; light gray


Item No.: 2002-406/000-005

Jumper; 6-way; insulated; red


Item No.: 2002-407/000-006

Jumper; 7-way; insulated; blue


Item No.: 2002-407

Jumper; 7-way; insulated; light gray


Item No.: 2002-407/000-005

Jumper; 7-way; insulated; red


Item No.: 2002-408/000-006

Jumper; 8-way; insulated; blue


Item No.: 2002-408

Jumper; 8-way; insulated; light gray


Item No.: 2002-408/000-005

Jumper; 8-way; insulated; red


Item No.: 2002-409/000-006

Jumper; 9-way; insulated; blue


Item No.: 2002-409

Jumper; 9-way; insulated; light gray


Item No.: 2002-409/000-005

Jumper; 9-way; insulated; red


Item No.: 2002-440

Jumper; from 1 to 10; insulated; light gray


Item No.: 2002-433

Jumper; from 1 to 3; insulated; light gray


Item No.: 2002-434

Jumper; from 1 to 4; insulated; light gray


Item No.: 2002-435

Jumper; from 1 to 5; insulated; light gray


Item No.: 2002-436

Jumper; from 1 to 6; insulated; light gray


Item No.: 2002-437

Jumper; from 1 to 7; insulated; light gray


Item No.: 2002-438

Jumper; from 1 to 8; insulated; light gray



1.3.5.1 Jumper



Item No.: 2002-439
Jumper; from 1 to 9; insulated; light gray



Item No.: 2002-480
Staggered jumper; 10-way; insulated; light gray



Item No.: 2002-481
Staggered jumper; 11-way; insulated; light gray



Item No.: 2002-482
Staggered jumper; 12-way; insulated; light gray



Item No.: 2002-473/011-000
Staggered jumper; 2-way; from 1 to 3; insulated; light gray



Item No.: 2002-472
Staggered jumper; 2-way; insulated; light gray



Item No.: 2002-473
Staggered jumper; 3-way; insulated; light gray



Item No.: 2002-475/011-000
Staggered jumper; 3-way; insulated; light gray



Item No.: 2002-474
Staggered jumper; 4-way; insulated; light gray



Item No.: 2002-475
Staggered jumper; 5-way; insulated; light gray



Item No.: 2002-476
Staggered jumper; 6-way; insulated; light gray



Item No.: 2002-477
Staggered jumper; 7-way; insulated; light gray



Item No.: 2002-478
Staggered jumper; 8-way; insulated; light gray



Item No.: 2002-479
Staggered jumper; 9-way; insulated; light gray



Item No.: 2002-477/011-000
Staggered jumper; insulated; light gray



Item No.: 2002-479/011-000
Staggered jumper; insulated; light gray



Item No.: 2002-481/011-000
Staggered jumper; insulated; light gray



Item No.: 2002-405/011-000
Star point jumper; 3-way; insulated; light gray



Item No.: 210-103
Wire commoning chain; 0.5 mm²; insulated; black



Item No.: 210-123
Wire commoning chain; insulated; blue

1.3.6 Marking

1.3.6.1 Group marker carrier



Item No.: 2009-191
Group marker carrier; gray



Item No.: 2009-192
Group marker carrier; gray



Item No.: 2009-193
Group marker carrier; gray

1.3.6.2 Marker



Item No.: 2009-145
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



Item No.: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



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.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.3.6.3 Marker carrier



Item No.: 2002-161
Adaptor; gray



Item No.: 2009-198
Adaptor; gray

1.3.6.4 Marking strip



Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white



1.3.7 Protective warning marker

1.3.7.1 Cover



Item No.: 2002-115
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.3.8 Push-in type wire jumper

1.3.8.1 Jumper



Item No.: 2009-414
Push-in type wire jumper; 1.5 mm²; insulated; 110 mm long; black



Item No.: 2009-414/000-005
Push-in type wire jumper; 1.5 mm²; insulated; 110 mm long; black



Item No.: 2009-416
Push-in type wire jumper; 1.5 mm²; insulated; 250 mm long; black



Item No.: 2009-414/000-006
Push-in type wire jumper; insulated; 110 mm long; black



Item No.: 2009-412
Push-in type wire jumper; insulated; 60 mm long; black

1.3.9 Screwless end stop

1.3.9.1 Mounting accessories



Item No.: 249-117
Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray



Item No.: 249-116
Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.3.10 Test and measurement

1.3.10.1 Testing accessories



Item No.: 2002-560
Modular TOPJOB®S connector; modular; for jumper contact slot; 10-pole; gray



Item No.: 2002-511
Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; gray



Item No.: 2002-552
Modular TOPJOB®S connector; modular; for jumper contact slot; 2-pole; gray



