Panel feed-through terminal block - TW 50/ 1-CL - 1708744

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Panel feed-through terminal block, connection method: T-LOX knee lever connection, Cable lug connection, number of positions: 1, load current: 150 A, cross section: 10 mm² - 50 mm², connection direction of the conductor to plug-in direction: 0 °, width: 38 mm, color: gray

Your advantages

- Lever actuation enables time-saving and smooth connection of large conductors
- Defined contact force ensures that contact remains stable over the long term
- 90° open clamping space allows the conductor to be conveniently swiveled
- Quick, tool-free mounting on the housing wall using a fixing wedge

Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	4 055626 020310
GTIN	4055626020310
Weight per Piece (excluding packing)	180.000 g
Custom tariff number	85369010
Country of origin	Poland

Technical data

Item properties

Brief article description	Panel feed-through terminal block
Range of articles	TW 50/..-CL
Pitch	20 mm
Number of positions	1

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Technical data

Item properties

Number of connections	2
Number of potentials	1

Electrical parameters

Nominal current	150 A
Nom. voltage	1000 V
Rated voltage (III/3)	1000 V
Rated voltage (III/2)	1000 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	8 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (II/2)	6 kV

Connection capacity, external

Connection method	T-LOX knee lever connection
Connection direction of the conductor to plug-in direction	0 °
Conductor cross section solid	10 mm² ... 50 mm²
Conductor cross section flexible	16 mm² ... 50 mm²
Conductor cross section flexible, with ferrule without plastic sleeve	10 mm² ... 50 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	10 mm² ... 50 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	6 mm² ... 16 mm²
Stripping length	20 mm (10 mm² to 25 mm² = 18 mm, 35 mm² to 50 mm² = 20 mm)

Connection capacity, internal

Connection method	Cable lug connection
Connection direction of the conductor to plug-in direction	0 °
Cable lug connection according to standard	DIN 46234:1980-03 10 mm² 50 mm² 6.5 mm 18 mm M6 6 Nm 8 Nm

Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	tin-plated

Material data - housing

Housing color	gray (7042)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

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Technical data

Material data - housing

Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Width [w]	38 mm
Pitch	20 mm

Dimensions for mounting cutout

Caption	Dimension a = 29 mm
Plate thickness	1 mm ... 5 mm

Packaging information

Pieces per package	10
Denomination packing units	Pcs.

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)

Termination and connection method

Test for conductor damage and slackening	IEC 60947-7-1:2009-04
	Test passed

Pull-out test

Pull-out test	DIN EN 60947-7-1 (VDE 0611-1):2010-03
Conductor cross section / conductor type / tensile force	10 mm² / solid / > 90 N
	10 mm² / flexible / > 90 N
	50 mm² / solid / > 236 N
	50 mm² / flexible / > 236 N
	6 mm² / flexible with ferrule / > 80 N
	16 mm² / flexible with ferrule / > 100 N

Mechanical tests according to standard

Test specification	IEC 60947-7-1 (following)

Electrical tests

Rated current	150 A
Conductor cross section	50 mm²

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Electrical tests

Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

Air clearances and creepage distances

Clearances and creepage distances	IEC 60947-1:2007-06 + A1:2010-12
Specification	IEC 60947-1:2007-06 + A1:2010-12
Minimum clearance - inhomogeneous field (III/3)	8 mm
Minimum clearance - inhomogeneous field (III/2)	8 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	12.5 mm
Minimum creepage distance value (III/2)	8 mm
Minimum creepage distance value (II/2)	5.5 mm

Temperature-rise test

Specification	IEC 60947-7-1:2009-04 (following)
Requirement temperature-rise test	Increase in temperature ≤ 45 K

Current carrying capacity / derating curves

Caption	Type: TW 50/...-CL

Standards and Regulations

Flammability rating according to UL 94	V0
Safety note	• Only electrically qualified personnel may install and operate the product. To recognize and prevent danger, the qualified personnel must be familiar with the basics of electrical engineering.
	• Observe the technical data provided here and refer to the documents listed under “Downloads”. The download area contains important information, such as installation notes, technical drawings, and 3D data.
	• The cable entry funnel is not safe to touch. Never connect or disconnect the terminal when it is energized. Take appropriate steps to ensure touch protection.

