

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

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Sensor/actuator terminal block, nom. voltage: 24 V, nominal current: 18 A, connection method: Spring-cage connection, number of connections: 4, cross section: 0.08 mm² - 4 mm², AWG: 28 - 12, width: 5.2 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

Your advantages

- ✓ Three-conductor output terminal block of the same shape with PE connection in the lower level for wiring actuators
- ✓ Power terminal blocks can be located at any point on the terminal strip for supply or extension purposes
- ✓ Easy bridging and potential distribution using the patented plug-in bridges from the CLIPLINE complete system
- ✓ Versions with LED for indicating the switching states
- ✓ The upper level is for signal wiring, whereas the two lower levels are used to distribute the positive and negative potential
- ✓ Potential is supplied via the STIO-IN power terminal blocks
- ✓ For space and time-saving wiring of three-conductor initiators and actuators



Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4046356143523

Technical data

General

Number of levels	3
Number of connections	4
Nominal cross section	2.5 mm ²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	4 kV
Degree of pollution	3

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Technical data

General

Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	0.77 W (the value is multiplied when connecting multiple levels)
Ambient temperature (operation)	-60 °C ... 85 °C
Ambient temperature (storage/transport)	-25 °C ... 55 °C (For a short time, not exceeding 24 h, -60 to +70 °C)
Permissible humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Connection in acc. with standard	IEC 60947-7-1
Nominal current I_N	18 A
Maximum load current	18 A (with 4 mm ² conductor cross section)
Nominal voltage U_N	24 V (Light indicator, green)
Open side panel	Yes
Relative insulation material temperature index (Elec.; UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Smoke gas toxicity NFPA 130 (SMP 800C)	passed
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3

Dimensions

Width	5.2 mm
Length	75 mm
Height NS 35/7,5	44.5 mm
Height NS 35/15	52 mm

Connection data

Connection method	Spring-cage connection
Conductor cross section solid min.	0.08 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section flexible min.	0.08 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	28
Conductor cross section AWG max.	12
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm ²

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Technical data

Connection data

Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm ²
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, maximum	0.5 mm ²
Stripping length	8 mm ... 10 mm

Standards and Regulations

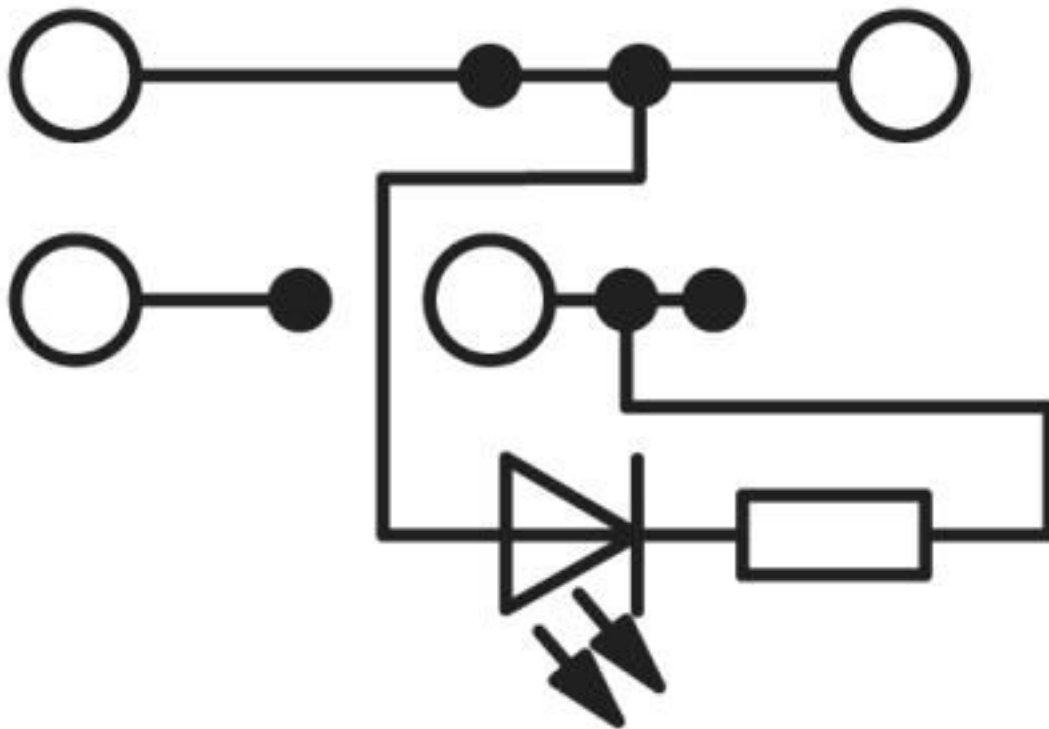
Connection in acc. with standard	CUL
	IEC 60947-7-1
Flammability rating according to UL 94	V0

