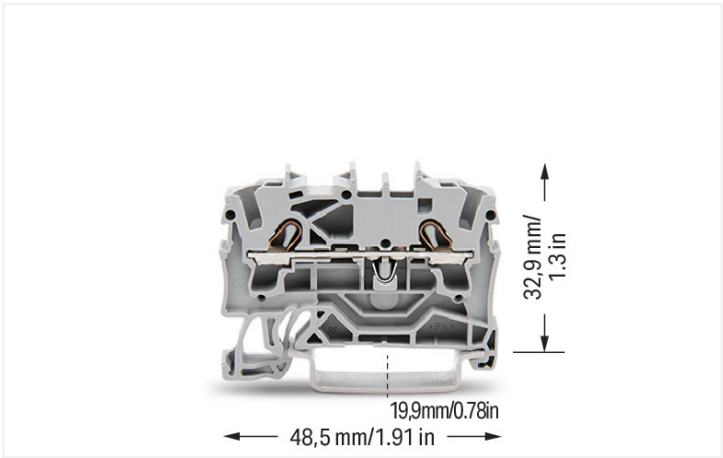


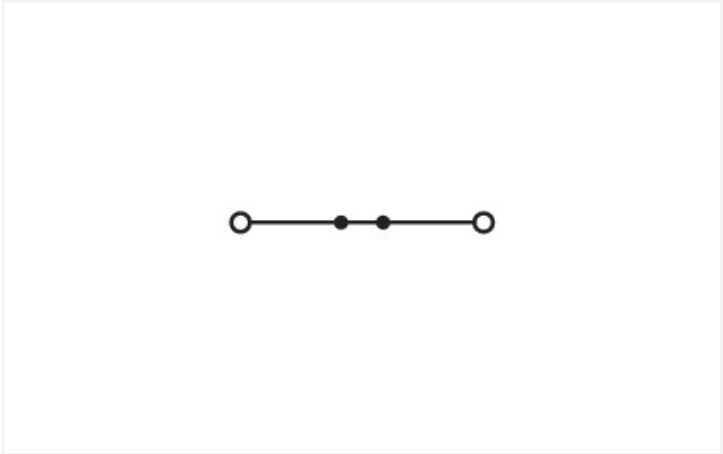
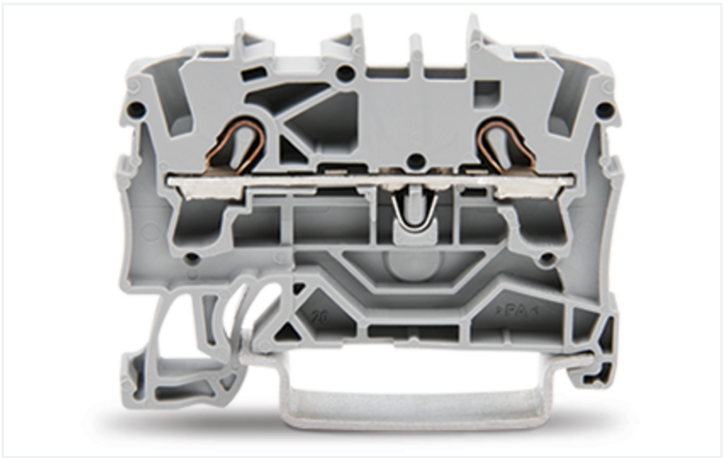
Data Sheet | Item Number: 2002-1201

Regletă de trecere cu 2 conductori; 2,5 mm²; potrivit pentru aplicații Ex e II; marcare laterală și centru; pentru șină DIN 35 x 15 și 35 x 7,5; CAGE CLAMP® înclichetare; 2,50 mm²; gri

<https://www.wago.com/2002-1201>



Color: ■ gri



Similar to illustration

Through terminal block, 2002 Series, operating tool

This through terminal block (item number 2002-1201) is designed to connect conductors quickly and easily. Whether for use in industry or building installations, our rail-mount through terminal blocks allow you to quickly and securely connect electrical conductors. They're perfect for either classic through-wiring or distributing potential, depending on the variant. This through rail-mount terminal block has a rated voltage of 800 V and can handle currents up to 24 A. Strip lengths must be between 10 mm and 12 mm when connecting conductors to this through terminal block. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® technology provides a universal connection solution for all conductor types. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. Dimensions: 5.2 x 48.5 x 39.5 mm (width x height x depth). This through terminal block is suitable for conductor cross sections ranging from 0.25 mm² to 4 mm². It has one level. You can connect a single potential using the two clamping points. The gray housing is made of polyamide (PA66) for insulation. This through rail-mount terminal block is operated with an operating tool. Our TOPJOB® S rail-mount terminal blocks guarantee secure electrical connections across many industrial applications and modern building installations. They simplify wiring, as you can quickly plug in solid, stranded, and fine-stranded conductors with ferrules. These through rail-mount terminal blocks are mounted using DIN-35 rails. The front-entry wiring means you can connect copper conductors. The two jumper slots enable potential distribution to other clamping points. This product is designed for specific Ex applications (please refer to the product datasheet).

