

Feed-through terminal block - ST 6 - 3031487

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Feed-through terminal block, Connection method: Spring-cage connection, Cross section: 0.2 mm² - 10 mm², AWG: 24 - 8, Width: 8.2 mm, Color: gray, Mounting type: NS 35/7,5, NS 35/15

Why buy this product

- As well as saving space, the compact design and front connection enable user-friendly wiring in a small amount of space
- The consistent double function shaft offers every opportunity for time-saving potential distribution and accommodating test accessories
- The large wiring space enables the use of conductors with ferrules and plastic collars within the nominal cross section
- Tested for railway applications



Key Commercial Data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	 4 017918 186944
Weight per Piece (excluding packing)	16.32 g
Custom tariff number	85369010
Country of origin	Germany

Technical data

General

Number of levels	1
Number of connections	2
Nominal cross section	6 mm ²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Mechanical engineering
	Plant engineering

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Technical data

General

	Process industry
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Connection in acc. with standard	IEC 60947-7-1
Maximum load current	52 A (with 10 mm ² conductor cross section)
Nominal current I _N	41 A
Nominal voltage U _N	1000 V
Open side panel	ja
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Surge voltage test setpoint	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2.2 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.2 mm ² / 0.2 kg
	6 mm ² / 1.4 kg
	10 mm ² / 2 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.2 mm ²
Tractive force setpoint	10 N
Conductor cross section tensile test	6 mm ²
Tractive force setpoint	80 N
Conductor cross section tensile test	10 mm ²
Tractive force setpoint	90 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	5 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	6 mm ²
Short-time current	0.72 kA

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Technical data

General

Conductor cross section short circuit testing	10 mm ²
Short-time current	1.2 kA
Result of aging test	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 2, bogie mounted
Test frequency	f ₁ = 5 Hz to f ₂ = 250 Hz
ASD level	11.83 (m/s ²) ² /Hz
Acceleration	4.25 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Static insulating material application in cold	-60 °C

Dimensions

Width	8.2 mm
End cover width	2.2 mm
Length	69.5 mm
Height NS 35/7,5	43.5 mm
Height NS 35/15	51 mm

Connection data

Connection method	Spring-cage connection
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	10 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	8
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	6 mm ²

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Technical data

Connection data

Min. AWG conductor cross section, flexible	24
Max. AWG conductor cross section, flexible	10
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.25 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.25 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm ²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm ²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	1.5 mm ²
Connection in acc. with standard	IEC/EN 60079-7
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	10 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	8
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	6 mm ²
Stripping length	12 mm
Internal cylindrical gage	A5

Standards and Regulations

Connection in acc. with standard	CSA
	IEC 60947-7-1
Flammability rating according to UL 94	V0

Classifications

eCl@ss

eCl@ss 4.0	27141121
eCl@ss 4.1	27141121
eCl@ss 5.0	27141120
eCl@ss 5.1	27141120
eCl@ss 6.0	27141120
eCl@ss 7.0	27141120
eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897

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Classifications

UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

Approvals

Approvals

Approvals


CSA / UL Recognized / VDE Gutachten mit Fertigungsüberwachung / cUL Recognized / LR / GL / BV / RS / KR / NK / IECCEB Scheme / EAC / EAC / cULus Recognized


Ex Approvals

IECEX / ATEX / EAC Ex

Approvals submitted


Approval details

CSA 		
	B	C
mm ² /AWG/kcmil	24-8	24-8
Nominal current I _N	50 A	50 A
Nominal voltage U _N	600 V	600 V


UL Recognized 		
	B	C
mm ² /AWG/kcmil	24-8	24-8
Nominal current I _N	50 A	50 A
Nominal voltage U _N	600 V	600 V

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VDE Gutachten mit Fertigungsüberwachung 

mm ² /AWG/kcmil	0.5-6
Nominal current I _N	41 A
Nominal voltage U _N	800 V

cUL Recognized 

	B	C
mm ² /AWG/kcmil	24-8	24-8
Nominal current I _N	50 A	50 A
Nominal voltage U _N	600 V	600 V

