UW 4-POT-SCM - Panel feed-through terminal block

3056996

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Panel feed-through terminal block, connection method: Screw connection with tension sleeve, Spade connection, number of positions: 1, load current: 18 A, cross section: 0.2 mm^2 - 6 mm^2, connection direction of the conductor to plug-in direction: 0 °, width: 8.1 mm, color: gray

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Tool-free snap-in principle enables easy mounting on the device panel
- Automatic panel thickness compensation enables universal use
- Reliable seal even with low-viscosity molding compounds

Commercial data

Item number	3056996
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA28
Product key	AA1ADB
GTIN	4046356513876
Weight per piece (including packing)	7.788 g
Weight per piece (excluding packing)	6.001 g
Customs tariff number	85369010
Country of origin	CN

Technical data

Product properties

Product type	Panel feed-through terminal block
Product family	UW 4-POT-SCM
Number of positions	1
Pitch	8.1 mm
Number of connections	2
Number of rows	1
Number of potentials	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Properties

Nominal current I_N	18 A
Nominal voltage U_N	500 V
Rated voltage (III/3)	500 V
Rated surge voltage (III/3)	6 kV

Connection data

Connection technology

Connector system	UW 4
Nominal cross section	4 mm²

Conductor connection exterior

Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	0 °
Conductor cross-section rigid	0.2 mm² ... 6 mm²
Conductor cross-section flexible	0.2 mm² ... 4 mm²
Conductor cross-section flexible, with ferrule without plastic sleeve	0.25 mm² ... 4 mm²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 4 mm²
2 conductors with same cross section, solid	0.2 mm² ... 1.5 mm²
2 conductors with same cross section, flexible	0.2 mm² ... 1.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² ... 1.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 2.5 mm²
Internal cylindrical gage	A4
Stripping length	10 mm

Tightening torque	0.6 Nm ... 0.8 Nm

Conductor connection interior

Connection method	Spade connection
Connection direction of the conductor to plug-in direction	0 °

Mounting

Panel thickness	1 mm...4 mm

Material specifications

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

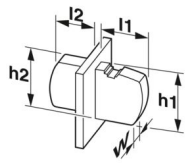
Color (Housing)	gray (7042)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

Notes

Safety note

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.
	• To maintain the nominal voltage, cast the terminals on the inside.

Dimensions

Dimensional drawing	

Pitch	8.1 mm
Width [w]	8.1 mm

External dimensions

Height [h1]	23.5 mm
Length [l1]	23.6 mm

Internal dimensions

Height [h2]	24.8 mm
Length [l2]	20.8 mm

Mechanical tests

Test for conductor damage and slackening

Specification	IEC 60947-7-1:2009-04
Result	Test passed

Pull-out test

Specification	IEC 60947-7-1:2009-04
Conductor cross-section/conductor type/tractive force setpoint/actual value	0.25 mm² / solid / > 10 N
	0.25 mm² / flexible / > 10 N
	6 mm² / solid / > 80 N
	4 mm² / flexible / > 60 N

Mechanical strength

Result	Test passed

Test for conductor damage and slackening

Conductor cross-section/weight	0.25 mm² / 0.2 kg
	4 mm² / 0.9 kg
	6 mm² / 1.4 kg
Result	Test passed

Electrical tests

Temperature-rise test

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

Short-time withstand current

Specification	IEC 60947-7-1:2009-04

Air clearances and creepage distances | 1. Insulation coordination

Application	without spacer plate
Specification	IEC 60947-7-1:2009-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	500 V

Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	6.3 mm

Air clearances and creepage distances | 2. Insulation coordination

Application	with spacer plate
Specification	IEC 60947-7-1:2009-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	10 mm

Surge voltage test

Test voltage setpoint	9.8 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 4 mm²	0.48 kA
Short-time withstand current 6 mm²	0.72 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

