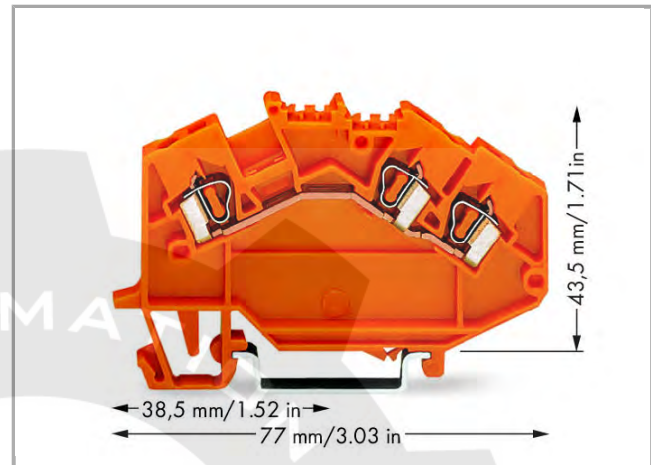


Data sheet | Item number: 780-654

3-conductor through terminal block; 2.5 mm²; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm²; orange



780-654



Item description

Note:

Terminating Aluminum Conductors

WAGO spring clamp terminal blocks are suitable for solid aluminum conductors up to 4 mm²/12 AWG if WAGO "Alu-Plus" Contact Paste is used for termination.

"Alu-Plus" Contact Paste Advantages:

- Automatically destroys the oxide film during clamping.
- Prevents fresh oxidation at the clamping point.
- Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block).
- Provides long-term protection against corrosion.

Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, aluminum conductors must first be cleaned with a blade and then immediately be inserted into the clamping units filled with "Alu-Plus" Contact Paste.

It is also possible to apply WAGO "Alu-Plus" **additionally** on the whole surface of the aluminum conductor before termination.

Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors:

2.5 mm² (14 AWG) = 16 A

4 mm² (12 AWG) = 22 A

Data

Electrical data

Ratings per IEC/EN 60664-1

Rated voltage (III / 3)	1000 V
Rated impulse voltage (III / 3)	8 kV
Rated current	24 A

Connection data

Connection technology	CAGE CLAMP®
Actuation type	Open Tool Slot
Connectable conductor materials	Copper Aluminum
Solid conductor	0.08 2.5 mm ² / 28 12 AWG
Fine-stranded conductor	0.08 2.5 mm ² / 28 12 AWG
Strip length	8 9 mm / 0.31 0.35 inch
Note (conductor cross-section)	12 AWG: THHN, THWN
Total number of connection points	3
Total number of potentials	1
Number of levels	1
Type of wiring	Front-entry wiring

Geometrical Data

Width	5 mm / 0.197 inch
Height from upper-edge of DIN-35 rail	43.5 mm / 1.713 inch

Depth	77 mm / 3.031 inch
-------	--------------------

Mechanical data

Design	angled
Type of mounting	DIN-35 rail
Marking level	Center marking

Material Data

Color	orange
Insulating material	Polyamide 66 (PA 66)
Fire load	0.177 MJ
Weight	9.25 g

Commercial data

Country of origin	DE
GTIN	4044918544665
Customs Tariff No.	85369010000

Approvals / Certificates

Radio-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	2157201.01
	CSA DEKRA Certification B.V.	C22.2 No. 158	1833819

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	EN 60947	14-HG1293677-PDA
	BV Bureau Veritas S.A.	EN 60947	07436/E0 BV
	CCA DEKRA Certification B.V.	EN 60947	2157201.01



CSA
DEKRA Certification B.V.

C22.2 No. 158

1833819



LR
Lloyds Register

EN 60947

91/20112
(E9)

Ship Approvals

Logo

Approval

Additional Approval Text

Certificate
name



ABS
American Bureau of Shipping

EN 60947

14-
HG1293677-
PDA



BV
Bureau Veritas S.A.

EN 60947

07436/E0
BV



LR
Lloyds Register

EN 60947

91/20112
(E9)

Other Approvals

Logo

Approval

Additional Approval Text

Certificate
name



UR
Underwriters Laboratories Inc.

UL 1059

E45172

UL-Approvals

Logo

Approval

Additional Approval Text

Certificate
name



UR
Underwriters Laboratories Inc.

UL 1059

20190731-
E45172

Compatible products

Marking accessories

	Item no.: 2009-115 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; white	2009-115
	Item no.: 2009-115/000-002 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; yellow	2009-115 /000-002
	Item no.: 2009-115/000-006 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; blue	2009-115 /000-006
	Item no.: 2009-115/000-007 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; gray	2009-115 /000-007
	Item no.: 2009-115/000-012 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; orange	2009-115 /000-012
	Item no.: 2009-115/000-017 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; light green	2009-115 /000-017
	Item no.: 2009-115/000-023 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; green	2009-115 /000-023
	Item no.: 2009-115/000-024 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; violet	2009-115 /000-024
	Item no.: 209-185 Adaptor	209-185
	Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white	793-501
	Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type; white	793-501 /000-002



Item no.: 793-501/000-005
WMB marking card; as card; not stretchable; plain; snap-on type; white

/000-005

793-501



Item no.: 793-501/000-006
WMB marking card; as card; not stretchable; plain; snap-on type; white

/000-006

793-501



Item no.: 793-501/000-007
WMB marking card; as card; not stretchable; plain; snap-on type; white

/000-007

793-501



Item no.: 793-501/000-012
WMB marking card; as card; not stretchable; plain; snap-on type; white