Electrical data				
Ratings per		IEC/EN 60947-7-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		800 V	-	-
Rated surge voltage		8 kV	-	-
Rated current		24 A	-	-
Ratings per		IEC/EN 60947-7-1		
Current at conductor cross-section (max.) mm²		32 A	-	-



Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		600 V	600 V	-
Rated current		20 A	20 A	-

Ex information	
Reference hazardous areas	See application instructions in section “Knowledge and Downloads – Documentation – Additional Information: Technical Section; Technical Explications”
Ratings per	ATEX: PTB 03 ATEX 1162 U / IECEx: PTB 03.0004U (Ex eb IIC Gb)
Rated voltage EN (Ex e II)	550 V
Rated current (Ex e II)	22 A
Rated current (Ex e II) with jumper	20 A

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

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

Connection data

Clamping units	2
Total number of potentials	1
Number of levels	1
Number of jumper slots	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	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 inci
Wiring direction	Front-entry wiring

Physical data

Width	5,2 mm / 0.205 inci
Height	48,5 mm / 1.909 inci
Depth from upper-edge of DIN-rail	32,9 mm / 1.295 inci
Depth	39,5 mm / 1.555 inci

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	gri
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.109 MJ
Weight	5 g

Environmental requirements	
Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C
Environmental Testing (Environmental Conditions)	
Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Installation location	Service life test, Category 1, Class A/B
Function test with noise-like vibration	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)
Test duration per axis	10 min.
Test directions	X, Y and Z axes
Monitoring for contact faults/interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 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 test scope: Monitoring for contact faults/interruptions	Passed
Extended test scope: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shock 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 test scope: Monitoring for contact faults/interruptions	Passed
Extended test scope: Voltage drop measurement before and after each axis	Passed
Vibration and shock stress for rolling stock equipment	Passed



Commercial data	
Product Group	22 (TOPJOB S)
PU (SPU)	100 Buc.
Packaging type	Box
GTIN	4017332999168

Product classification	
UNSPSC	39121410
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 9.0	EC000897
ETIM 8.0	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	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-8054	ATEX-Attestation of Con- formity WAGO GmbH & Co. KG	-	-
CSA CSA Group	C22.2 No. 158	154112	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-124163	Railway WAGO GmbH & Co. KG	-	Railway Ready
UL Underwriters Laboratories Inc.	UL 1059	E45172	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications			Approvals for hazardous areas		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA	AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
BV Bureau Veritas S.A.	EN 60947	38586/B0 BV	ATEX Physikalisch Technische Bundesanstalt	EN 60079	PTB 03 ATEX 1162 U (II2G Ex eb IIC Gb, IM2 Ex eb IMb)
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2	CCC CQST/CNEx	GB/T 3836.3	2020312313000238 (Ex eb IIC Gb, Ex eb I Mb)
			IECEx Physikalisch Technische Bundesanstalt	IEC 60079	IECEx PTB 03.0004U (Ex eb IIC Gb or Ex eb I Mb)
			INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV 12.1307 U
			KTL Korea Testing Laboratory	EN IEC 60079-0, EN IEC 60079-7	19-KA4B0-0921U



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2002-1201

Download icon

Documentation				
Bid Text				
2002-1201	29.04.2019	xml	4.15 KB	Download icon
2002-1201	23.04.2019	docx	14.68 KB	Download icon

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 2002-1201	EPLAN Data Portal 2002-1201
Download icon	Download icon
	WSCAD Universe 2002-1201
	Download icon
	ZUKEN Portal 2002-1201
	Download icon

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate

Item No.: 2002-1291
Placă de capăt și placă intermediară; Grosime de 0,8 mm; gri

Item No.: 2002-1292
Placă de capăt și placă intermediară; Grosime de 0,8 mm; portocaliu

Item No.: 209-191
Separator pentru aplicații Ex e/Ex i; Grosime de 3 mm; Lățime de 120 mm; portocaliu

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories

Item No.: 210-196
Șină DIN din aluminiu; 35 x 8,2 mm; Grosime de 1,6 mm; 2 m lungime; necreatat; similar cu EN 60715; argintiu

Item No.: 210-198
Șină DIN din cupru; 35 x 15 mm; Grosime de 2,3 mm; 2 m lungime; necreatat; conform EN 60715; arămiu

Item No.: 210-508
Șină DIN din oțel; 35 x 15 mm; Grosime de 1,5 mm; 2 m lungime; creatat; galvanizat; similar cu EN 60715; argintiu

Item No.: 210-197
Șină DIN din oțel; 35 x 15 mm; Grosime de 1,5 mm; 2 m lungime; creatat; similar cu EN 60715; argintiu



1.2.1.1 Mounting accessories



Item No.: 210-506
Șină DIN din oțel; 35 x 15 mm; Grosime de 1,5 mm; 2 m lungime; necreat; galvanizat; similar cu EN 60715; argintiu



Item No.: 210-114
Șină DIN din oțel; 35 x 15 mm; Grosime de 1,5 mm; 2 m lungime; necreat; similar cu EN 60715; argintiu



Item No.: 210-118
Șină DIN din oțel; 35 x 15 mm; Grosime de 2,3 mm; 2 m lungime; necreat; conform EN 60715; argintiu



