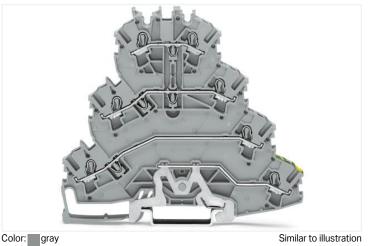
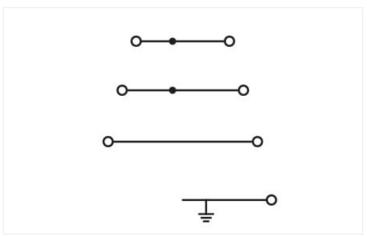
Quadruple-deck rail-mounted terminal block; Rail-mounted terminal block for electric motor wiring; 2.5 mm<sup>2</sup>; L1 - L2 - L3 - PE; with marker carrier; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 2,50 mm²; gray



https://www.wago.com/2002-4157





Similar to illustration

Similar to illustration

Electrical data	
Ratings per IEC/EN	
Ratings per	IEC/EN 60947-7-1
Nominal voltage (III/3)	800 V
Rated impulse voltage (III/3)	8 kV
Rated current	20 A
Current at conductor cross-section (max.) mm <sup>2</sup>	25 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Ratings per UL 1059	
Rated voltage UL (Use Group B)	600 V
Rated current UL (Use Group B)	20 A
Rated voltage UL (Use Group C)	600 V
Rated current UL (Use Group C)	20 A

Ratings per CSA	
Rated voltage CSA (Use Group B)	600 V
Rated current CSA (Use Group B)	20 A
Rated voltage CSA (Use Group C)	600 V
Rated current CSA (Use Group C)	20 A

Ex information	
Reference hazardous areas	See "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)	19 A
Rated current (Ex e II) with jumper	17 A

Power loss	
Power loss, per pole (potential)	1.596 W
Rated current $I_N$ for specified power loss	20 A
Resistance value for specified, current- dependent power loss	0.00133 Ω

# Connection data

https://www.wago.com/2002-4157





Connection 1	
Connection technology	Push-in CAGE CLAMP®
Number of connection points	2
Actuation type	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	2.5 mm <sup>2</sup>
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

Connection 2		
Number of connection points 2	2	

Connection 3	
Number of connection points 3	2

Connection 4	
Number of connection points 4	1

Physical data	
Width	5.2 mm / 0.205 inches
Height	103.5 mm / 4.075 inches
Depth from upper-edge of DIN-rail	96.8 mm / 3.811 inches

Mechanical data	
Potential marking	L1 - L2 - L3 - PE
Mounting type	DIN-35 rail

Material data	
Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.436 MJ
Weight	26 g

https://www.wago.com/2002-4157



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

Commercial data	
Product Group	22 (TOPJOB S)
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 8.0	EC000901
ETIM 7.0	EC000901
PU (SPU)	25 pcs
Packaging type	Box
Country of origin	CN
GTIN	4050821579441
Customs tariff number	85369010000

# Approvals / Certificates

## General approvals







Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	71-120369
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7892
CSA DEKRA Certification B.V.	C22.2 No. 158	1536069
UL Underwriters Laboratories Inc.	UL 1059	E45172

# Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Railway Ready

# Approvals for marine applications





Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2

# Approvals for hazardous areas



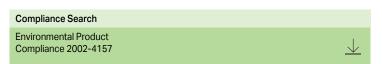
Approval	Standard	Certificate Name
ATEX Physikalisch Technische Bundesanstalt (PTB)	EN 60079	PTB 03 ATEX 1162 U (II2G Ex eb IIC Gb, IM2 Ex eb IMb)
CCC CNEX	GB/T 3836.3	2020312313000238 (Ex eb IIC Gb, Ex eb I Mb)
EAC Brjansker Zertifizierungs- stelle	TP TC 012/2011	RU C-DE.AM02. B.00127/19 (Ex e IIC Gb U)
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