LR

GL


mm ² /AWG/kcmil	6
Nominal current I _N	41 A
Nominal voltage U _N	800 V

BV

RS

KR

NK

IECEE CB Scheme 

mm ² /AWG/kcmil	0.5-6
Nominal voltage U _N	800 V

EAC

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Approvals

EAC

cULus Recognized 

Accessories

Accessories

DIN rail

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m

DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119



DIN rail 35 mm (NS 35)

DIN rail - NS 35/ 7,5 WH UNPERF 2000MM - 1204122



DIN rail 35 mm (NS 35)

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Accessories

DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704



DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail, material: Galvanized, perforated, height 7.5 mm, width 35 mm, length: 2 m

DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, material: Galvanized, unperforated, height 7.5 mm, width 35 mm, length: 2 m

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m

End cap - NS 35/ 7,5 CAP - 1206560



DIN rail end piece, for DIN rail NS 35/7.5

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Accessories

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 15 mm, width 35 mm, length: 2000 mm

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m

DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602



DIN rail 35 mm (NS 35)

DIN rail - NS 35/15 WH UNPERF 2000MM - 1204135



DIN rail 35 mm (NS 35)

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, deep drawn, high profile, unperforated, 1.5 mm thick, material: aluminum, height 15 mm, width 35 mm, length 2000 mm

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DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599



DIN rail, material: Galvanized, perforated, height 15 mm, width 35 mm, length: 2 m

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586



DIN rail, material: Galvanized, unperforated, height 15 mm, width 35 mm, length: 2 m

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, material: Copper, unperforated, 1.5 mm thick, height 15 mm, width 35 mm, length: 2 m

End cap - NS 35/15 CAP - 1206573



DIN rail end piece, for DIN rail NS 35/15

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, material: Steel, unperforated, 2.3 mm thick, height 15 mm, width 35 mm, length: 2 m

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Accessories

Mounting material - ST-IL - 3039900

Operating decal for the ST terminal block



End block

End clamp - CLIPFIX 35 - 3022218



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

End clamp - CLIPFIX 35-5 - 3022276



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray

End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

End clamp - E/UK - 1201442



End clamp, Width: 9.5 mm, Height: 35.3 mm, Length: 50.5 mm, Color: gray

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Accessories

End clamp - E/UK 1 - 1201413



End clamps, for supporting the ends of double-level and three-level terminal blocks, width: 10 mm, color: gray

End cover

End cover - D-ST 6 - 3030433



End cover, Length: 69.5 mm, Width: 2.2 mm, Height: 36 mm, Color: gray

Jumper

Plug-in bridge - FBS 2-8 - 3030284



Plug-in bridge, Length: 29.6 mm, Width: 14.7 mm, Number of positions: 2, Color: red

Plug-in bridge - FBS 3-8 - 3030297



Plug-in bridge, Number of positions: 3, Color: red

Plug-in bridge - FBS 4-8 - 3030307



Plug-in bridge, Number of positions: 4, Color: red

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Accessories

Plug-in bridge - FBS 5-8 - 3030310



Plug-in bridge, Number of positions: 5, Color: red

Plug-in bridge - FBS 10-8 - 3030323



Plug-in bridge, Number of positions: 10, Color: red

Plug-in bridge - FBS 6-8 - 3032470



Plug-in bridge, Number of positions: 6, Color: red

Plug-in bridge - FBSR 2-8 - 3033808



Plug-in bridge, Number of positions: 2, Color: red

Plug-in bridge - FBSR 3-8 - 3001597



Plug-in bridge, Number of positions: 3, Color: red

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Plug-in bridge - FBSR 4-8 - 3000585



