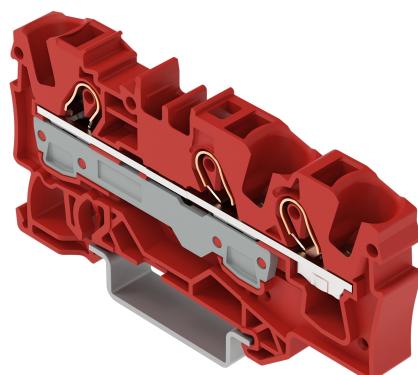
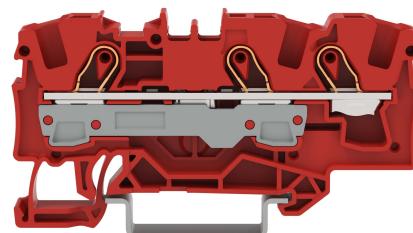


Color: ■ red



Similar to illustration

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	41 A	-	-		

Approvals per			UL 1059		
Use group	B	C	D		
Rated voltage	600 V	600 V	-		
Rated current	50 A	50 A	-		

Approvals per			CSA 22.2 No 158		
Use group	B	C	D		
Rated voltage	600 V	600 V	-		
Rated current	50 A	50 A	-		

Ex information		
Reference hazardous areas	See application instructions in section "Knowledge and Downloads – Documentation – Additional Information: Technical Section; Technical Explanations"	
Ratings per	ATEX: PTB 05 ATEX 1030 U / IECEx: PTB 05.0014U (Ex eb IIC Gb)	
Rated voltage EN (Ex e II)	550 V	
Rated current (Ex e II)	36 A	
Rated current (Ex e II) with jumper	33 A	

Power Loss

Power loss, per pole (potential)	1.3112 W
Rated current I_N for specified power loss	41 A
Resistance value for specified, current-dependent power loss	0.00078 Ω

Connection data

Connection points	3	Connection 1	
Total number of potentials	1	Connection technology	Push-in CAGE CLAMP®
Number of levels	1	Actuation type	Operating tool
Number of jumper slots	2	Connectable conductor materials	Copper
		Nominal cross-section	6 mm ²
		Solid conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
		Solid conductor; push-in termination	2.5 ... 10 mm ² / 14 ... 8 AWG
		Fine-stranded conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
		Fine-stranded conductor; with insulated ferrule	0.5 ... 6 mm ² / 20 ... 10 AWG
		Fine-stranded conductor; with ferrule; push-in termination	2.5 ... 6 mm ² / 16 ... 10 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	13 ... 15 mm / 0.51 ... 0.59 inches
		Wiring direction	Front-entry wiring

Physical data

Width	7.5 mm / 0.295 inches
Height	73.3 mm / 2.886 inches
Depth from upper-edge of DIN-rail	32.9 mm / 1.295 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	red
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.233 MJ
Weight	12.8 g

Environmental requirements

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

Commercial data

PU (SPU)	25 pcs
Country of origin	DE
GTIN	4066966335088
Customs tariff number	85369010000

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

Approvals / Certificates**General approvals**

Approval	Standard	Certificate Name
CCA	IEC 60947	71-122840 REV.1
DEKRA Certification B.V.		
CCA	EN 60947	NTR NL 7925/1
DEKRA Certification B.V.		
CSA	C22.2 No. 158	1543858
DEKRA Certification B.V.		
UL	UL 1059	E45172
UL International Germany GmbH		

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
ATEX-Attestation of Conformity	-	-
WAGO GmbH & Co. KG		
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	EN 60947	20-HG1941090-PDA
American Bureau of Shipping		
DNV GL	-	TAE00001V2
Det Norske Veritas, Germanischer Lloyd		

Approvals for hazardous areas

Approval	Standard	Certificate Name
AEx	UL 60079	E 185892 (AEx eb IIC Gb, Ex eb IIC Gb)
Underwriters Laboratories Inc.		
ATEX	EN 60079	PTB 05 ATEX 1030 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb)
Physikalisch Technische Bundesanstalt (PTB)		
IECEx	IEC 60079	IECEx PTB 05.0014 U (Ex eb IIC resp. EX eb I Mb)
Physikalisch Technische Bundesanstalt (PTB)		
INMETRO	IEC 60079	TÜV 12.1310 U
TÜV Rheinland do Brasil Ltda.		

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product
Compliance 2006-1303



Documentation

Additional Information

Technical Section

pdf
2240.62 KB



CAD/CAE-Data

CAD data

2D/3D Models
2006-1303



1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



[Item No.: 2006-1391](#)

End and intermediate plate; 1 mm thick;
gray

[Item No.: 2006-1392](#)

End and intermediate plate; 1 mm thick;
orange

[Item No.: 209-191](#)

Separator for Ex e/Ex i applications; 3 mm
thick; 120 mm wide; orange

[Item No.: 2006-1393](#)

Separator plate; 2 mm thick; oversized;
gray

[Item No.: 2006-1394](#)

Separator plate; 2 mm thick; oversized;
orange

1.2 Optional Accessories

1.2.1 Cover

1.2.1.1 Cover



[Item No.: 2006-191](#)

Lockout cap; for wire insertion and actuating
opening; gray

1.2.2 DIN-rail

1.2.2.1 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; 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

