

Feed-through terminal block - ST 1,5-TWIN - 3031128

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Feed-through terminal block, Connection method: Spring-cage connection, Cross section: 0.08 mm² - 1.5 mm², AWG: 28 - 16, Width: 4.2 mm, Color: gray, Mounting type: NS 35/7,5, NS 35/15

Why buy this product

- The consistent double function shaft offers every opportunity for time-saving potential distribution and accommodating test accessories
- Tested for railway applications
- User-friendly implementation of all potential branching tasks
- Space-saving and practical multi-conductor connection without additional bridges



Key commercial data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	
Weight per Piece (excluding packing)	6.38 g
Custom tariff number	85369010
Country of origin	Germany

Technical data

General

Number of levels	1
Number of connections	3
Color	gray
Insulating material	PA
Inflammability class according to UL 94	V0
Area of application	Railway industry
	Mechanical engineering
	Plant engineering
	Process industry

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Technical data

General

Maximum load current	17.5 A (with 1.5 mm ² conductor cross section)
Rated surge voltage	6 kV
Pollution degree	3
Surge voltage category	III
Insulating material group	I
Connection in acc. with standard	IEC 60947-7-1
Maximum load current	17.5 A (In case of a 1.5 mm ² conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal current I _N	17.5 A (with 1.5 mm ² conductor cross section)
Nominal voltage U _N	500 V
Maximum load current	17.5 A (In case of a 1.5 mm ² conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.)
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
Surge voltage test setpoint	7.3 kV
Result of surge voltage test	Test passed
Power frequency withstand voltage setpoint	1.89 kV
Result of power-frequency withstand voltage test	Test passed
Checking the mechanical stability of terminal points (5 x conductor connection)	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.08 mm ² / 0.1 kg
	1.5 mm ² / 0.4 kg
Result of bending test	Test passed
Conductor cross section tensile test	0.08 mm ²
Tractive force setpoint	5 N
Conductor cross section tensile test	1.5 mm ²
Tractive force setpoint	40 N
Tensile test result	Test passed
Tight fit on carrier	NS 35
Setpoint	1 N
Result of tight fit test	Test passed
Result of voltage drop test	Test passed
Temperature-rise test	Test passed
Conductor cross section short circuit testing	1.5 mm ²
Short-time current	0.18 kA
Short circuit stability result	Test passed

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Technical data

General

Ageing test for screwless modular terminal block temperature cycles	192
Result of aging test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Result of thermal test	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	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Oscillation, broadband noise test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Semi-sinusoidal
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Shock test result	Test passed
Temperature index, insulating material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Static insulating material application in cold	-60 °C

Dimensions

Width	4.2 mm
End cover width	2.2 mm
Length	60.5 mm
Height NS 35/7,5	36.5 mm
Height NS 35/15	44 mm

Connection data

Connection in acc. with standard	IEC 60947-7-1
Connection method	Spring-cage connection
Conductor cross section solid min.	0.08 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section AWG/kcmil min.	28
Conductor cross section AWG/kcmil max	16
Conductor cross section stranded min.	0.08 mm ²
Conductor cross section stranded max.	1.5 mm ²
Min. AWG conductor cross section, stranded	28
Max. AWG conductor cross section, stranded	16

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Technical data

Connection data

Conductor cross section stranded, with ferrule without plastic sleeve min.	0.14 mm ²
Conductor cross section stranded, with ferrule without plastic sleeve max.	1.5 mm ²
Conductor cross section stranded, with ferrule with plastic sleeve min.	0.14 mm ²
Conductor cross section stranded, with ferrule with plastic sleeve max.	1.5 mm ²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm ²
Stripping length	10 mm
Internal cylindrical gage	A1

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

ETIM

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

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 / DNV / EAC / cULus Recognized

Feed-through terminal block - ST 1,5-TWIN - 3031128


Approvals

Ex Approvals


IECEX / ATEX / EAC Ex

Approvals submitted


Approval details

CSA 


	B	C
mm ² /AWG/kcmil	26-14	26-14
Nominal current I _N	15 A	15 A
Nominal voltage U _N	300 V	300 V

UL Recognized 

	B	C
mm ² /AWG/kcmil	26-14	26-14
Nominal current I _N	15 A	15 A
Nominal voltage U _N	300 V	300 V

VDE Gutachten mit Fertigungsüberwachung 

mm ² /AWG/kcmil	1.5
Nominal current I _N	17.5 A
Nominal voltage U _N	500 V

cUL Recognized 

	B	C
mm ² /AWG/kcmil	26-14	26-14
Nominal current I _N	15 A	15 A
Nominal voltage U _N	300 V	300 V