Plug-in bridge, Number of positions: 4, Color: red

Plug-in bridge - FBSR 5-8 - 3033809



Plug-in bridge, Number of positions: 5, Color: red

Plug-in bridge - FBSR 10-8 - 3001599



Plug-in bridge, Number of positions: 10, Color: red

Plug-in bridge - FBS 2-8 CT - 3033830



Plug-in bridge, Length: 29.6 mm, Width: 14.7 mm, Number of positions: 2, Color: orange

Plug-in bridge - FBS 3-8 CT - 3033831



Plug-in bridge, Number of positions: 3, Color: orange

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Accessories

Plug-in bridge - FBS 4-8 CT - 3033832



Plug-in bridge, Number of positions: 4, Color: orange

Plug-in bridge - FBS 10-8 CT - 3033833



Plug-in bridge, Number of positions: 10, Color: orange

Labeled terminal marker

Warning cover - WST 6 - 3030967



Warning cover, Strip, yellow, labeled, Mounting type: Plug in, Lettering field: 10.4 x 7.55 mm

Zack marker strip - ZB 8 CUS - 0825011



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 8.2 mm, Lettering field: 10.5 x 8.15 mm

Marker for terminal blocks - UC-TM 8 CUS - 0824597



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 8.2 mm, Lettering field: 7.6 x 10.5 mm

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Accessories

Marker for terminal blocks - UCT-TM 8 CUS - 0829616



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 8.2 mm, Lettering field: 7.6 x 10.5 mm

Zack marker strip - ZB 8,LGS:FORTL.ZAHLEN - 1052015



Zack marker strip, Strip, white, labeled, can be labeled with: Plotter, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into tall marker groove, for terminal block width: 8.2 mm, Lettering field: 10.5 x 8.15 mm

Zack marker strip - ZB 8,QR:FORTL.ZAHLEN - 1052028



Zack marker strip, Strip, white, labeled, can be labeled with: Plotter, Printed vertically: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into tall marker groove, for terminal block width: 8.2 mm, Lettering field: 10.5 x 8.15 mm

Marker for terminal blocks - ZB 8,LGS:L1-N,PE - 1052413



Marker for terminal blocks, Strip, white, labeled, can be labeled with: Plotter, Horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, Mounting type: Snap into tall marker groove, for terminal block width: 8.2 mm, Lettering field: 10.5 x 8.15 mm

Zack Marker strip, flat - ZBF 8 CUS - 0825030



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 8 mm, Lettering field: 5.15 x 8.15 mm

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Accessories

Zack Marker strip, flat - ZBF 8,LGS:FORTL.ZAHLEN - 0808804



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 101 - 110, Mounting type: Snap into flat marker groove, for terminal block width: 8 mm, Lettering field: 5.15 x 8.15 mm

Marker for terminal blocks - UC-TMF 8 CUS - 0824654



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 8.2 mm, Lettering field: 7.6 x 5.1 mm

Marker for terminal blocks - UCT-TMF 8 CUS - 0829672



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 8.2 mm, Lettering field: 7.4 x 4.7 mm

Partition plate

Partition plate - ATP-ST 6 - 3024481



Partition plate, Length: 73.5 mm, Width: 2 mm, Height: 47.2 mm, Color: gray

Spacer plate - DP PS-6 - 3036738



Spacer plate, Length: 22.4 mm, Width: 6.2 mm, Height: 29 mm, Number of positions: 1, Color: red

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Accessories

Spacer plate - DP PS-8 - 3036741



Spacer plate, Length: 22.4 mm, Width: 8.2 mm, Height: 29 mm, Number of positions: 1, Color: red

Planning and marking software

Software - CLIP-PROJECT ADVANCED - 5146040



Multilingual software for easy planning of Phoenix Contact on DIN rails together with the integrated TRABTECH-select software module for planning comprehensive surge protection concepts.