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Circuit diagram



Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Classifications

eCl@ss

eCl@ss 10.0.1	27141128
eCl@ss 11.0	27141128
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141128
eCl@ss 8.0	27141128
eCl@ss 9.0	27141128

ETIM

ETIM 2.0	EC000900
ETIM 3.0	EC000900
ETIM 4.0	EC000900
ETIM 5.0	EC000900
ETIM 6.0	EC000900
ETIM 7.0	EC000900

UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

Ex Approvals

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 60425
	B	C	D	
Nominal voltage UN	300 V	150 V	300 V	
Nominal current IN	10 A	18 A	10 A	
mm ² /AWG/kcmil	28-12	28-12	28-12	

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 60425
	B	C	D	
Nominal voltage UN	300 V	150 V	300 V	
Nominal current IN	10 A	18 A	10 A	
mm ² /AWG/kcmil	28-12	28-12	28-12	

EAC		EAC-Zulassung
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EAC		RU C-DE.BL08.B.00644
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cULus Recognized	
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Accessories

Accessories

Bridge

Wire bridge - FBSW 2-5/250MM - 3030172

Wire bridge, length: 250 mm, width: 5.1 mm, number of positions: 1, color: red/black



Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

Wire bridge - FBSW 2-5/60MM - 3030170



Wire bridge, length: 60 mm, width: 5.1 mm, number of positions: 1, color: red/black

Wire bridge - FBSW 2-5/110MM - 3030171



Wire bridge, length: 110 mm, width: 5.1 mm, number of positions: 1, color: red/black

Cover

Group cover marker - BST 2,5 - 3061282



Cover for actuation shaft, 5-pos., for spring-cage terminal blocks with width of 5.2 mm

DIN rail

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



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

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



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

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



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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



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

Documentation

Mounting material - ST-IL - 3039900



Operating decal for the ST terminal block

End block

End clamp - E/AL-NS 35 - 1201662



End clamp, for end support of UKH 50 to UKH 240, is pushed onto DIN rail NS 35 and fixed with 2 screws, width: 10 mm, color: aluminum

End cover

End cover - D-STIO 2,5/3 - 3209112



End cover, length: 74.9 mm, width: 2.2 mm, height: 36.8 mm, color: gray

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

Filler plug

Filler plugs - CEC 2,5 - 3062757



Cover for conductor shaft, 10-pos., for spring cage terminal blocks (ST) and terminal blocks with push-in technology (PT) with a width of 5.2 mm

Jumper

Plug-in bridge - FBS 2-5 - 3030161



Plug-in bridge, pitch: 5.2 mm, length: 22.7 mm, width: 9 mm, number of positions: 2, color: red

Plug-in bridge - FBS 3-5 - 3030174



Plug-in bridge, pitch: 5.2 mm, length: 22.7 mm, width: 14.2 mm, number of positions: 3, color: red

Plug-in bridge - FBS 4-5 - 3030187



Plug-in bridge, pitch: 5.2 mm, length: 22.7 mm, width: 19.4 mm, number of positions: 4, color: red

Plug-in bridge - FBS 5-5 - 3030190



Plug-in bridge, pitch: 5.2 mm, length: 23 mm, width: 24.6 mm, number of positions: 5, color: red

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

Plug-in bridge - FBS 10-5 - 3030213



Plug-in bridge, pitch: 5.2 mm, length: 22.7 mm, width: 50.6 mm, number of positions: 10, color: red