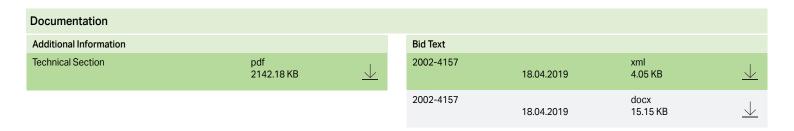
#### **Downloads**

# **Environmental Product Compliance**

https://www.wago.com/2002-4157







CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 2002-4157	EPLAN Data Portal 2002-4157
	WSCAD Universe 2002-4157
	ZUKEN Portal 2002-4157 <u> </u>

# 1 Compatible Products 1.1 Required Accessories 1.1.1 End plate 1.1.1.1 End plate 1.1.1.1 End plate

 Item No.: 2002-4191
 Item No.: 2002-4192

 End and intermediate plate; 1 mm thick;
 End and intermediate plate; 1 mm thick;

 gray
 orange

#### 1.2 Optional Accessories

# 1.2.1 DIN-rail

#### 1.2.1.1 Mounting accessories



# 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;  $35 \times 15$  mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm

thick; 2 m long; unslotted; similar to EN

# Item No.: 210-506

60715; silver-colored

Item No.: 210-196

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

https://www.wago.com/2002-4157



#### 1.2.1.1 Mounting accessories



#### 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.: 210-504
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



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

#### 1.2.2 Ferrule

#### 1.2.2.1 Ferrule



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



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



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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

#### 1.2.3 Installation

#### 1.2.3.1 Cover



#### Item No.: 709-156

Cover; Type 3; suitable for cover carrier, type 3; 1 m long; transparent

#### 1.2.3.2 Cover carrier



#### Item No.: 709-169

Cover carrier; Type 3; gray

#### 1.2.4 Insulation stop

https://www.wago.com/2002-4157



#### 1.2.4.1 Insulation stop





Item No.: 2002-171

Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/ strip; light gray

Item No.: 2002-172

Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/ strip; dark gray

# 1.2.5 Jumper

#### 1.2.5.1 Jumper

Item No.: 2002-400





Continuous jumper; from 1 to 3; insulated;

Item No.: 2002-423/000-006



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;

Continuous jumper; 2-way; insulated; light

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;

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; 6-way; insulated; blue

Jumper; 4-way; insulated; red

Item No.: 2002-405/000-006 Jumper; 5-way; insulated; blue

Jumper; 5-way; insulated; light gray

Item No.: 2002-405/000-005 Jumper; 5-way; insulated; red

Item No.: 2002-406/000-006

Item No.: 2002-406/000-005

Item No.: 2002-405

Jumper; 6-way; insulated; red

Item No.: 2002-407/000-006

Item No.: 2002-407

Jumper; 7-way; insulated; light gray



Item No.: 2002-406 Jumper; 6-way; insulated; light gray

Jumper; 7-way; insulated; blue

Item No.: 2002-408/000-006

Item No.: 2002-408

Item No.: 2002-408/000-005



Item No.: 2002-407/000-005 Jumper; 7-way; insulated; red

Jumper; 8-way; insulated; blue

Jumper; 8-way; insulated; light gray

Jumper; 8-way; insulated; red



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

Jumper; 9-way; insulated; light gray

Item No.: 2002-409/000-005



Jumper; 9-way; insulated; blue

Jumper; 9-way; insulated; red

Jumper; from 1 to 10; insulated; light gray



Item No.: 2002-433

Jumper; from 1 to 3; insulated; light gray

Item No.: 2002-434

Item No.: 2002-438

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

Jumper; from 1 to 4; insulated; light gray

Item No.: 2002-439

Jumper; from 1 to 9; insulated; light gray



Jumper; from 1 to 8; insulated; light gray

gray

Staggered jumper; 10-way; insulated; light



Staggered jumper; 12-way; insulated; light gray

Item No.: 2002-473/011-000

sulated; light gray

Item No.: 2002-472

Item No.: 2002-480

Staggered jumper; 2-way; insulated; light



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

gray

Item No.: 2002-482

Staggered jumper; 2-way; from 1 to 3; in-

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https://www.wago.com/2002-4157

