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Feed-through terminal block, nom. voltage: 690 V, nominal current: 24 A, connection method: Screw connection, number of connections: 2, cross section:0.2 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 24 - 12, width: 6.2 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

### RoHS

### Key Commercial Data

Packing unit	1 pc
GTIN	4 017918 089788
GTIN	4017918089788
Weight per Piece (excluding packing)	7.200 g
Custom tariff number	85369010
Country of origin	China

### Technical data

General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	2.5 mm <sup>2</sup>
Color	gray
Insulating material	РА
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	1

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### Technical data

### General

Maximum power dissipation for nominal condition	0.77 W
Nominal current I <sub>N</sub>	24 A
Nominal voltage U <sub>N</sub>	690 V
Open side panel	Yes
Shock protection test specification	IEC 60529:2001-02
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	1.89 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 mm² / 0.2 kg
	2.5 mm² / 0.7 kg
	4 mm² / 0.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.2 mm <sup>2</sup>
Tractive force setpoint	10 N
Conductor cross section tensile test	2.5 mm <sup>2</sup>
Tractive force setpoint	50 N
Conductor cross section tensile test	4 mm <sup>2</sup>
Tractive force setpoint	60 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 32/NS 35
Setpoint	1 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	$\leq$ 3.2 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	2.5 mm <sup>2</sup>
Short-time current	0.3 kA
Conductor cross section short circuit testing	4 mm <sup>2</sup>
Short-time current	0.48 kA



### Technical data

### General

Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
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
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
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	6.2 mm
End cover width	1.5 mm
Length	42.5 mm
Height NS 35/7,5	42 mm
Height NS 35/15	49.5 mm
Height NS 32	47 mm

#### Connection data

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	24
Max. AWG conductor cross section, flexible	14
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.25 mm <sup>2</sup>



### Technical data

### Connection data

Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.25 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	1 mm <sup>2</sup>
2 conductors with same cross section, solid min.	0.2 mm <sup>2</sup>
2 conductors with same cross section, solid max.	1 mm <sup>2</sup>
2 conductors with same cross section, stranded min.	0.25 mm²
2 conductors with same cross section, stranded max.	1 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	1.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	0.25 mm²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	1 mm <sup>2</sup>
Connection in acc. with standard	UL
Conductor cross section AWG min.	30
Conductor cross section AWG max.	12
Stripping length	7 mm
Internal cylindrical gage	A3
Screw thread	M3
Tightening torque, min	0.6 Nm
Tightening torque max	0.8 Nm

#### Standards and Regulations

Connection in acc. with standard	CSA
Flammability rating according to UL 94	V0
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

### **Environmental Product Compliance**

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"



### Classifications

### eCl@ss

eCl@ss 4.0	27141120
eCl@ss 4.1	27141120
eCl@ss 5.0	27141120
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
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
ETIM 6.0	EC000897

### UNSPSC

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

### Approvals

### Approvals

#### Approvals

DNV GL / CSA / BV / KR / UL Recognized / cUL Recognized / EAC / cULus Recognized

#### Ex Approvals

### Approval details

DNV GL

http://exchange.dnv.com/tari/

TAE00001CT



### Approvals

CSA	SP.	http://www.csagroup.org/services-industries/product-listing/			13631
		В	С		
Nominal voltage UN		600 V	600 V		
Nominal current IN		25 A	25 A		
mm²/AWG/kcmil		28-12	28-12		
BV	( <b>(</b> ))	http://www.veristar.com/portal/veristarinfo/generalinfo/ approved/approvedProducts/equipmentAndMaterials		05401/D0 BV	
KR	KOREAN REGISTER	http://www.krs.co.kr/eng/main/main.aspx			HMB17372-EL001
UL Recognized	17	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm			FILE E 60425
Nominal voltage UN			600 V		
Nominal current IN			20 A		
mm²/AWG/kcmil			30-12		
cUL Recognized	<b>.A</b>	http://database.ul.co	n/cgi-bin/XYV/template/LISEXT/1	FRAME/index.htm	FILE E 60425

EAC EAC-Zulassung

20 A 30-12

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Nominal current IN

mm²/AWG/kcmil



### Approvals

 cULus Recognized

 Accessories

 Bridge

 Fixed bridge - FB-150 METER - 0201595

 Cross connection rail, for fixed bridging of identical inputs and outputs, made of Cu, nickel-plated, 1 m long

 DIN rail

 DIN rail



DIN rail perforated, G profile, width: 32 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 32 UNPERF 2000MM - 1201015



DIN rail, unperforated, G profile, width: 32 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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



### Accessories

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

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: white

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: white

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



### Accessories

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

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

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



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver



### Accessories

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



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: white

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: white

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

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



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver



### Accessories

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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, unperforated, Standard profile 2.3 mm, width: 35 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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

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### Accessories

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, material: PA, length: 50.5 mm, Mounting on a DIN rail NS 32 or NS 35, color: gray