Item No.: 210-115
Șină DIN din oțel; 35 x 7,5 mm; Grosime de 1 mm; 2 m lungime; creat; conform EN 60715; "Lățime orificiu 18 mm; argintiu



Item No.: 210-112
Șină DIN din oțel; 35 x 7,5 mm; Grosime de 1 mm; 2 m lungime; creat; conform EN 60715; "Lățime orificiu 25 mm; argintiu



Item No.: 210-504
Șină DIN din oțel; 35 x 7,5 mm; Grosime de 1 mm; 2 m lungime; creat; galvanizat; conform EN 60715; argintiu



Item No.: 210-113
Șină DIN din oțel; 35 x 7,5 mm; Grosime de 1 mm; 2 m lungime; necreat; conform EN 60715; argintiu



Item No.: 210-505
Șină DIN din oțel; 35 x 7,5 mm; Grosime de 1 mm; 2 m lungime; necreat; galvanizat; conform EN 60715; argintiu

1.2.2 End plate

1.2.2.1 End plate



Item No.: 2002-1293
Placă separator; Grosime de 2 mm; supra-dimensionat; gri



Item No.: 2002-1294
Placă separator; Grosime de 2 mm; supradimensionat; portocaliu



Item No.: 209-190
Separator pentru aplicații Ex e/Ex i; Grosime de 3 mm; Lățime de 90 mm; portocaliu

1.2.3 Ferrule

1.2.3.1 Ferrule



Item No.: 216-241
Manșon de capăt; Manșon pentru 0,5 mm² / 20 AWG; izolat; galvanizat cu cositor; cupru electrolitic; sertizat etanș la gaz; conform DIN 46228, partea 4/09.90; alb



Item No.: 216-242
Manșon de capăt; Manșon pentru 0,75 mm² / 18 AWG; izolat; galvanizat cu cositor; cupru electrolitic; sertizat etanș la gaz; conform DIN 46228, partea 4/09.90; gri



Item No.: 216-262
Manșon de capăt; Manșon pentru 0,75 mm² / 18 AWG; izolat; galvanizat cu cositor; cupru electrolitic; sertizat etanș la gaz; conform DIN 46228, partea 4/09.90; gri



Item No.: 216-243
Manșon de capăt; Manșon pentru 1 mm² / AWG 18; izolat; galvanizat cu cositor; cupru electrolitic; sertizat etanș la gaz; conform DIN 46228, partea 4/09.90; roșu



Item No.: 216-263
Manșon de capăt; Manșon pentru 1 mm² / AWG 18; izolat; galvanizat cu cositor; cupru electrolitic; sertizat etanș la gaz; conform DIN 46228, partea 4/09.90; roșu



Item No.: 216-244
Manșon de capăt; Manșon pentru 1,5 mm² / AWG 16; izolat; galvanizat cu cositor; cupru electrolitic; sertizat etanș la gaz; conform DIN 46228, partea 4/09.90; negru



Item No.: 216-264
Manșon de capăt; Manșon pentru 1,5 mm² / AWG 16; izolat; galvanizat cu cositor; cupru electrolitic; sertizat etanș la gaz; conform DIN 46228, partea 4/09.90; negru



Item No.: 216-246
Manșon de capăt; Manșon pentru 2,5 mm² / AWG 14; izolat; galvanizat cu cositor; cupru electrolitic; sertizat etanș la gaz; conform DIN 46228, partea 4/09.90; albastru



Item No.: 216-266
Manșon de capăt; Manșon pentru 2,5 mm² / AWG 14; izolat; galvanizat cu cositor; cupru electrolitic; sertizat etanș la gaz; conform DIN 46228, partea 4/09.90; albastru



1.2.4 Installation

1.2.4.1 Cover



Item No.: 709-156
Carcasă; Tip 3; potrivit pentru suport capac, tip 3; 1 m lungime; transparent

1.2.4.2 Cover carrier



Item No.: 709-169
Suport capac; Tip 3; incl. șuruburi de fixare/reținere și piuliță moletată; potrivit pentru regletele montate pe șină, din seriile 279 până la 282 și 880; potrivit pentru reglete miniaturale montate pe șină, din seria 264; potrivit pentru reglete de conexiuni pentru senzori și actuatori din seria 270; gri

1.2.5 Insulation stop

1.2.5.1 Insulation stop



Item No.: 2002-171
Opritor de izolație; 0,25 - 0,5 mm²; 5 bucăți/bandă; gri deschis



Item No.: 2002-172
Opritor de izolație; 0,75 - 1 mm²; 5 bucăți/bandă; gri închis

1.2.6 Jumper

1.2.6.1 Jumper



Item No.: 2002-480
Conductor de șuntare decalat; 10 căi; izolat; gri deschis



Item No.: 2002-481
Conductor de șuntare decalat; 11 căi; izolat; gri deschis



Item No.: 2002-482
Conductor de șuntare decalat; 12 căi; izolat; gri deschis



Item No.: 2002-473/011-000
Conductor de șuntare decalat; 2 căi; de la 1 la 3; izolat; gri deschis



