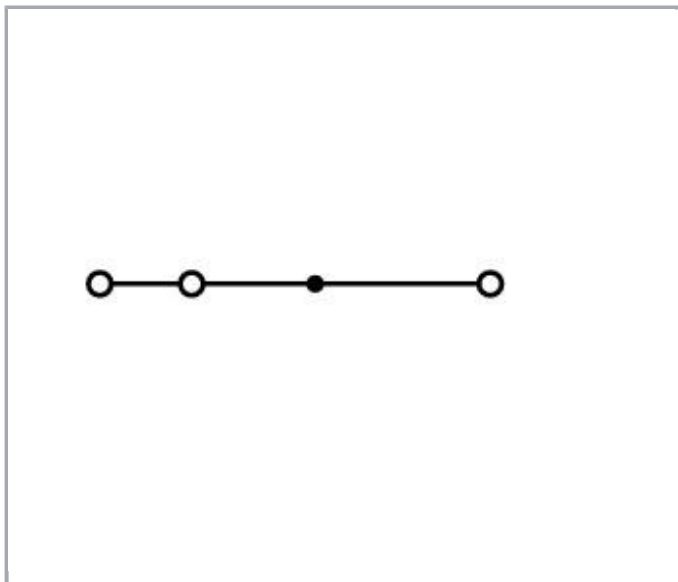
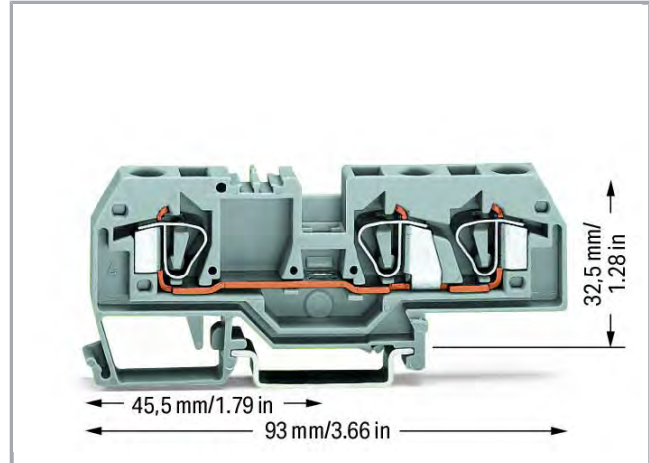
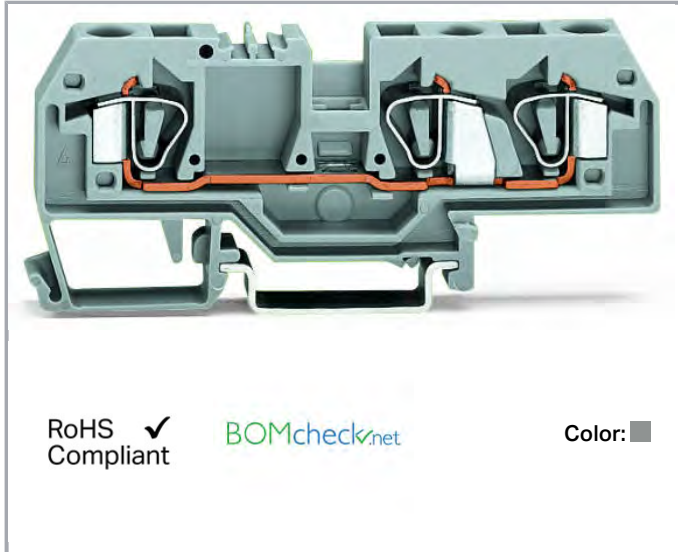


Data sheet | Item number: 282-681

3-conductor through terminal block; 6 mm²; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 6,00 mm²; gray



Data

Electrical data

Ratings per IEC/EN 60664-1

Ratings per

IEC/EN 60947-7-1

Subject to changes. Please also observe the further product documentation!



Nominal voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
Rated current	41 A
Legend (ratings)	(III / 3) $\triangleq$ Overvoltage category III / Pollution degree 3

Connection data

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Solid conductor	0,2 ... 6 mm ² / 24 ... 10 AWG
Fine-stranded conductor	0,2 ... 6 mm ² / 24 ... 10 AWG
Strip length	12 ... 13 mm / 0.47 ... 0.51 inch
Total number of connection points	3
Total number of potentials	1
Number of levels	1
Wiring type	Front-entry wiring

Geometrical Data

Width	8 mm / 0.315 inch
Height from upper-edge of DIN-rail	32,5 mm / 1.28 inch
Depth	93 mm / 3.661 inch

Mechanical data

Design	horizontal type
Mounting type	DIN-35 rail
Marking level	Center marking

Material Data

Color	gray
Insulation material	Polyamide 66 (PA 66)
Fire load	0.335 MJ
Weight	21.4 g

Commercial data

Product Group	1 (Rail Mounted Terminal Blocks)
Packaging type	BOX

Subject to changes. Please also observe the further product documentation!