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

1.2.3 Ferrule

1.2.3.1 Ferrule

**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.: 216-263

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.: 216-264

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.: 216-266

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.: 216-267**

Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

Item No.: 216-208

Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow

1.2.4 Installation

1.2.4.1 Cover

**Item No.: 709-156**

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

**Item No.: 709-169**

Cover carrier; Type 3; incl. fixing/retaining screws and knurled nut; suitable for 279 to 282 and 880 Series rail-mounted terminal blocks; suitable for 264 Series miniature rail-mounted terminal blocks; suitable for 270 Series sensor and actuator terminal blocks; gray

1.2.5 Jumper

1.2.5.1 Jumper

[Item No.: 2006-402](#)

Jumper; 2-way; insulated; light gray

[Item No.: 2006-403](#)

Jumper; 3-way; insulated; light gray

[Item No.: 2006-404](#)

Jumper; 4-way; insulated; light gray

[Item No.: 2006-405](#)

Jumper; 5-way; insulated; light gray

[Item No.: 2006-433](#)

Jumper; from 1 to 3; insulated; light gray

[Item No.: 2006-434](#)

Jumper; from 1 to 4; insulated; light gray

[Item No.: 2006-435](#)

Jumper; from 1 to 5; insulated; light gray

[Item No.: 2006-405/011-000](#)

Star point jumper; 3-way; insulated; light gray

[Item No.: 2006-499](#)

Step-down jumper; from 2006/2004 to 2004/2002/2001 series; from 2206/2204 to 2204/2202/2201 series; insulated; light gray

[Item No.: 2016-499](#)

Step-down jumper; from 2016/2010 to 2010/2006/2004/2002 series; from 2216/2210 to 2210/2206/2204/2202 series; insulated; light gray

1.2.6 Marking

1.2.6.1 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

1.2.6.2 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

[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.: 248-501/000-005](#)

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

[Item No.: 248-501/000-024](#)

Mini-WSB marking card; as card; not 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.: 793-5501/000-006](#)

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

[Item No.: 793-5501/000-007](#)

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

[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

[Item No.: 793-5501/000-017](#)

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

[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](#)

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

1.2.6.2 Marker

Item No.: 793-5501

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

Item No.: 793-5501/000-002

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

Item No.: 793-501/000-006

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

Item No.: 793-501/000-007

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

Item No.: 793-501/000-023

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

Item No.: 793-501/000-017

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

Item No.: 793-501/000-012

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

Item No.: 793-501/000-005

WMB marking card; as card; not stretchable; plain; snap-on type; red

Item No.: 793-501/000-024

WMB marking card; as card; not stretchable; plain; snap-on type; violet

Item No.: 793-501

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

Item No.: 793-501/000-002

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

Item No.: 2009-115/000-006

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

Item No.: 2009-115/000-007

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

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

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

1.2.6.3 Marker carrier

Item No.: 2009-198

Adaptor; gray

1.2.6.4 Marking strip

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.: 2006-115

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

1.2.8 Screwless end stop

1.2.8.1 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

1.2.9 Test and measurement

1.2.9.1 Testing accessories

**Item No.: 2006-511**Modular TOPJOB S connector; modular; for jumper contact slot; 1-pole; 6,00 mm²; gray**Item No.: 2006-549**

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.: 210-136

Test plug; 2 mm Ø; with 500 mm cable; red

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

1.2.10 Tool

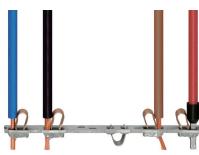
1.2.10.1 Operating tool

**Item No.: 210-721**

Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

Conductor termination



All conductor types at a glance

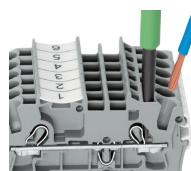


Push-in termination of solid and ferruled conductors



Inserting a conductor via push-in termination:

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 without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.

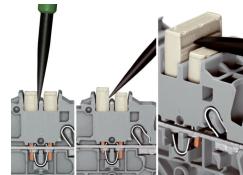
Advantage:

To open the clamp, the operating tool is inserted vertically. The conductor entry is less than 15 degrees for easier wiring.

Commoning



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



Removing a push-in type jumper bar:

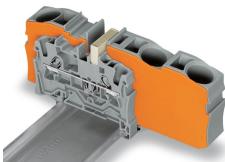
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper. Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five contacts.

Commoning



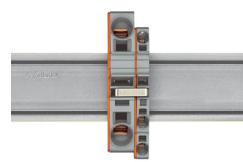
This star point jumper has been specially developed to create a "star point" and is used on motor terminal boards equipped with Rail-Mount Terminal Blocks TOPJOB® S.

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.



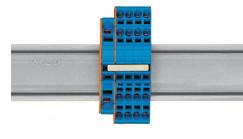
Using step-down jumpers, an end plate must be inserted between the terminal blocks to be commoned.



Step-down jumper (2006-499) common 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) common 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).



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

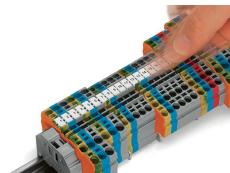


Test plug adapter (2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series



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!



Ex application

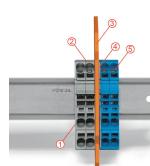


Through terminal blocks with a blue insulated housing are suitable for Ex i applications.

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 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.