Item No.: 2002-472
Conductor de șuntare decalat; 2 căi; izolat; gri deschis



Item No.: 2002-473
Conductor de șuntare decalat; 3 căi; izolat; gri deschis



Item No.: 2002-475/011-000
Conductor de șuntare decalat; 3 căi; izolat; gri deschis



Item No.: 2002-474
Conductor de șuntare decalat; 4 căi; izolat; gri deschis



Item No.: 2002-475
Conductor de șuntare decalat; 5 căi; izolat; gri deschis



Item No.: 2002-476
Conductor de șuntare decalat; 6 căi; izolat; gri deschis



Item No.: 2002-477
Conductor de șuntare decalat; 7 căi; izolat; gri deschis



Item No.: 2002-478
Conductor de șuntare decalat; 8 căi; izolat; gri deschis



Item No.: 2002-479
Conductor de șuntare decalat; 9 căi; izolat; gri deschis



Item No.: 2002-477/011-000
Conductor de șuntare decalat; izolat; gri deschis



Item No.: 2002-479/011-000
Conductor de șuntare decalat; izolat; gri deschis



Item No.: 2002-481/011-000
Conductor de șuntare decalat; izolat; gri deschis



Item No.: 210-123
Lanț conectare în comun fire; izolat; alb-stru



Item No.: 210-103
Lanț conectare în comun fire; izolat; negru



Item No.: 2002-400
Șunt continuu; 2 căi; izolat; gri deschis



Item No.: 2002-413
Șunt continuu; 3 căi; izolat; gri deschis

1.2.6.1 Jumper

**Item No.: 2002-415**

Șunt continuu; 5 căi; izolat; gri deschis

**Item No.: 2002-423/000-006**

Șunt continuu; de la 1 la 3; izolat; albastru

**Item No.: 2002-423**

Șunt continuu; de la 1 la 3; izolat; gri deschis

**Item No.: 2002-423/000-005**

Șunt continuu; de la 1 la 3; izolat; roșu

**Item No.: 2002-424/000-006**

Șunt continuu; de la 1 la 4; izolat; albastru

**Item No.: 2002-424**

Șunt continuu; de la 1 la 4; izolat; gri deschis

**Item No.: 2002-424/000-005**

Șunt continuu; de la 1 la 4; izolat; roșu

**Item No.: 2006-499**

Șunt de reducere; de la seria 2006/2004 la 2004/2002/2001; de la seria 2206/2204 la 2204/2202/2201; izolat; gri deschis

**Item No.: 2016-499**

Șunt de reducere; din 2016/2010 până în 2010/2006/2004/2002 seria; din 2216/2210 până în 2210/2206/2204/2202 seria; izolat; gri deschis