Plug-in bridge - FBS 20-5 - 3030226



Plug-in bridge, pitch: 5.2 mm, number of positions: 20, color: red

Plug-in bridge - FBS 50-5 - 3038930



Plug-in bridge, pitch: 5.2 mm, number of positions: 50, color: red

Plug-in bridge - FBS 2-5 BU - 3036877



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: blue

Plug-in bridge - FBS 3-5 BU - 3036880



Plug-in bridge, pitch: 5.2 mm, number of positions: 3, color: blue

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

Plug-in bridge - FBS 4-5 BU - 3036893



Plug-in bridge, pitch: 5.2 mm, number of positions: 4, color: blue

Plug-in bridge - FBS 5-5 BU - 3036903



Plug-in bridge, pitch: 5.2 mm, number of positions: 5, color: blue

Plug-in bridge - FBS 10-5 BU - 3036916



Plug-in bridge, pitch: 5.2 mm, number of positions: 10, color: blue

Plug-in bridge - FBS 20-5 BU - 3036929



Plug-in bridge, pitch: 5.2 mm, number of positions: 20, color: blue

Plug-in bridge - FBS 50-5 BU - 3032114



Plug-in bridge, pitch: 5.2 mm, number of positions: 50, color: blue

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

Plug-in bridge - FBS 2-5 GY - 3038969



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: gray

Plug-in bridge - FBS 3-5 GY - 3038972



Plug-in bridge, pitch: 5.2 mm, number of positions: 3, color: gray

Plug-in bridge - FBS 4-5 GY - 3038985



Plug-in bridge, pitch: 5.2 mm, number of positions: 4, color: gray

Plug-in bridge - FBS 5-5 GY - 3038998



Plug-in bridge, pitch: 5.2 mm, number of positions: 5, color: gray

Plug-in bridge - FBS 10-5 GY - 3039007



Plug-in bridge, pitch: 5.2 mm, number of positions: 10, color: gray

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

Plug-in bridge - FBS 20-5 GY - 3038671



Plug-in bridge, pitch: 5.2 mm, number of positions: 20, color: gray

Plug-in bridge - FBS 50-5 GY - 3032127



Plug-in bridge, pitch: 5.2 mm, number of positions: 50, color: gray

Plug-in bridge - FBSR 2-5 - 3033702



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: red

Plug-in bridge - FBSR 3-5 - 3001591



Plug-in bridge, pitch: 5.2 mm, number of positions: 3, color: red

Plug-in bridge - FBSR 4-5 - 3001592



Plug-in bridge, pitch: 5.2 mm, number of positions: 4, color: red

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

Plug-in bridge - FBSR 5-5 - 3001593



Plug-in bridge, pitch: 5.2 mm, number of positions: 5, color: red

Plug-in bridge - FBSR 10-5 - 3033710



Plug-in bridge, pitch: 5.2 mm, number of positions: 10, color: red

Labeled terminal marker

Warning cover - WST 2,5 - 3030941



Warning cover, 5-pos., for terminal width: 5.2 mm

Zack marker strip - ZB 5 CUS - 0824962



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

Zack marker strip - ZB 5,LGS:FORTL.ZAHLEN - 1050017



Zack marker strip, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

Zack marker strip - ZB 5,QR:FORTL.ZAHLEN - 1050020



Zack marker strip, white, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm

Zack marker strip - ZB 5,LGS:GLEICHE ZAHLEN - 1050033



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: Identical numbers 1 or 2, etc. up to 100, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

Zack marker strip - ZB 5,LGS:L1-N,PE - 1050415



Zack marker strip, Strip, white, labeled, horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

Marker for terminal blocks - UC-TM 5 CUS - 0824581



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: 5.2 mm, lettering field size: 10.5 x 4.6 mm, Number of individual labels: 96

Marker for terminal blocks - UCT-TM 5 CUS - 0829595



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: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

Zack Marker strip, flat - ZBF 5 CUS - 0825025



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: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 5,LGS:FORTL.ZAHLEN - 0808671



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 5,QR:FORTL.ZAHLEN - 0808697



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: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 5,LGS:GERADE ZAHLEN - 0810821



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: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 5,LGS:UNGERADE ZAHLEN - 0810863



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: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

Marker for terminal blocks - UC-TMF 5 CUS - 0824638



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: 5.2 mm, lettering field size: 4.6 x 5.1 mm, Number of individual labels: 96

Marker for terminal blocks - UCT-TMF 5 CUS - 0829658



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: 5.2 mm, lettering field size: 4.4 x 4.7 mm, Number of individual labels: 72

Screwdriver tools

Actuation tool - ST-BW - 1207608



Actuation tool, for all 2.5 mm² - 4.0 mm² spring-cages

Terminal marking

Zack marker strip - ZB 5 :UNBEDRUCKT - 1050004



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.1 x 10.5 mm, Number of individual labels: 10

Marker for terminal blocks - UC-TM 5 - 0818108



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 10.5 x 4.6 mm, Number of individual labels: 96

Sensor/actuator terminal block - STIO 2,5/3-2B/L-LA24GN/O-M - 3209031

Accessories

Marker for terminal blocks - UCT-TM 5 - 0828734



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

Zack Marker strip, flat - ZBF 5:UNBEDRUCKT - 0808642



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.1 x 5.2 mm, Number of individual labels: 10

Marker for terminal blocks - UC-TMF 5 - 0818153



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 5.1 mm, Number of individual labels: 96

Marker for terminal blocks - UCT-TMF 5 - 0828744



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into flat marker groove, for terminal block width: 5.2 mm, lettering field size: 4.4 x 4.7 mm, Number of individual labels: 72

Additional products

Power terminal block - STIO-IN 2,5/3 OG - 3209196



Power terminal block, nom. voltage: 250 V, nominal current: 30 A, connection method: Spring-cage connection, number of connections: 4, cross section: 0.08 mm² - 4 mm², AWG: 28 - 12, width: 10.4 mm, color: orange, mounting type: NS 35/7,5, NS 35/15

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