Country of origin	DE
GTIN	4044918386098
Customs tariff number	85369010000

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	2195540.01
	CCA DEKRA Certification B.V.	EN 60947	NTR NL-7522
	CSA DEKRA Certification B.V.	C22.2 No. 158	1505033

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	EN 60947	20-HG1941090-PDA
	BV Bureau Veritas S.A.	EN 60947	07436/E0 BV
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
	LR Lloyds Register	EN 60947	91/20112 (E9)

UL-Approvals

Certificate

Subject to changes. Please also observe the further product documentation!

Logo	Approval	Additional Approval Text	name
	UL UL International Germany GmbH	UL 1059	20190731- E45172

Counterpart

Compatible products

Carrier rail

	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"
	Item no.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715
	Item no.: 210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715
	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"
	Item no.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715
	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.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715
	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.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715

Subject to changes. Please also observe the further product documentation!


Item no.: 210-505

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


Item no.: 210-506

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715


Item no.: 210-508

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715

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

protection

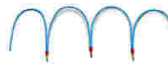
Item no.: 282-415

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

Jumper

Item no.: 210-103

Wire commoning chain; insulated; 50 connections; black


Item no.: 210-123

Wire commoning chain; insulated; 50 connections


Item no.: 282-402

Adjacent jumper; insulated; Nominal current 41 A


Item no.: 282-409

Alternate jumper; insulated; Nominal current 41 A; gray


Item no.: 282-422

Adjacent jumper; insulated; Nominal current 41 A; yellow-green


Item no.: 282-424

Adjacent jumper; insulated; Nominal current 41 A; orange


Item no.: 284-413

Step-down jumper; insulated; from 10/6 mm² to 6/4 mm²; Nominal current 30 A; gray

Subject to changes. Please also observe the further product documentation!


Item no.: 284-414

Step-down jumper; insulated; from 10/6 mm² to 4/2.5/1.5 mm²; Nominal current 15 A; gray


Item no.: 709-110

Wire commoning chain; insulated; 4 connections; 3 x 110 mm; black


Item no.: 709-111

Wire commoning chain; insulated; 3 connections; 2 x 120 mm; black


Item no.: 709-112

Wire commoning chain; insulated; 3 connections; 2 x 170 mm; black

Marking accessories

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


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.: 2009-115/000-012

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


Item no.: 2009-115/000-017

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


Item no.: 2009-115/000-023

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


Item no.: 2009-115/000-024

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


Item no.: 209-185

Adaptor; gray


Item no.: 210-612

Marking strips; for self-marking; plain; Self-adhesive; transparent


Item no.: 249-105

Group marker carrier; gray

Subject to changes. Please also observe the further product documentation!



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.: 793-501/000-005

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



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.: 793-501/000-012

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



Item no.: 793-501/000-017

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



Item no.: 793-501/000-023

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



Item no.: 793-501/000-024

WMB marking card; as card; not stretchable; 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.: 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.: 793-5501/000-006

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

Subject to changes. Please also observe the further product documentation!


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.: 793-5501/000-014

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.: 793-5501/000-017

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.: 793-5501/000-023

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.: 793-5501/000-024

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

tools

Item no.: 210-721

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

General accessories

Item no.: 209-143

Group marker carrier; gray


Item no.: 209-144

Group marker carrier; gray


Item no.: 709-310

B-type test plug module; modular; suitable for all WAGO 282 Series rail-mounted terminal blocks with jumper slots; 6,00 mm²; gray


Item no.: 709-311

B-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray

assembling

Item no.: 209-106

Mounting carrier; for isolated mounting on DIN 35 rails; gray


Item no.: 709-153

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

End plate

Item no.: 282-308

End and intermediate plate; 2.5 mm thick; gray


Item no.: 282-309

Separator plate; 2 mm thick; oversized; gray

Item no.: 282-339

Subject to changes. Please also observe the further product documentation!



End and intermediate plate; 2.5 mm thick; orange



Item no.: 282-340

Separator plate; 2 mm thick; oversized; orange



Item no.: 282-358

Step-down cover plate; 1 mm thick; in connection with 3-conductor 282-681 terminal blocks; gray



Item no.: 282-368

Step-down cover plate; 1 mm thick; in connection with 3-conductor 282-681 terminal blocks; orange

check



Item no.: 209-170

Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm² - 10 mm² tbs; gray

Downloads

Documentation

Additional Information

Technical explanations

Apr 3, 2019

CAD/CAE-Data

CAD data

2D/3D Models 282-681

CAE data

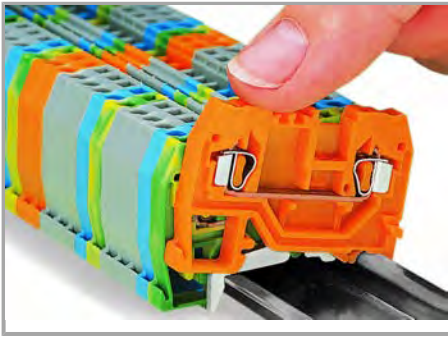
EPLAN Data Portal 282-681

WSCAD Universe 282-681

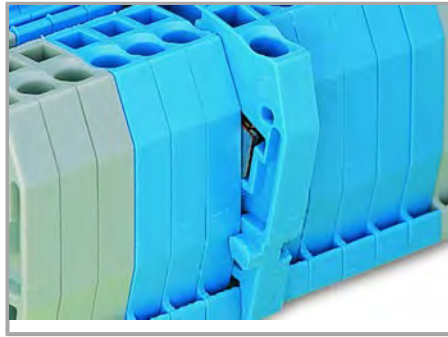
Installation Notes

Assembly

Subject to changes. Please also observe the further product documentation!