**Item No.: 2002-406/020-000**

Șunt Delta; izolat; gri deschis

**Item No.: 2002-405/011-000**

Șunt punct stea; 3 căi; izolat; gri deschis

**Item No.: 2002-410/000-006**

Șunt; 10 căi; izolat; albastru

**Item No.: 2002-410**

Șunt; 10 căi; izolat; gri deschis

**Item No.: 2002-410/000-005**

Șunt; 10 căi; izolat; roșu

**Item No.: 2002-402/000-006**

Șunt; 2 căi; izolat; albastru

**Item No.: 2002-402**

Șunt; 2 căi; izolat; gri deschis

**Item No.: 2002-402/000-005**

Șunt; 2 căi; izolat; roșu

**Item No.: 2002-403/000-006**

Șunt; 3 căi; izolat; albastru

**Item No.: 2002-403**

Șunt; 3 căi; izolat; gri deschis

**Item No.: 2002-403/000-005**

Șunt; 3 căi; izolat; roșu

**Item No.: 2002-404/000-006**

Șunt; 4 căi; izolat; albastru

**Item No.: 2002-404**

Șunt; 4 căi; izolat; gri deschis

**Item No.: 2002-404/000-005**

Șunt; 4 căi; izolat; roșu

**Item No.: 2002-405/000-006**

Șunt; 5 căi; izolat; albastru

**Item No.: 2002-405**

Șunt; 5 căi; izolat; gri deschis

**Item No.: 2002-405/000-005**

Șunt; 5 căi; izolat; roșu

**Item No.: 2002-406/000-006**

Șunt; 6 căi; izolat; albastru

**Item No.: 2002-406**

Șunt; 6 căi; izolat; gri deschis

**Item No.: 2002-406/000-005**

Șunt; 6 căi; izolat; roșu

**Item No.: 2002-407/000-006**

Șunt; 7 căi; izolat; albastru

**Item No.: 2002-407**

Șunt; 7 căi; izolat; gri deschis

**Item No.: 2002-407/000-005**

Șunt; 7 căi; izolat; roșu

**Item No.: 2002-408/000-006**

Șunt; 8 căi; izolat; albastru

**Item No.: 2002-408**

Șunt; 8 căi; izolat; gri deschis

**Item No.: 2002-408/000-005**

Șunt; 8 căi; izolat; roșu

**Item No.: 2002-409/000-006**

Șunt; 9 căi; izolat; albastru

**Item No.: 2002-409**

Șunt; 9 căi; izolat; gri deschis

**Item No.: 2002-409/000-005**

Șunt; 9 căi; izolat; roșu

**Item No.: 2002-440**

Șunt; de la 1 la 10; izolat; gri deschis

**Item No.: 2002-433**

Șunt; de la 1 la 3; izolat; gri deschis

**Item No.: 2002-434**

Șunt; de la 1 la 4; izolat; gri deschis

**Item No.: 2002-435**

Șunt; de la 1 la 5; izolat; gri deschis

**Item No.: 2002-436**

Șunt; de la 1 la 6; izolat; gri deschis

**Item No.: 2002-437**

Șunt; de la 1 la 7; izolat; gri deschis

**Item No.: 2002-438**

Șunt; de la 1 la 8; izolat; gri deschis

**Item No.: 2002-439**

Șunt; de la 1 la 9; izolat; gri deschis

1.2.7 Marking

1.2.7.1 Group marker carrier



Item No.: 2009-191

Suport marker grup; gri



Item No.: 2009-192

Suport marker grup; gri



Item No.: 2009-193

Suport marker grup; gri

1.2.7.2 Marker



Item No.: 248-501

Card de marcare Mini-WSB; sub formă de card; fără posibilitate de extindere; simplu;; tip cu clipsare; alb



Item No.: 248-501/000-006

Card de marcare Mini-WSB; sub formă de card; fără posibilitate de extindere; simplu;; tip cu clipsare; albastru



Item No.: 248-501/000-002

Card de marcare Mini-WSB; sub formă de card; fără posibilitate de extindere; simplu;; tip cu clipsare; galben



Item No.: 248-501/000-007

Card de marcare Mini-WSB; sub formă de card; fără posibilitate de extindere; simplu;; tip cu clipsare; gri



Item No.: 248-501/000-012

Card de marcare Mini-WSB; sub formă de card; fără posibilitate de extindere; simplu;; tip cu clipsare; portocaliu



Item No.: 248-501/000-005

Card de marcare Mini-WSB; sub formă de card; fără posibilitate de extindere; simplu;; tip cu clipsare; roșu



Item No.: 248-501/000-023

Card de marcare Mini-WSB; sub formă de card; fără posibilitate de extindere; simplu;; tip cu clipsare; verde



Item No.: 248-501/000-017

Card de marcare Mini-WSB; sub formă de card; fără posibilitate de extindere; simplu;; tip cu clipsare; verde deschis



Item No.: 248-501/000-024

Card de marcare Mini-WSB; sub formă de card; fără posibilitate de extindere; simplu;; tip cu clipsare; violet



Item No.: 793-5501

Card de marcare WMB; sub formă de card; pt. reglete cu lățimea de 5 - 17,5 mm; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; alb



Item No.: 793-5501/000-006

Card de marcare WMB; sub formă de card; pt. reglete cu lățimea de 5 - 17,5 mm; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; albastru



Item No.: 793-5501/000-002

Card de marcare WMB; sub formă de card; pt. reglete cu lățimea de 5 - 17,5 mm; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; galben



Item No.: 793-5501/000-007

Card de marcare WMB; sub formă de card; pt. reglete cu lățimea de 5 - 17,5 mm; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; gri



Item No.: 793-5501/000-014

Card de marcare WMB; sub formă de card; pt. reglete cu lățimea de 5 - 17,5 mm; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; maro



Item No.: 793-5501/000-012

Card de marcare WMB; sub formă de card; pt. reglete cu lățimea de 5 - 17,5 mm; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; portocaliu



Item No.: 793-5501/000-005

Card de marcare WMB; sub formă de card; pt. reglete cu lățimea de 5 - 17,5 mm; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; roșu



Item No.: 793-5501/000-023

Card de marcare WMB; sub formă de card; pt. reglete cu lățimea de 5 - 17,5 mm; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; verde



Item No.: 793-5501/000-017

Card de marcare WMB; sub formă de card; pt. reglete cu lățimea de 5 - 17,5 mm; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; verde deschis



Item No.: 793-5501/000-024

Card de marcare WMB; sub formă de card; pt. reglete cu lățimea de 5 - 17,5 mm; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; violet



Item No.: 2009-145

Mini-WSB In linie; pentru Smart Printer; 1700 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; alb



Item No.: 2009-145/000-006

Mini-WSB In linie; pentru Smart Printer; 1700 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; albastru



Item No.: 2009-145/000-002

Mini-WSB In linie; pentru Smart Printer; 1700 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; galben



Item No.: 2009-145/000-007

Mini-WSB In linie; pentru Smart Printer; 1700 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; gri



Item No.: 2009-145/000-012

Mini-WSB In linie; pentru Smart Printer; 1700 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; portocaliu



Item No.: 2009-145/000-005

Mini-WSB In linie; pentru Smart Printer; 1700 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; roșu



Item No.: 2009-145/000-023

Mini-WSB In linie; pentru Smart Printer; 1700 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; verde



Item No.: 2009-145/000-024

Mini-WSB In linie; pentru Smart Printer; 1700 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; violet