/000-012

793-501



Item no.: 793-501/000-017
WMB marking card; as card; not stretchable; plain; snap-on type; white

/000-017

793-501



Item no.: 793-501/000-023
WMB marking card; as card; not stretchable; plain; snap-on type; white

/000-023

793-501



Item no.: 793-501/000-024
WMB marking card; as card; not stretchable; plain; snap-on type; white

/000-024

793-501



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

793-5501



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

/000-002

793-5501



Item no.: 793-5501/000-005
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type; red

/000-005

793-5501



Item no.: 793-5501/000-006
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type; blue

/000-006

793-5501



Item no.: 793-5501/000-007
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type; gray

/000-007

793-5501



Item no.: 793-5501/000-012
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type; orange

/000-012

793-5501



Item no.: 793-5501/000-017
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type; light green

/000-017

793-5501



Item no.: 793-5501/000-023
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type; green

/000-023

793-5501



Item no.: 793-5501/000-024

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type; violet

793-5501

/000-024

assembling



Item no.: 209-106

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

209-106



Item no.: 709-154

Cover; Type 2; suitable for cover carrier, type 2; 1 m long; transparent

709-154

End plate



Item no.: 780-317

End and intermediate plate; 1.5 mm thick; orange

780-317

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

210-112



Item no.: 210-113

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

210-113



Item no.: 210-114

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

210-114



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

210-115



Item no.: 210-118

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715

210-118



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

210-196



Item no.: 210-197

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

210-197



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

210-198



Item no.: 210-504

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

210-504



Item no.: 210-505

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

210-505



Item no.: 210-506

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

210-506



Item no.: 210-508

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

210-508

Insulation stop



Item no.: 280-470

Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white

280-470



Item no.: 280-471

Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray

280-471



Item no.: 280-472
Insulation stop; 0.75 - 1 mm²; 5 pieces/strip

280-472

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

209-170



Item no.: 249-106
B-type test plug module; modular; 1,50 mm²; gray

249-106



Item no.: 249-107
B-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray

249-107



Item no.: 249-141
L-type test plug module; modular; with spring-loaded contact pin; Center module; 1,50 mm²; gray

249-141

tools



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

210-720

General accessories



Item no.: 249-105
Group marker carrier

249-105



Item no.: 280-404
Test plug adapter; 5 mm wide; for test plug 210-137 (2.3 mm Ø); suitable for 1.5 mm² - 4 mm² tbs; gray

280-404



Item no.: 280-418
Test plug module; modular; suitable for all WAGO 280 and 780 Series rail-mounted terminal blocks with jumper slots in the current bar; gray

280-418



Item no.: 280-419
Spacer module; modular; bridging commoned terminal blocks; gray

280-419



Item no.: 281-407
Test plug; 6 mm wide; Nominal current 24 A; for 0.08 mm² - 2.5 mm²; 2,50 mm²; gray

281-407

Jumper



Item no.: 249-123
Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm²

249-123



Item no.: 249-125
Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm²

249-125



Item no.: 249-126
Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm²

249-126



Item no.: 249-127
Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm²

249-127



Item no.: 280-402
Adjacent jumper; insulated; IN = IN terminal block; gray

280-402



Item no.: 280-409
Alternate jumper; insulated; IN = IN terminal block; gray

280-409



Item no.: 280-422
Adjacent jumper; insulated; IN = IN terminal block; yellow-green

280-422

	Item no.: 780-452 Staggered jumper; insulated; from 1 to 2; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	780-452
	Item no.: 780-453 Staggered jumper; insulated; from 1 to 3; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	780-453
	Item no.: 780-454 Staggered jumper; insulated; from 1 to 4; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	780-454
	Item no.: 780-455 Staggered jumper; insulated; from 1 to 5; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	780-455
	Item no.: 780-456 Staggered jumper; insulated; from 1 to 6; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	780-456
	Item no.: 780-457 Staggered jumper; insulated; from 1 to 7; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	780-457
	Item no.: 780-458 Staggered jumper; insulated; from 1 to 8; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	780-458
ferrule		
	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated	216-101
	Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated	216-102
	Item no.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated	216-103
	Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	216-104
	Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated	216-106
	Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated	216-121
	Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated	216-122
	Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated	216-123
	Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	216-124
	Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	216-131
	Item no.: 216-132 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	216-132
	Item no.: 216-141 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	216-141
	Item no.: 216-142	

	Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	216-142
	Item no.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	216-143
	Item no.: 216-144 Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	216-144
	Item no.: 216-151 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated	216-151
	Item no.: 216-152 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated	216-152
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white	216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black	216-204
	Item no.: 216-205 Ferrule; Sleeve for 2.08 mm² / AWG 14; insulated; electro-tin plated; yellow	216-205
	Item no.: 216-206 Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; blue	216-206
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white	216-221
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	216-223
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black	216-224
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	216-242
	Item no.: 216-243 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	216-243
	Item no.: 216-244 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	216-244

	Item no.: 216-246 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	216-246
	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	216-262
	Item no.: 216-263 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	216-263
	Item no.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	216-264
	Item no.: 216-266 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	216-266
	Item no.: 216-284 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	216-284
	Item no.: 216-286 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	216-286
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	216-302
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	216-322
Protective Warning Marker		
	Item no.: 280-415 Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks; yellow	280-415

Downloads

Documentation

Bid Text

780-654		doc 25.1 kB	Download
Additional Information			
Technical explanations	Apr 3, 2019	pdf 2.1 MB	Download



CAD/CAE - Smart Data

CAD data

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Product family

TOPJOB Classic
Show all products from the family

Subject to changes.