LR

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Approvals


GL	
mm ² /AWG/kcmil	1.5
Nominal current I _N	17.5 A
Nominal voltage U _N	500 V

BV

RS

KR

NK

IECEE CB Scheme 	
mm ² /AWG/kcmil	1.5
Nominal voltage U _N	500 V

DNV

EAC

cULus Recognized 

Accessories

Accessories

Documentation

Mounting material - ST-IL - 3039900

Operating decal for the ST terminal block



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Accessories

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, for assembly on NS 32 or NS 35/7.5 DIN rail

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

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Accessories

End cover - D-ST 2,5-TWIN - 3030488



End cover, Length: 60.5 mm, Width: 2.2 mm, Height: 29 mm, Color: gray

Cover segment - DS-ST 2,5 - 3036602



End cover segments, large segment: 32.25 x 13.83 x 0.9, small segment: 22.65 x 11.65 x 0.9, color: gray

End cover - D-ST 2,5-TWIN-0,8 OG - 3030512



End cover, Length: 60.5 mm, Width: 0.8 mm, Height: 29 mm, Color: orange

Spacer plate - DP PS-4 - 3036712



Spacer plate, Color: red

Front adapter

Front adapters - VIP-PA-PWR/20XOE/ 1,0M/S7 - 2904724



VIP power cabling, universal front adapter for connection to all popular 20-pos. SIMATIC S7-300 I/O modules, via 20 individual wires in rope structure, not assembled (field connection, e.g., via 20 modular terminal blocks), cable length: 1 m

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Accessories

Front adapters - VIP-PA-PWR/20XOE/ 2,0M/S7 - 2904725



VIP power cabling, universal front adapter for connection to all popular 20-pos. SIMATIC S7-300 I/O modules, via 20 individual wires in rope structure, not assembled (field connection, e.g., via 20 modular terminal blocks), cable length: 2 m

Front adapters - VIP-PA-PWR/20XOE/ 3,0M/S7 - 2904726



VIP power cabling, universal front adapter for connection to all popular 20-pos. SIMATIC S7-300 I/O modules, via 20 individual wires in rope structure, not assembled (field connection, e.g., via 20 modular terminal blocks), cable length: 3 m

Front adapters - VIP-PA-PWR/20XOE/10,0M/S7 - 2904730



VIP power cabling, universal front adapter for connection to all popular 20-pos. SIMATIC S7-300 I/O modules, via 20 individual wires in rope structure, not assembled (field connection, e.g., via 20 modular terminal blocks), cable length: 10 m

Front adapters - VIP-PA-PWR/40XOE/ 1,0M/S7 - 2904731



VIP power cabling, universal front adapter for connection to all popular 40-pos. SIMATIC S7-300 I/O modules, via 40 individual wires in rope structure, not assembled (field connection, e.g., via 40 modular terminal blocks), cable length: 1 m

Front adapters - VIP-PA-PWR/40XOE/ 2,0M/S7 - 2904732



VIP power cabling, universal front adapter for connection to all popular 40-pos. SIMATIC S7-300 I/O modules, via 40 individual wires in rope structure, not assembled (field connection, e.g., via 40 modular terminal blocks), cable length: 2 m

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Accessories

Front adapters - VIP-PA-PWR/40XOE/ 3,0M/S7 - 2904733



VIP power cabling, universal front adapter for connection to all popular 40-pos. SIMATIC S7-300 I/O modules, via 40 individual wires in rope structure, not assembled (field connection, e.g., via 40 modular terminal blocks), cable length: 3 m

Front adapters - VIP-PA-PWR/40XOE/10,0M/S7 - 2904737



VIP power cabling, universal front adapter for connection to all popular 40-pos. SIMATIC S7-300 I/O modules, via 40 individual wires in rope structure, not assembled (field connection, e.g., via 40 modular terminal blocks), cable length: 10 m

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663



Insulating sleeve, Color: white

Insulating sleeve - MPS-IH RD - 0201676



Insulating sleeve, Color: red

Insulating sleeve - MPS-IH BU - 0201689



Insulating sleeve, Color: blue

Feed-through terminal block - ST 1,5-TWIN - 3031128

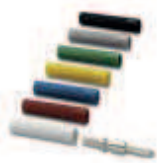
Accessories

Insulating sleeve - MPS-IH YE - 0201692



Insulating sleeve, Color: yellow

Insulating sleeve - MPS-IH GN - 0201702



Insulating sleeve, Color: green

Insulating sleeve - MPS-IH GY - 0201728



Insulating sleeve, Color: gray

Insulating sleeve - MPS-IH BK - 0201731



Insulating sleeve, Color: black

Insulating sleeve - ISH 1,5/0,2 - 3206131



Insulating sleeve, Color: white

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Accessories

Insulating sleeve - ISH 1,5/0,5 - 3031034



Insulating sleeve, Color: gray

Jumper

Plug-in bridge - FBS 20-4 - 3030352



Plug-in bridge, Number of positions: 20, Color: red

Plug-in bridge - FBS 10-4 - 3030158



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

Plug-in bridge - FBS 5-4 - 3030145



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

Plug-in bridge - FBS 4-4 - 3030132



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

Feed-through terminal block - ST 1,5-TWIN - 3031128

Accessories

Plug-in bridge - FBS 3-4 - 3030129



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

Plug-in bridge - FBS 2-4 - 3030116



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

Labeled terminal marker

Zack marker strip - ZB 4 CUS - 0824951



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 4.2 mm, Lettering field: 4.2 x 10.5 mm