Item No.: 2009-115

WMB-Inline; pentru Smart Printer; 1500 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; alb



Item No.: 2009-115/000-006

WMB-Inline; pentru Smart Printer; 1500 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; albastru



Item No.: 2009-115/000-002

WMB-Inline; pentru Smart Printer; 1500 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; galben



Item No.: 2009-115/000-007

WMB-Inline; pentru Smart Printer; 1500 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; gri



Item No.: 2009-115/000-012

WMB-Inline; pentru Smart Printer; 1500 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu;; tip cu clipsare; portocaliu

1.2.7.2 Marker

**Item No.: 2009-115/000-005**

WMB-Inline; pentru Smart Printer; 1500 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu; tip cu clipsare; roșu

**Item No.: 2009-115/000-023**

WMB-Inline; pentru Smart Printer; 1500 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu; tip cu clipsare; verde

**Item No.: 2009-115/000-017**

WMB-Inline; pentru Smart Printer; 1500 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu; tip cu clipsare; verde deschis

**Item No.: 2009-115/000-024**

WMB-Inline; pentru Smart Printer; 1500 bucăți pe rolă; posibilitate de extindere 5 - 5,2 mm; simplu; tip cu clipsare; violet

1.2.7.3 Marker carrier

**Item No.: 2002-161**

Adaptor; gri

**Item No.: 2009-198**

Adaptor; gri

1.2.7.4 Marking strip

**Item No.: 2009-110**

Benzi de marcaj; pentru Smart Printer; pe bobină; fără posibilitate de extindere; simplu; tip cu clipsare; alb

1.2.8 Plug

1.2.8.1 Component module with diode

**Item No.: 2002-880/1000-411**

Componentă conector; 2 poli; cu diodă 1N4007; Lățime de 10,4 mm; Temperatură de funcționare 85°C max.; gri

1.2.8.2 Component module with LED

**Item No.: 2002-880/1000-541**

Componentă conector; 2 poli; LED (roșu); Lățime de 10,4 mm; Temperatură de funcționare 85°C max.; gri

**Item No.: 2002-880/1000-836**

Componentă conector; 2 poli; LED (roșu); Lățime de 10,4 mm; Temperatură de funcționare 85°C max.; gri

**Item No.: 2002-880/1000-542**

Componentă conector; 2 poli; LED (roșu); Lățime de 10,4 mm; Temperatură de funcționare 85°C max.; multicolor

1.2.8.3 Empty component plug housing

**Item No.: 2002-880**

Carcasă goală componente conector; Lățime de 10,4 mm; 2 poli; Tip 4; gri

1.2.9 Protective warning marker

1.2.9.1 Cover



Item No.: 2002-115

Marcaj de avertizare protecție; pentru 5 reglete de conexiuni; cu simbol de înaltă tensiune, negru; galben

1.2.10 Push-in type wire jumper

1.2.10.1 Jumper



Item No.: 2009-414

Șunturi fire de tip push-in; 1,5 mm²; izolat; 110 mm lungime; negru



Item No.: 2009-414/000-005

Șunturi fire de tip push-in; 1,5 mm²; izolat; 110 mm lungime; negru



Item No.: 2009-416

Șunturi fire de tip push-in; 1,5 mm²; izolat; 250 mm lungime; negru



Item No.: 2009-414/000-006

Șunturi fire de tip push-in; izolat; 110 mm lungime; negru



Item No.: 2009-412

Șunturi fire de tip push-in; izolat; 60 mm lungime; negru

1.2.11 Screwless end stop

1.2.11.1 Mounting accessories



Item No.: 249-117

Regletă de oprire fara șurub; Lățime de 10 mm; pentru șină DIN 35 x 15 și 35 x 7,5; gri



Item No.: 249-116

Regletă de oprire fara șurub; Lățime de 6 mm; pentru șină DIN 35 x 15 și 35 x 7,5; gri

1.2.12 Test and measurement

1.2.12.1 Testing accessories



Item No.: 2009-174

Adaptor conector de testare; pentru conectori test de 4 mm Ø; pentru reglete de testare TOPJOB®S montate pe șină; gri



Item No.: 2002-511

Conector modular TOPJOB®S; modular; pentru slot contact șunt; 1 poli; gri



Item No.: 2002-560

Conector modular TOPJOB®S; modular; pentru slot contact șunt; 10 poli; gri



Item No.: 2002-552

Conector modular TOPJOB®S; modular; pentru slot contact șunt; 2 poli; gri



Item No.: 2002-553

Conector modular TOPJOB®S; modular; pentru slot contact șunt; 3 poli; gri



Item No.: 2002-554

Conector modular TOPJOB®S; modular; pentru slot contact șunt; 4 poli; gri



Item No.: 2002-555

Conector modular TOPJOB®S; modular; pentru slot contact șunt; 5 poli; gri



Item No.: 2002-556

Conector modular TOPJOB®S; modular; pentru slot contact șunt; 6 poli; gri



Item No.: 2002-557

Conector modular TOPJOB®S; modular; pentru slot contact șunt; 7 poli; gri



Item No.: 2002-558

Conector modular TOPJOB®S; modular; pentru slot contact șunt; 8 poli; gri



Item No.: 2002-559

Conector modular TOPJOB®S; modular; pentru slot contact șunt; 9 poli; gri



Item No.: 2009-182

Conexiune de testare; for max. 2,5 mm²; conectare fără unelte pentru fire de test individuale 0,08 - 2,5 mm; gri