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Glow-wire test

Specification	IEC 60695-2-11:2000-10
Temperature	960 °C

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Technical data

Glow-wire test

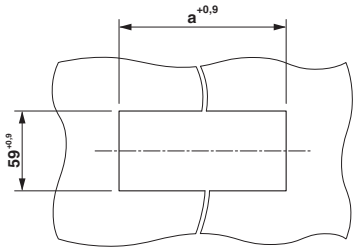
Time of exposure	30 s

Environmental Product Compliance

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

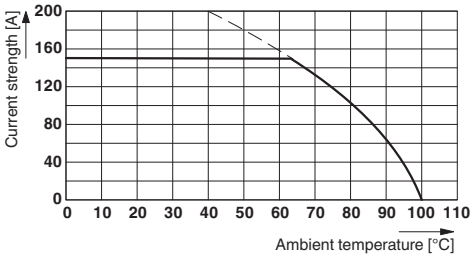
Drawings

Drilling diagram



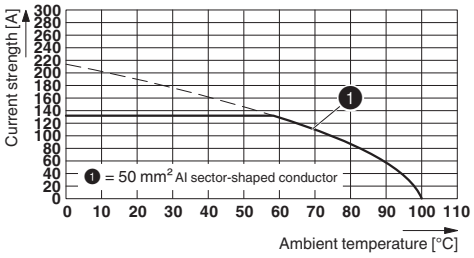
Dimension a = 29 mm

Diagram



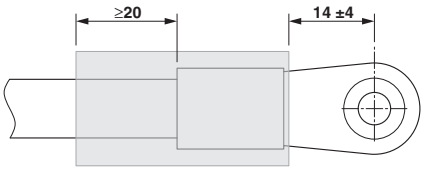
Type: TW 50/...-CL

Diagram



Type: TW 50/...-CL

Dimensional drawing



Electric strength > 19.7 kV/mm (IEC243), min. Wall thickness, fully shrunk ≥ 0.5 mm

Classifications

eCl@ss

eCl@ss 10.0.1	27141134
eCl@ss 11.0	27141134
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141134

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Classifications

eCl@ss

eCl@ss 9.0	27141134

ETIM

ETIM 6.0	EC001283
ETIM 7.0	EC001283

UNSPSC

UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

Approvals

Approvals

Approvals

VDE Zeichengenehmigung / EAC / cULus Recognized

Ex Approvals

Approval details

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40045667

Nominal voltage UN	1000 V
Nominal current IN	150 A
mm²/AWG/kcmil	10-50

EAC		B.01687

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Approvals

cULus Recognized	c UL us	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20160914

	C
Nominal voltage UN	600 V
Nominal current IN	150 A
mm²/AWG/kcmil	8

Accessories

Accessories

Crimping tool

Crimping pliers - CRIMPFOX 25R - 1212039

Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 10 mm² ... 25 mm², lateral entry, WM crimp

Crimping pliers - CRIMPFOX 50R - 1212041

Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 35 mm² ... 50 mm², lateral entry, WM crimp

Labeled terminal marker

Zack Marker strip, flat - ZBF 15 CUS - 0825019

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: 15 mm, lettering field size: 5.15 x 15.1 mm, Number of individual labels: 5

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Accessories

Zack marker strip - ZB 15,LGS:L1-N,PE - 0811998

Zack marker strip, Strip, white, labeled, printed horizontally: L1, L2, L3, N, PE, mounting type: snap into tall marker groove, for terminal block width: 15.2 mm, lettering field size: 10.5 x 15.1 mm, Number of individual labels: 5

Zack marker strip - ZB 15 CUS - 0824945

Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 15.2 mm, lettering field size: 10.5 x 15.1 mm, Number of individual labels: 5

Screwdriver tools

Philips screwdriver - SZK PZ2 VDE - 1206463

Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 mm, 2-component grip, with non-slip grip

Terminal marking

Zack Marker strip, flat - ZBF 15:UNBEDRUCKT - 0811202

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: 15 mm, lettering field size: 15 x 5.2 mm, Number of individual labels: 5

Zack marker strip - ZB 15:UNBEDRUCKT - 0811972

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: 15.2 mm, lettering field size: 10.5 x 15.1 mm, Number of individual labels: 5

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Accessories

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