#### 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-UK 2,5 BU - 3001103



End cover, length: 42.5 mm, width: 1.5 mm, height: 30.7 mm, color: blue

End cover - D-UK 2,5 - 3001022



End cover, length: 42.5 mm, width: 1.5 mm, height: 30.7 mm, color: gray

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### Accessories

Insertion bridge

Insertion bridge - EB 3- 6 - 0201142



Insertion bridge, pitch: 6.2 mm, number of positions: 3, color: gray

Insertion bridge - EB 2- 6 - 0201155



Insertion bridge, pitch: 6.2 mm, number of positions: 2, color: gray

Insertion bridge - EB 10- 6 - 0201139



Insertion bridge, pitch: 6.2 mm, number of positions: 10, color: gray

Insulating sleeve

Bridge bar isolator - IS-K 4 - 1302338



Bridge bar isolator, color: gray

Labeled terminal marker

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### Accessories

Zack marker strip - ZB 6 CUS - 0824992



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm

#### Zack marker strip - ZB 6,LGS:FORTL.ZAHLEN - 1051016



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-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: 6.2 mm, lettering field size: 6.15 x 10.5 mm

#### Zack marker strip - ZB 6, QR: FORTL. ZAHLEN - 1051029



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm

Zack marker strip - ZB 6,LGS:GLEICHE ZAHLEN - 1051032



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: 6.2 mm, lettering field size: 6.15 x 10.5 mm

Marker for terminal blocks - ZB 6,LGS:L1-N,PE - 1051414



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm



### Accessories

Marker for terminal blocks - ZB 6,LGS:U-N - 1051430



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: U, V, W, N, GND, U, V, W, N, GND, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm

Marker for terminal blocks - UC-TM 6 CUS - 0824589



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: 6.2 mm, lettering field size: 5.6 x 10.5 mm

Marker for terminal blocks - UCT-TM 6 CUS - 0829602



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: 6.2 mm, lettering field size: 5.6 x 10.5 mm

Mounting material

Mounting clip - ZSR-EX - 0200017



Distance piece, metal, for branches of FB-150, with screw and thrust washer

Partition plate

Separating plate - TS-KK 3 - 2770215



Separating plate, length: 14 mm, width: 0.5 mm, height: 16 mm, color: gray

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### Accessories

#### Partition plate - ATP-UK - 3003224



Partition plate, length: 56 mm, width: 1.5 mm, height: 45.7 mm, color: gray

Screw bridge

Jumper - ISSBI 10- 6 - 0301505



Jumper, pitch: 6 mm, number of positions: 10, color: silver

Jumper - LB 10-6 BU - 0202280



Jumper, pitch: 6 mm, number of positions: 10, color: blue

Jumper - LB 10-6 GY - 0202358



Jumper, pitch: 6 mm, number of positions: 10, color: gray

Chain bridge - KB- 6-EX - 0201485



Chain bridge, number of positions: 1, color: silver



### Accessories

Fixed bridge - FBI 10- 6 - 0203250



Fixed bridge, pitch: 6 mm, number of positions: 10, color: silver

Fixed bridge - FB 3- 6-EX - 0201469



Fixed bridge, pitch: 6.2 mm, number of positions: 3, color: silver

Fixed bridge - FB 2- 6-EX - 0201456



Fixed bridge, pitch: 6.2 mm, number of positions: 2, color: silver

Fixed bridge - FB 10- 6-EX - 0201281



Fixed bridge, pitch: 6.2 mm, number of positions: 10, color: silver

Fixed bridge - FBI 100- 6 - 0201650



Fixed bridge, pitch: 6 mm, number of positions: 100, color: silver

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### Accessories

Fixed bridge - FBI 20- 6 - 0201867



Fixed bridge, pitch: 6 mm, number of positions: 20, color: silver

Fixed bridge - FB 10- 6 - 0201184



Fixed bridge, pitch: 6.2 mm, number of positions: 10, color: silver

Fixed bridge - FB 5- 6 - 0201029



Fixed bridge, pitch: 6.2 mm, number of positions: 5, color: silver

Short-circuit connector

Short-circuit connector - KSS 3- 6 - 0309523



Short-circuit connector, pitch: 6 mm, number of positions: 3, color: black

Short-circuit connector - KSS 6 - 0301547



Short-circuit connector, pitch: 6 mm, number of positions: 2, color: black

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### Accessories

Switching jumper

Switching jumper - USBR 2-7 - 2303239



Switching jumper, pitch: 7 mm, number of positions: 2, color: silver

Switching jumper - USBRJ 2-7 - 2305538



Switching jumper, number of positions: 2, color: silver

Switching jumper - SBRN 2-7 - 1413230



Switching jumper, pitch: 7 mm, number of positions: 2, color: silver

Terminal marking

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



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: 6.2 mm, lettering field size: 6.15 x 10.5 mm

Marker for terminal blocks - UC-TM 6 - 0818085



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: 6.2 mm, lettering field size: 5.6 x 10.5 mm

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### Accessories

Marker for terminal blocks - UCT-TM 6 - 0828736



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, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm

#### Test plug terminal block

Test plugs - PS-UK 2,5 B/Z-6 - 3001239



Test plugs, color: red

Test plugs - PS-UK 2,5 B/E - 3001132



Test plugs, color: red

Reducing plug - RPS - 0201647



Reducing plug, color: gray

Test socket

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### Accessories

Female test connector - PSBJ 3/13/4 - 0201304



Female test connector, color: silver

Female test connector - PSB 3/10/4 - 0601292



Female test connector, color: silver

Warning label printed

Warning label - WS 5- 6 - 1004403

Warning plate, with 2 plastic screws, across 5 terminal blocks, pitch 6 mm



Warning label - WS 4- 6 - 1004209



Warning plate, with 2 plastic screws, across 4 terminal blocks, pitch 6 mm

Warning label - WS 3- 6 - 1004115



Warning plate, with 2 plastic screws, across 3 terminal blocks, pitch 6 mm

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