Item No.: 2002-611

Modul conector de testare tip L TOPJOB®S; modular; 1 poli; gri



Item No.: 2002-649

Modul distanțier tip L TOPJOB®S; modular; de ex., pentru șuntarea regletelor de conexiuni; gri



Item No.: 2002-549

Modul distanțier; modular; de ex., pentru șuntarea regletelor de conexiuni; gri

1.2.13 Tool

1.2.13.1 Operating tool



Item No.: 210-658
Unealtă de operare; Lamă: 3,5 x 0,5 mm;
cu mâner izolat parțial; cotit; scurt; multi-
color

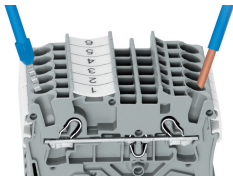
Item No.: 210-720
Unealtă de operare; Lamă: 3,5 x 0,5 mm;
cu mâner izolat parțial; multicolor

Installation Notes

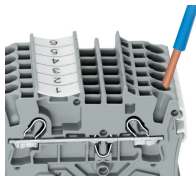
Conductor termination



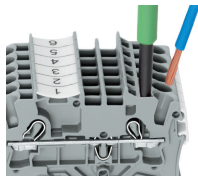
All conductor types at a glance



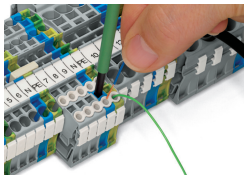
Push-in termination of solid and ferruled
conductors



**Inserting a conductor via push-in ter-
mination:**
Solid conductors with cross-sections
from either one size above, or up to two
sizes below, the rated cross-section can
be simply pushed in – no tools needed.

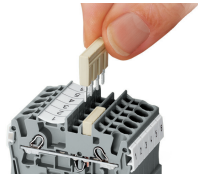


Inserting a conductor via operating tool:
Connecting fine-stranded conductors wi-
thout ferrules, or small cross-sectional
conductors that cannot be pushed in, is
performed similarly to the original CAGE
CLAMP® – just use an operating tool.
Advantage:
To open the clamp, the operating tool is
inserted vertically. The conductor entry is
less than 15 degrees for easier wiring.

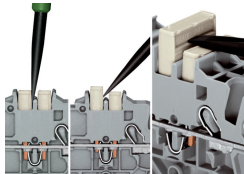


Conductor termination – insulation stop

Commoning

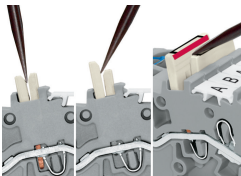
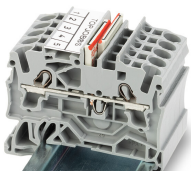


Insert push-in type jumper bar and push
down until it hits backstop.



Removing a push-in type jumper bar:
Insert the operating tool between the jum-
per and partition wall of the dual jumper
slots, then lift up the jumper.
Place the operating tool in the center of
jumpers for up to five contacts (see abo-
ve), or alternately on both sides for jum-
pers with more than five contacts.

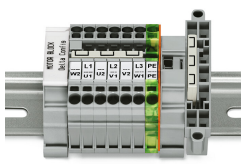
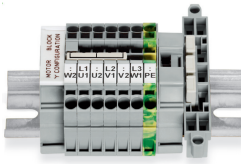
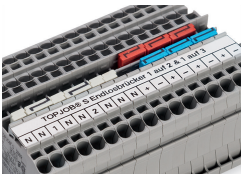
Commoning



Orient the staggered jumpers' red stripes on the inside.
Insert the staggered jumper and push down until it hits the backstop.

Removing a staggered jumper:
Insert the operating tool between the staggered jumpers, then lift up the jumper.

Commoning

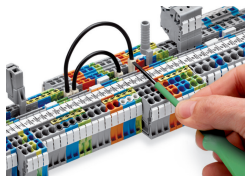


Continuous jumpers (2002 Series) readily connect an endless number of terminal blocks to each other via single jumper slot. Use the second jumper slot for additional commoning or testing.

The 1-to-3 adjacent jumper for continuous commoning enables every other terminal block to be commoned. For example, positive and negative potentials can be accommodated alongside each other.

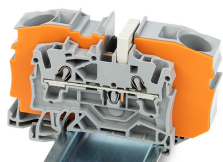
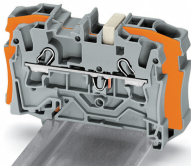
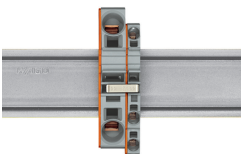
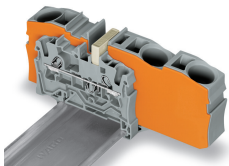
This star point jumper has been specially developed to create a "star point" and is used on motor terminal boards equipped with Rail-Mount Terminal Blocks TOP-JOB® S.

