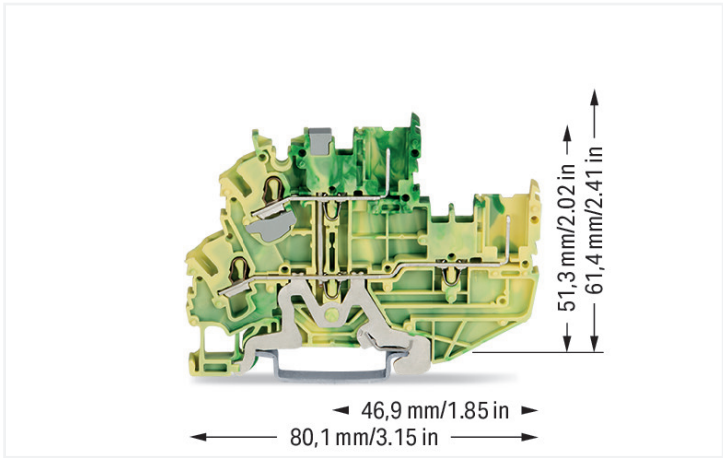


Data Sheet | Item Number: 2022-2207/999-953

2-conductor/2-pin, double-deck carrier terminal block; 2-conductor/2-pin ground terminal block; 2.5 mm²; PE; suitable for Ex nA applications; internal commoning; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 2,50 mm²; green-yellow



<https://www.wago.com/2022-2207/999-953>



Color: ■ green-yellow

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

2-conductor/2-pin double-deck carrier terminal block (item number 2022-2207/999-953) simplifies electrical installations. Ensure that the strip lengths are between 10 and 12 mm when connecting conductors to 2-conductor/2-pin double-deck 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 properties 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®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, featuring a winning design: both solid and fine-stranded conductors with ferrules can be directly inserted without the need for any preparation, such as crimping the ferrule. Depending on the type of conductor, 2-conductor/2-pin double-deck carrier terminal block is suitable for conductor cross sections ranging from 0.25 mm² to 4 mm².

An operating tool is used to operate this pluggable rail-mount terminal block. This product is designed for specific Ex applications (please refer to the product datasheet).

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					General information	
Ratings per		IEC/EN 60947-7-2			Wiring direction	
Overvoltage category		III	III	II	Front-entry wiring	
Pollution degree		3	2	2		
Nominal voltage		-	-	-		
Rated impulse withstand voltage		-	-	-		
Rated current		-	-	-		

Connection Data

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

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	0.75 ... 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	80.1 mm / 3.154 inches
Depth from upper-edge of DIN-rail	51.3 mm / 2.02 inches

Mechanical data

Potential marking	PE
Mounting type	DIN-35 rail
Marking level	Side marking

Material data

Note (material data)	Information on material specifications can be found here
Color	green-yellow
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.255 MJ
Weight	15.9 g

Environmental requirements

Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C
Environmental Testing	
Test specification: Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Mounting location	Service life test, Category 1, Class A/B
Functional test with noise-like oscillations	Test passed according to Section 8 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.101g (highest test level used for all axes)

Environmental Testing

Test duration per axis	10 min.
Test directions	X, Y and Z axes
Monitoring of contact faults and interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like oscillations	Test passed according to Section 9 of the standard
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
Acceleration	0.572g (highest test level used for all axes)
Test duration per axis	5 h
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shock pulse form	Half sine
Acceleration	5g (highest test level used for all axes)
Shock duration	30 ms
Number of shocks (per axis)	3 pos. und 3 neg.
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Vibration and shock stress for rolling stock equipment	Passed

Commercial data

PU (SPU)	50 pcs
Packaging type	Box
Country of origin	CN
GTIN	4055143257824
Customs tariff number	85366990990

Product Classification

UNSPSC	39121410
eCl@ss 10.0	27-14-11-41
eCl@ss 9.0	27-14-11-41
ETIM 9.0	EC000901
ETIM 10.0	EC000901
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	Approval	Standard	Certificate Name
CSA CSA Group	C22.2 No. 158	2437422	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
DEKRA DEKRA Certification B.V.	EN 60947	71-145809	Railway WAGO GmbH & Co. KG	-	Z00004394.000
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-116567	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UL Underwriters Laboratories Inc.	UL 1059	E45172			

Approvals for hazardous areas

  		
Approval	Standard	Certificate Name
ATEX Physikalisch Technische Bundesanstalt	EN IEC 60079-0	PTB 13 ATEX 1004 U (II 3 G Ex ec II C Gc)
CCC CNEX	GB/T 3836.3	2020312313000255 (Ex ec IIC Gc)
IECEx Physikalisch Technische Bundesanstalt	IEC 60079-0	IECEx PTB 13.0004U (Ex ec IIC Gc)

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 2022-2207/999-953	

Documentation

Bid Text			
2022-2207/999-953	19.02.2019	xml 4.09 KB	
2022-2207/999-953	14.05.2019	docx 15.53 KB	



CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 2022-2207/999-953	EPLAN Data Portal 2022-2207/999-953
	WSCAD Universe 2022-2207/999-953
	ZUKEN Portal 2022-2207/999-953

1 Compatible Products
1.1 System counterpart
1.1.1 Female connector/socket



Item No.: 2022-102/999-953
1-conductor female connector; Push-in CAGE CLAMP®; 4 mm²; Pin spacing 5.2 mm; 2-pole; Centered locking levers; 4,00 mm²; gray

1.2 Required Accessories
1.2.1 End plate
1.2.1.1 End plate



Item No.: 2022-2291
End and intermediate plate; 1 mm thick; gray



Item No.: 2022-2292
End and intermediate plate; 1 mm thick; orange

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.: 210-508
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; 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; silver-colored



Item No.: 210-506
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; 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; according to EN 60715; "Hole width 25 mm; silver-colored



Item No.: 210-504
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; 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



Item No.: 210-505
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; 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.: 216-284
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



Item No.: 216-286
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

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



1.3.5.1 Jumper



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; 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.: 2002-121
Adaptor; gray



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.: 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

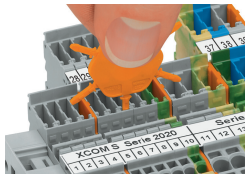
1.3.11.1 Operating tool



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

Installation Notes

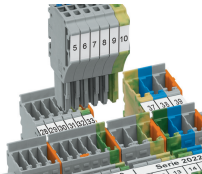
Coding



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

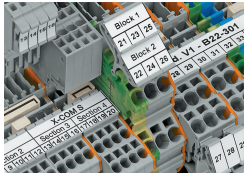


Coding a female plug: remove coding fin-finger using a suitable tool.

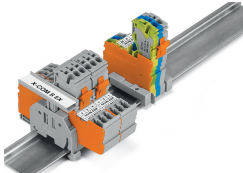


Insert coded female plug into X-COM®S-SYSTEM terminal block assembly.

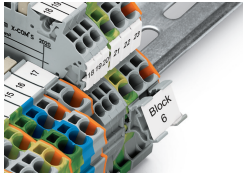
Marking



Clear marking via large marking area



Group marking with height-adjustable group marker carrier (2009-163)



Marking via marker carrier (Item No. 2009-198)