

## Feed-through terminal block - ST 16 - 3036149

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Feed-through terminal block, Connection method: Spring-cage connection, Cross section: 0.2 mm<sup>2</sup> - 25 mm<sup>2</sup>, AWG: 24 - 4, Width: 12.2 mm, Color: gray, Mounting type: NS 35/7,5, NS 35/15

### Why buy this product

- The flexible options for reducing bridging in the CLIPLINE complete system can be found in "Accessories for the CLIPLINE complete modular terminal block system"
- The double bridge shaft not only enables individual chain bridging, but also reducing bridging to spring-cage terminal blocks with smaller cross sections



### Key Commercial Data

Packing unit	50 STK
GTIN	 4 017918 819309
GTIN	4017918819309
Weight per Piece (excluding packing)	36.860 g
Custom tariff number	85369010
Country of origin	Poland

### Technical data

#### General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	16 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Degree of pollution	3

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## Technical data

### General

Overvoltage category	III
Insulating material group	I
Maximum load current	90 A (with 25 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	76 A
Nominal voltage U <sub>N</sub>	1000 V
Open side panel	Yes
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand 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 <sup>2</sup> / 0.2 kg
	16 mm <sup>2</sup> / 2.9 kg
	25 mm <sup>2</sup> / 4.5 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	16 mm <sup>2</sup>
Tractive force setpoint	100 N
Conductor cross section tensile test	25 mm <sup>2</sup>
Tractive force setpoint	135 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	16 mm <sup>2</sup>
Short-time current	1.92 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
Relative insulation material temperature index (Elec., UL 746 B)	130 °C

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## Technical data

### General

Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °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)	27,5 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	12.2 mm
End cover width	2.2 mm
Length	80 mm
Height NS 35/7,5	51.5 mm
Height NS 35/15	59 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 <sup>2</sup>
Conductor cross section solid max.	25 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	4
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	16 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	24
Max. AWG conductor cross section, flexible	6
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.25 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	16 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.	16 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	1.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	4 mm <sup>2</sup>

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## Technical data

### Connection data

Connection in acc. with standard	IEC/EN 60079-7
Conductor cross section solid min.	1.5 mm <sup>2</sup>
Conductor cross section solid max.	25 mm <sup>2</sup>
Conductor cross section AWG min.	16
Conductor cross section AWG max.	4
Conductor cross section flexible min.	1.5 mm <sup>2</sup>
Conductor cross section flexible max.	16 mm <sup>2</sup>
Stripping length	18 mm
Internal cylindrical gage	A7

### Standards and Regulations

Connection in acc. with standard	CSA
	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



## 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
ETIM 6.0	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 / BV / RS / KR / NK / IECEE CB Scheme / EAC / EAC / DNV GL / DNV GL / cULus Recognized


#### Ex Approvals

IECEX / ATEX / EAC Ex

### Approval details

CSA		<a href="http://www.csagroup.org/services/testing-and-certification/certified-product-listing/">http://www.csagroup.org/services/testing-and-certification/certified-product-listing/</a>	13631
	B	C	
mm <sup>2</sup> /AWG/kcmil	16-4	16-4	
Nominal current I <sub>N</sub>	85 A	85 A	
Nominal voltage U <sub>N</sub>	600 V	600 V	

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	
mm <sup>2</sup> /AWG/kcmil	16-4	16-4	
Nominal current I <sub>N</sub>	85 A	85 A	
Nominal voltage U <sub>N</sub>	600 V	600 V	

VDE Gutachten mit Fertigungsüberwachung		<a href="http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx">http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx</a>	40009030
mm <sup>2</sup> /AWG/kcmil	1.5-16		

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Nominal current IN	76 A
Nominal voltage UN	800 V

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	
mm <sup>2</sup> /AWG/kcmil	16-4	16-4	
Nominal current IN	85 A	85 A	
Nominal voltage UN	600 V	600 V	

LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	04/20034
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BV		<a href="http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials">http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials</a>	13403/B0 BV
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RS		<a href="http://www.rs-head.spb.ru/en/index.php">http://www.rs-head.spb.ru/en/index.php</a>	11.04057.250
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KR		<a href="http://www.krs.co.kr/eng/main/main.aspx">http://www.krs.co.kr/eng/main/main.aspx</a>	HMB17372-EL002
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NK		<a href="http://www.classnk.or.jp/hp/en/">http://www.classnk.or.jp/hp/en/</a>	09 ME 140
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IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-51463
mm <sup>2</sup> /AWG/kcmil	1.5-16		
Nominal current IN	76 A		
Nominal voltage UN	800 V		

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## Approvals

EAC		EAC-Zulassung
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EAC		7500651.22.01.00246
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DNV GL	<a href="https://www.dnvgl.com/">https://www.dnvgl.com/</a>	E-13345 (E-9232)
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DNV GL	<a href="https://www.dnvgl.com/">https://www.dnvgl.com/</a>	TAE00001CS
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cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>
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## 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)