Zack marker strip - ZB 4,LGS:FORTL.ZAHLEN - 0805739



Zack marker strip, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into tall marker groove, for terminal block width: 4.2 mm, Lettering field: 4.2 x 10.5 mm

Zack marker strip - ZB 4,QR:FORTL.ZAHLEN - 0805807

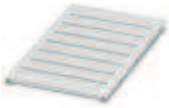


Zack marker strip, Strip, white, labeled, Printed vertically: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into tall marker groove, for terminal block width: 4.2 mm, Lettering field: 4.2 x 10.5 mm

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Accessories

Marker for terminal blocks - UC-TM 4 CUS - 0824573



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: 4.2 mm, Lettering field: 3.6 x 10.5 mm

Marker for terminal blocks - UCT-TM 4 CUS - 0829588



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: 4.2 mm, Lettering field: 3.6 x 10.5 mm

Zack Marker strip, flat - ZBF 4 CUS - 0825023



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: 4.2 mm, Lettering field: 4.2 x 5.2 mm

Zack Marker strip, flat - ZBF 4,LGS:FORTL.ZAHLEN - 0808626



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 4 mm, Lettering field: 4.2 x 5.2 mm

Zack Marker strip, flat - ZBF 4,QR:FORTL.ZAHLEN - 0808820



Zack Marker strip, flat, Strip, white, labeled, Printed vertically: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 4 mm, Lettering field: 4.2 x 5.2 mm

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Accessories

Zack Marker strip, flat - ZBF 4,LGS:GERADE ZAHLEN - 0810818



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 2 - 20, 22 - 40, etc. up to 82 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 4 mm, Lettering field: 5.15 x 4.15 mm

Zack Marker strip, flat - ZBF 4,LGS:UNGERADE ZAHLEN - 0810850



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, Mounting type: Snap into flat marker groove, for terminal block width: 4 mm, Lettering field: 5.15 x 4.15 mm

Marker for terminal blocks - UC-TMF 4 CUS - 0824630



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: 4.2 mm, Lettering field: 3.6 x 5.1 mm

Marker for terminal blocks - UCT-TMF 4 CUS - 0829651



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: 4.2 mm, Lettering field: 3.4 x 4.7 mm

Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

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Accessories

Marker pen - X-PEN 0,35 - 0811228



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

Mounting 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)

Feed-through terminal block - ST 1,5-TWIN - 3031128

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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Accessories

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

Partition plate

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Accessories

Partition plate - ATP-ST-TWIN - 3030789



Partition plate, Length: 76.6 mm, Width: 2 mm, Height: 45 mm, Color: gray

Screwdriver tools

Screwdriver - SZF 0-0,4X2,5 - 1204504



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

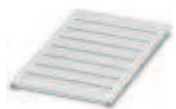
Terminal marking

Zack marker strip - ZB 4 :UNBEDRUCKT - 0805001



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 4.2 mm, Lettering field: 4.2 x 10.5 mm

Marker for terminal blocks - UC-TM 4 - 0818111



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: 4.2 mm, Lettering field: 3.6 x 10.5 mm

Marker for terminal blocks - UCT-TM 4 - 0828732



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: 4.2 mm, Lettering field: 3.6 x 10.5 mm

Feed-through terminal block - ST 1,5-TWIN - 3031128

Accessories

Zack Marker strip, flat - ZBF 4:UNBEDRUCKT - 0808587



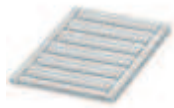
Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 4 mm, Lettering field: 4.2 x 5.2 mm

Marker for terminal blocks - UC-TMF 4 - 0818166



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: 4.2 mm, Lettering field: 3.6 x 5.1 mm

Marker for terminal blocks - UCT-TMF 4 - 0828742



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: 4.2 mm, Lettering field: 3.4 x 4.7 mm

Test plug terminal block

Reducing plug - RPS - 0201647



Reducing plug, Color: gray

Test plugs - MPS-MT - 0201744



Test plugs, Color: silver

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Accessories

Test plugs - PAI-4 - 3030925



Test plugs, Color: gray

Test plugs - PS-4 - 3030970



Test plugs, Color: red

Drawings

Circuit diagram