Snapping a terminal block onto the carrier rail.



Quick assembly keys prevent reverse mounting.



Removing a terminal block from the assembly.



Steel carrier rails are not suited for PEN (ground and N-conductor) applications per EN 60947-7-2 (VDE 0611, Part 3).

Inserting a conductor



CAGE CLAMP® connection

Inserting a conductor.

Subject to changes. Please also observe the further product documentation!



CAGE CLAMP® connection



CAGE CLAMP® connection
Removing a conductor.

Inserting a conductor.

With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross-section.

Commoning



Commoning using an adjacent jumper (280-402).



Commoning from 6 mm²/10 AWG (282 Series) to 1.5 mm²/16 AWG (279 Series) rail-mount terminal blocks via step-down jumpers.



Commoning from 6 mm²/10 AWG (282 Series) to 1.5 mm²/16 AWG (279 Series) rail-mount terminal blocks via step-down jumpers.

Push jumper down until fully inserted.

Subject to changes. Please also observe the further product documentation!

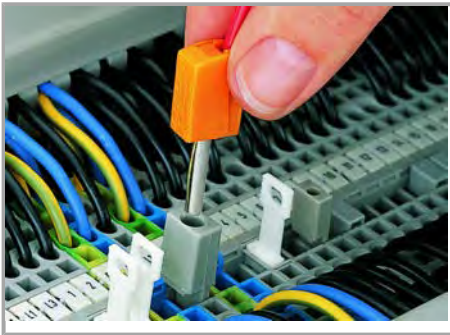


Commoning from 10 mm²/8 AWG (284 Series) to 6 mm²/10 AWG (282 Series) rail-mount terminal blocks via step-down jumpers.



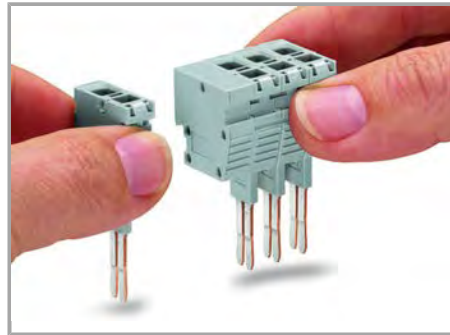
Commoning from 10 mm²/8 AWG (284 Series) to 6 mm²/10 AWG (282 Series) rail-mount terminal blocks via step-down jumpers.

Testing

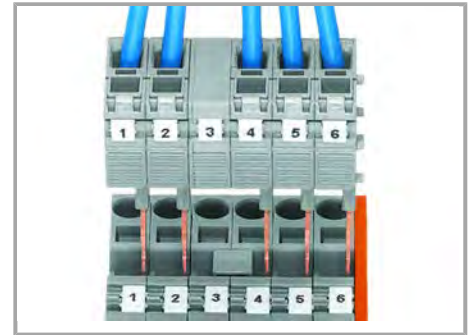


Testing with a test plug

(picture shows 209-170 Test Plug Adapter).



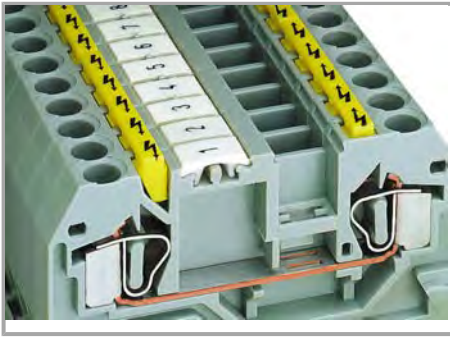
Snapping test plug and spacer modules together to assemble a multi-pole test plug module (max. 10 poles) for 8 mm terminal block width.



The test plug modules are directly plugged into the jumper contact slot of the current bar (picture shows 282 Series).

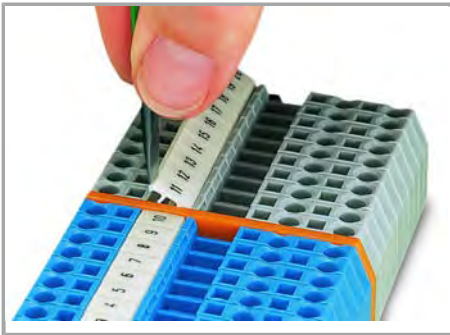
Cover

Subject to changes. Please also observe the further product documentation!



Protective warning markers inserted into the operating slots.

Marking



Marking via WMB Multi Marking System.

Subject to changes. Please also observe the further product documentation!