#### 1.2.5.1 Jumper









# 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

# 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.: 2002-492

Vertical jumper; insulated; light gray

#### Item No.: 210-103

Wire commoning chain; insulated; black

#### Item No.: 210-123

Wire commoning chain; insulated; blue

#### 1.2.6 Marking

#### 1.2.6.1 Marker

#### Item No.: 2009-145/000-006

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

#### Item No.: 2009-145/000-007

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

#### Item No.: 2009-145/000-023

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll: stretchable 5 - 5.2 mm; plain; snap-on type; green

#### Item No.: 2009-145/000-012

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

#### Item No.: 2009-145/000-005

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red

#### Item No.: 2009-145/000-024

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

#### 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.: 2009-145/000-002

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



# Item No.: 248-501/000-006

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

# Item No.: 248-501/000-007

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

# Item No.: 248-501/000-023

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

Mini-WSB marking card; as card; not

Item No.: 248-501/000-017

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



#### Item No.: 248-501/000-012

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



Item No.: 793-5501/000-006

Mini-WSB marking card; as card; not

stretchable; plain; snap-on type; red

WMB marking card; as card; for terminal

Item No.: 248-501/000-005

#### Item No.: 248-501/000-024

stretchable; plain; snap-on type; violet

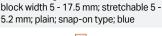
# Item No.: 248-501

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



# Item No.: 248-501/000-002

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow



Item No.: 793-5501/000-017

#### Item No.: 793-5501/000-014

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 -5.2 mm; plain; snap-on type; brown



# 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



# 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; green



WMB marking card; as card; for terminal

block width 5 - 17.5 mm; stretchable 5 -

#### 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.: 793-5501/000-005

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.: 793-5501/000-024

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WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 -5.2 mm; plain; snap-on type; violet

# Item No.: 793-5501

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 -5.2 mm; plain; 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.: 2009-115/000-006

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

https://www.wago.com/2002-4157



#### 1.2.6.1 Marker

**A** 

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#### Item No.: 2009-115/000-007

Item No.: 2009-115/000-005

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

WMB-Inline; for Smart Printer; 1500 pie-

ces on roll; stretchable 5 - 5.2 mm; plain;

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

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

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

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green

#### 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

A



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

#### 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

#### 1.2.6.2 Marking strip

snap-on type; red



#### Item No.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

#### 1.2.7 Protective warning marker

#### 1.2.7.1 Cover



# Item No.: 2002-115

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

#### 1.2.8 Push-in type wire jumper

#### 1.2.8.1 Jumper

Item No.: 2009-414

ted; 110 mm long; black



# Item No.: 2009-414/000-005

Push-in type wire jumper; 1.5 mm<sup>2</sup>; insulated; 110 mm long; black

# Item No.: 2009-416

Push-in type wire jumper; 1.5 mm<sup>2</sup>; 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

Push-in type wire jumper; 1.5 mm<sup>2</sup>; insula-

#### 1.2.9 Test and measurement

## 1.2.9.1 Testing accessories



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.: 2002-649

TOPJOB®S L-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray

#### Item No.: 2002-611

TOPJOB®S L-type test plug module; modular; 1-pole; 2,50 mm²; gray

## 1.2.10 Tool

https://www.wago.com/2002-4157



#### 1.2.10.1 Operating tool



Item No.: 210-658

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured

Item No.: 210-720

Operating tool; Blade:  $3.5 \times 0.5$  mm; with a partially insulated shaft; multicoloured

#### **Installation Notes**

#### Testing



Testing with voltage tester.

#### Application



In addition to rail-mount terminal blocks for electric motor wiring, special versions are also available. Version without ground contact and only two potentials: These terminal blocks were specifically designed to support additional functions, such as engine brakes or temperature sensors. Sharing a common profile, this terminal block version can be put next to the appropriate electric motor wiring terminal block without using intermediate plates. That makes the rail assembly easier to understand and wire. This also prevents wiring errors as no conductor entry is unused. Version without ground contact and with three potentials: Clearly designated clamping units are the primary advantage to this terminal block design. When using devices with protective insulation, for example, there are no open ground clamping units that could create confusion.

#### Cover



Creating spacer housings for electric motor wiring rail-mount terminal blocks via lockout caps (2002-192) for conductor entry and operating slot.

https://www.wago.com/2002-4157



# Marking



Marking clamping points via WMB Multi Marking System. Group marking via marking strips (Item No. 709-177

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