Item No.: 2002-553
Modular TOPJOB®S connector; modular; for jumper contact slot; 3-pole; gray



Item No.: 2002-554
Modular TOPJOB®S connector; modular; for jumper contact slot; 4-pole; gray



Item No.: 2002-555
Modular TOPJOB®S connector; modular; for jumper contact slot; 5-pole; gray



Item No.: 2002-556
Modular TOPJOB®S connector; modular; for jumper contact slot; 6-pole; gray



Item No.: 2002-557
Modular TOPJOB®S connector; modular; for jumper contact slot; 7-pole; gray



Item No.: 2002-558
Modular TOPJOB®S connector; modular; for jumper contact slot; 8-pole; gray



Item No.: 2002-559
Modular TOPJOB®S connector; modular; for jumper contact slot; 9-pole; gray



Item No.: 2002-549
Spacer module; modular; e.g., for bridging commoned terminal blocks; gray



Item No.: 2009-174
Test plug adapter; for 4 mm Ø test plugs; for testing TOPJOB®S rail-mounted terminal blocks; gray



Item No.: 2009-182
Testing tap; for max. 2.5 mm²; tool-free connection for individual test wires 0.08 - 2.5 mm; gray



Item No.: 859-500
WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 10 mm uninsulated; Test lead for soldering up to 0,5mm²

1.3.11 Tool

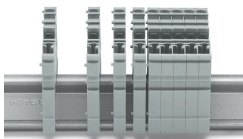
1.3.11.1 Operating tool



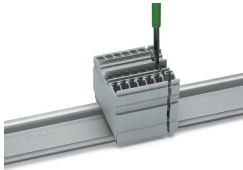
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

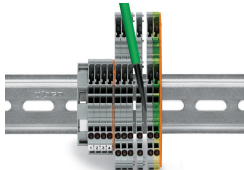
Installation



Snap individual carrier terminal blocks onto the DIN-rail and slide together.

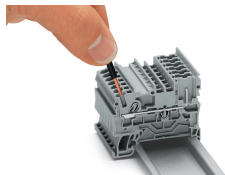


Open the assembly by laterally sliding a block via operating tool (3.5 x 0.5 mm blade).



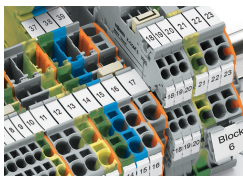
Separate terminal block assembly and slide individual terminal blocks laterally using an operating tool.

Conductor termination

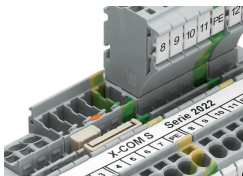


Push-in CAGE CLAMP® enables solid conductors to be connected by simply pushing them into the unit.

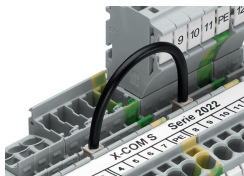
Commoning



Commoning X-COM®S-SYSTEM Terminal Blocks using jumpers for TOPJOB® S Terminal Blocks. An end plate provides connection to TOPJOB® S Terminal Blocks. 2020 and 2022 Series Terminal Blocks are combinable. Jumper slots are on the same level for both series.

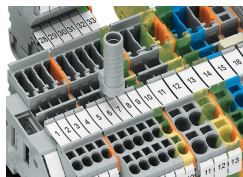


Pairing push-in comb style jumpers.



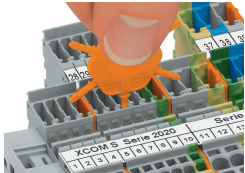
Commoning with push-in type wire jumper.

Testing



Test plug adapter (Item No. 2009-174) for 4 mm test plugs or banana plugs – also suitable for X-COM®S-SYSTEM-MINI Terminal Blocks.

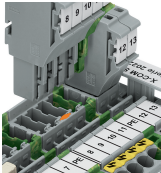
Coding



Insert coding pin into the corresponding slot and twist it off.

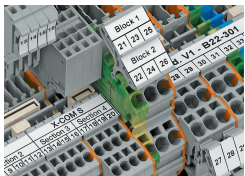


Coding a female plug: remove coding finger using a suitable tool.

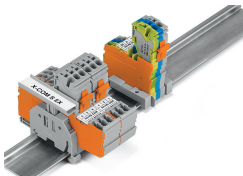


Insert a coding pin (Item No. 2022-100) into the corresponding location of the carrier terminal block.

Marking



Clear marking via large marking area



Group marking with height-adjustable group marker carrier (Item No. 2009-163)

Security



Carrier terminal blocks and female plugs are touch-proof.