Software - CLIP-PROJECT PROFESSIONAL - 5146053



Multi-lingual software for terminal strip project planning. A marking module allows professional labeling of markers and labels for marking terminal blocks, conductors, cables and devices. The additionally integrated software module TRABTECH-select for planning comprehensive surge protection concepts.

Reducing bridge

Reducing bridge - RB ST 6-(2,5/4) - 3030860



Reducing bridge, Number of positions: 2, Color: red

Reducing bridge - RB 16-6 - 3047072



Reducing bridge, Number of positions: 2, Color: red

Screwdriver tools

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Accessories

Screwdriver - SZF 2-0,8X4,0 - 1204520



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.8 x 4.0 x 100 mm, 2-component grip, with non-slip grip

Short-circuit connector

Short-circuit connector - FBSRH 2-8 - 3033802



Short-circuit connector, Number of positions: 2, Color: red

Short-circuit connector - FBSRH 3-8 - 3033803



Short-circuit connector, Number of positions: 3, Color: red

Short-circuit connector - FBSRH 4-8 - 3033804



Short-circuit connector, Number of positions: 4, Color: red

Terminal marking

Zack marker strip - ZB 8:UNBEDRUCKT - 1052002



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 8.2 mm, Lettering field: 10.5 x 8.15 mm

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Accessories

Marker for terminal blocks - UC-TM 8 - 0818072



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 8.2 mm, Lettering field: 7.6 x 10.5 mm

Marker for terminal blocks - UCT-TM 8 - 0828740



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, Mounting type: Snap into tall marker groove, for terminal block width: 8.2 mm, Lettering field: 7.6 x 10.5 mm

Zack Marker strip, flat - ZBF 8:UNBEDRUCKT - 0808781



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 8 mm, Lettering field: 5.15 x 8.15 mm

Marker for terminal blocks - UC-TMF 8 - 0818137



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 8.2 mm, Lettering field: 7.6 x 5.1 mm

Marker for terminal blocks - UCT-TMF 8 - 0828748



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, Mounting type: Snap into flat marker groove, for terminal block width: 8.2 mm, Lettering field: 7.4 x 4.7 mm

Test plug terminal block

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Accessories

Test plugs - PS-6 - 3030996



Test plugs, Color: red

Test plugs - PS-6/2,3MM RD - 3038736



Test plugs, Color: red

Test plugs - PS-8 - 3031005



Test plugs, Color: red

Test adapter - PS-8/2,3MM RD - 3048564



Test adapter, Color: red

Test socket

Test adapter - PAI-4-FIX BU - 3032729



4 mm test adapter, for terminal blocks with 8.2 mm pitch

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Accessories

Test adapter - PAI-4-FIX OG - 3034455



4 mm test adapter, for terminal blocks with 8.2 mm pitch

Test adapter - PAI-4-FIX YE - 3032745



4 mm test adapter, for terminal blocks with 8.2 mm pitch

Test adapter - PAI-4-FIX RD - 3032732



4 mm test adapter, for terminal blocks with 8.2 mm pitch

Test adapter - PAI-4-FIX GN - 3032758



4 mm test adapter, for terminal blocks with 8.2 mm pitch

Test adapter - PAI-4-FIX BK - 3032774



4 mm test adapter, for terminal blocks with 8.2 mm pitch

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Accessories

Test adapter - PAI-4-FIX GY - 3032790



4 mm test adapter, for terminal blocks with 8.2 mm pitch

Test adapter - PAI-4-FIX VT - 3032761



4 mm test adapter, for terminal blocks with 8.2 mm pitch

Test adapter - PAI-4-FIX BN - 3032787



4 mm test adapter, for terminal blocks with 8.2 mm pitch

Test adapter - PAIS-4-FIX GY - 3032791



Test adapter, Color: gray

Test adapter - PAIS-4-FIX BK - 3032792



Test adapter, Color: black

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Accessories

Test adapter - PAIS-4-FIX RD - 3032793



Test adapter, Color: red

Drawings

Circuit diagram