This delta jumper has been specially developed to create a delta configuration and is used on motor terminal boards equipped with rail-mount terminal blocks TOPJOB® S.



Push down the wire jumper until fully inserted. Lift the jumper with an operating tool for rewiring.

Commoning



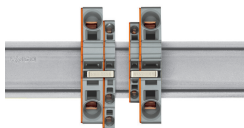
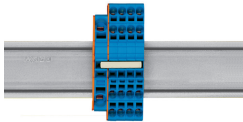
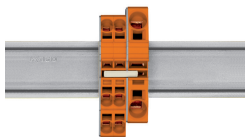
Step-down jumpers common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point.
Commoning may be made in either direction using the special thin end plate to cover the open side. Additional through terminal blocks having a smaller cross-section may be commoned using push-in type jumper bars.

Using step-down jumpers, an end plate must be inserted between the terminal blocks to be commoned.

Step-down jumper (2006-499) commons 6/4 mm² (10/12 AWG) terminal blocks (2006/2004 Series) with 4/2.5/1.5 mm² (AWG 12/14/16) terminal blocks (2004/2002/2001 Series).

Step-down jumper (2016-499) commons 16/10 mm² (16/8 AWG) terminal blocks (2016/2010 Series) with 10/6/4/2.5 mm² (8/10/12/14 AWG) terminal blocks (2010/2006/2004/2002 Series).

Commoning

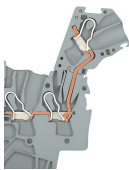
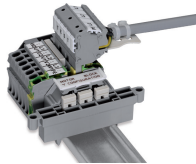
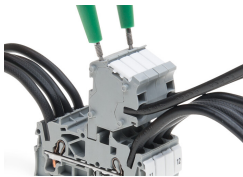
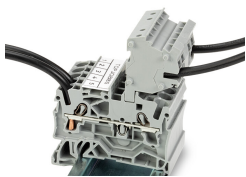


Stepping down via push-in type jumper bar:
Commoning via open terminal side with end plate allows jumpering over two cross-section sizes for 16 mm² (6 AWG) and 10 mm² (8 AWG) and one cross-section size for 6/4/2.5 mm² (10/12/14 AWG). An example: from 16 mm² (6 AWG) to 6 mm² (10 AWG) (see illustration above) or from 10 mm² (8 AWG) to 4 mm² (12 AWG).

Stepping down via push-in type jumper bar:
Commoning via closed terminal side with end plate allows jumpering over two cross-section sizes, e.g., from 16 mm² (6 AWG) to 6 mm² (10 AWG) or from 6 mm² (10 AWG) to 2.5 mm² (14 AWG) (see illustration above).

Note:
The total current of the outgoing circuits must not exceed the nominal current of the step-down jumper/push-in type jumper bar.

Testing



The modular TOPJOB® S connectors also connect conductors of the same size as the terminal blocks being used.

TOPJOB® S Connectors with a 2 mm Ø test socket for testing voltage via 2-pole voltage tester

Rail-mount terminal block assembly for electric motor wiring

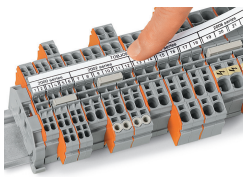
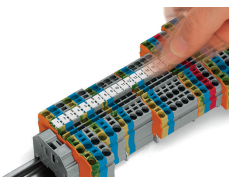
L-type test plug module – cross-sectional view of contacts



Test plug adapter (2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series

Testing tap (2009-182) for tool-free connection of test cables up to 2.5 mm² (12 AWG) – compatible with 2000 to 2016 Series

Marking

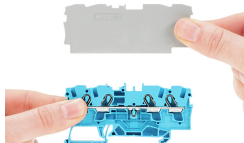
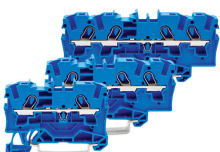


Snapping WMB Inline markers into marker slots.

TOPJOB® S 2009-193 Group Marker Carrier (equipped with a marking strip) for all 2001 to 2016 Series TOPJOB® S Rail-Mount Terminal Blocks
Do not use on an end plate!

Using marker carriers for marking strips (2002-161) in jumper slots.

Ex application

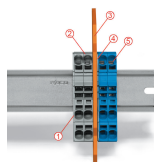
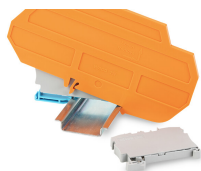


Through terminal blocks with a blue insulated housing are suitable for Ex i applications.

All through and ground conductor terminal blocks are suitable for Ex e II applications.

Separator plate for Ex e/Ex i applications
An end plate must be applied to the terminal block located directly behind an Ex e/Ex i separator plate.

Ex application

**Ex e II/Ex i terminal strip****Note:**

The movable feet of terminal blocks and separator plates must face the same direction.

A separator plate is located between the Ex e II and Ex i terminal strip.

End plate

Ex e II terminal blocks

Separator plate for Ex e/Ex i applications

End plate

Ex i terminal blocks

According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common DIN-rail.