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### Accessories

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



DIN rail 35 mm (NS 35)

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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

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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

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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

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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

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### Accessories

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

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



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### Documentation

Mounting material - ST-IL - 3039900

Operating decal for the ST terminal block



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### End cover

End cover - D-ST 16 - 3036657

End cover, Length: 80 mm, Width: 2.2 mm, Height: 51.1 mm, Color: gray



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### Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, Color: white



Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, Color: red



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### Accessories

Insulating sleeve - MPS-IH BU - 0201689



Insulating sleeve, Color: blue

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Insulating sleeve - MPS-IH YE - 0201692



Insulating sleeve, Color: yellow

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Insulating sleeve - MPS-IH GN - 0201702



Insulating sleeve, Color: green

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Insulating sleeve - MPS-IH GY - 0201728



Insulating sleeve, Color: gray

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Insulating sleeve - MPS-IH BK - 0201731



Insulating sleeve, Color: black

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### Jumper

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### Accessories

Plug-in bridge - FBS 2-12 - 3005950



Plug-in bridge, Pitch: 12 mm, Number of positions: 2, Color: red

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### Labeled terminal marker

Warning cover - WST 10/35 - 3030006

Warning cover, 5-pos., for terminal widths of 10.2 mm, 12.2 mm, and 16 mm



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Zack marker strip - ZB 12 CUS - 0824942



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 12.2 mm, Lettering field: 10.5 x 12.15 mm

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Marker for terminal blocks - ZB 12,LGS:L1-N,PE - 0812146



Marker for terminal blocks, Strip, white, labeled, Printed horizontally: L1, L2, L3, N, PE, Mounting type: Snap into tall marker groove, for terminal block width: 12.2 mm, Lettering field: 10.5 x 12.15 mm

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Marker for terminal blocks - UC-TM 12 CUS - 0824613



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: 12 mm, Lettering field: 11.45 x 10.5 mm

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### Accessories

#### Marker for terminal blocks - UCT-TM 12 CUS - 0829630



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: 12 mm, Lettering field: 10.8 x 9.6 mm

#### Zack Marker strip, flat - ZBF 12 CUS - 0825018



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: 12 mm, Lettering field: 5.15 x 12.15 mm

#### Marker for terminal blocks - UC-TMF 12 CUS - 0824670



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: 12 mm, Lettering field: 11.45 x 5.1 mm

#### Marker for terminal blocks - UCT-TMF 12 CUS - 0829686



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: 12 mm, Lettering field: 11.2 x 4.7 mm

### Planning and marking software

#### Software - CLIP-PROJECT ADVANCED - 5146040



Multilingual software for convenient configuration of Phoenix Contact products on standard DIN rails.

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### Accessories

Software - CLIP-PROJECT PROFESSIONAL - 5146053



Multilingual software for terminal strip configuration. A marking module enables the professional marking of markers and labels for identifying terminal blocks, conductors and cables, and devices.

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### Reducing bridge

Reducing bridge - RB ST 16-(2,5/4) - 3030886



Reducing bridge, Pitch: 11 mm, Number of positions: 2, Color: red

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Reducing bridge - RB 16-6 - 3047072



Reducing bridge, Pitch: 6 mm, Number of positions: 2, Color: red

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Reducing bridge - RB PTPOWER 35-ST 16 - 3032170



Reducing bridge, for bridging of PTPOWER 35 to ST or PT ..N terminal blocks with 16 mm<sup>2</sup> nominal cross section, Pitch: 14.5 mm, Length: 5 mm, Width: 22.9 mm, Number of positions: 2, Color: red

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### Screwdriver tools

Screwdriver - SZF 3-1,0X5,5 - 1206612



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 1.0 x 5.5 x 150 mm, 2-component grip, with non-slip grip

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### Terminal marking

## Feed-through terminal block - ST 16 - 3036149

### Accessories

#### Zack marker strip - ZB 12:UNPRINTED - 0812120



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into tall marker groove, for terminal block width: 12.2 mm, Lettering field: 12 x 10.5 mm

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#### Marker for terminal blocks - UC-TM 12 - 0819194



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into tall marker groove, for terminal block width: 12 mm, Lettering field: 11.45 x 10.5 mm

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#### Marker for terminal blocks - UCT-TM 12 - 0829144



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, Mounting type: Snap into tall marker groove, for terminal block width: 12 mm, Lettering field: 10.8 x 9.6 mm

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#### Zack Marker strip, flat - ZBF 12:UNBEDRUCKT - 0809735



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 5.15 x 12.15 mm

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#### Marker for terminal blocks - UC-TMF 12 - 0819233



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 11.45 x 5.1 mm

## Feed-through terminal block - ST 16 - 3036149

### Accessories

Marker for terminal blocks - UCT-TMF 12 - 0829214



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 11.2 x 4.7 mm

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### Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, Color: silver