Environmental and real-life conditions

Glow-wire test

Specification	IEC 60695-2-11:2000-10
Temperature	960 °C
Time of exposure	30 s

Needle-flame test

Time of exposure	30 s
Result	Test passed

Ambient conditions

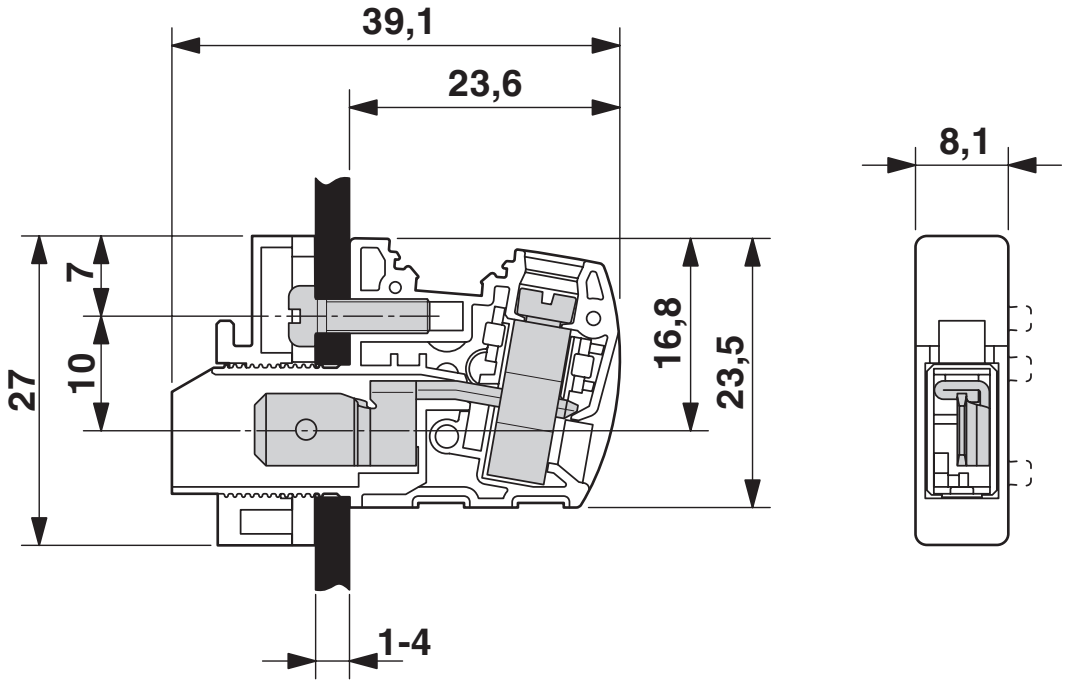
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

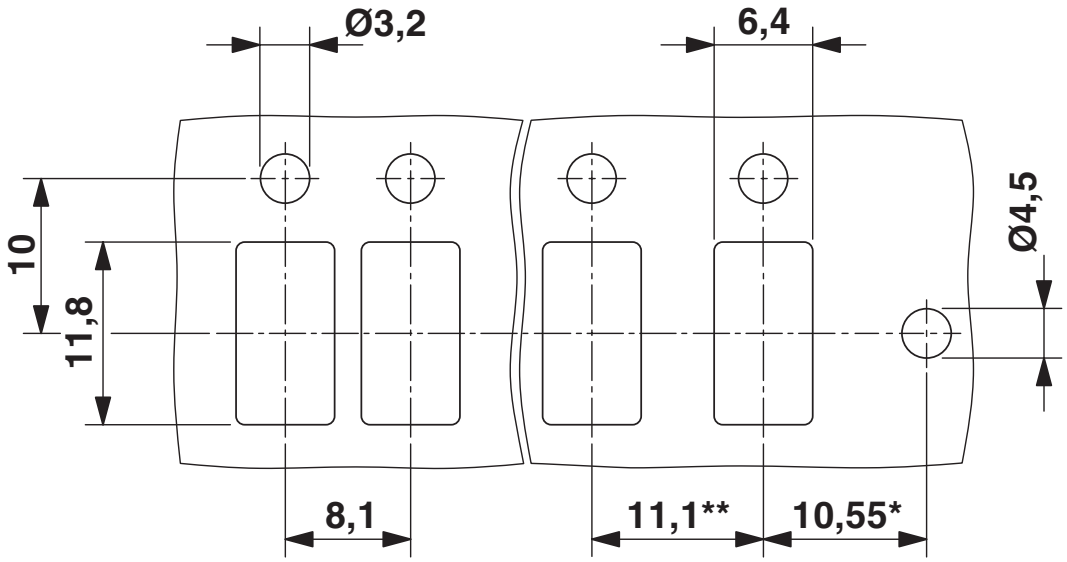
Type of packaging	packed in cardboard

Drawings

Dimensional drawing



Dimensional drawing



* Only when using the UW...-F flange plate

** Dimensions when using the DP-UW... spacer plate

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3056996

CSA
Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	300 V	30 A	24 - 10	-
C				
	300 V	30 A	24 - 10	-
D				
	600 V	5 A	24 - 10	-

cULus Recognized
Approval ID: E60425-20100423

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	300 V	30 A	24 - 10	-
C				
	300 V	30 A	24 - 10	-
D				
	600 V	5 A	24 - 10	-

Classifications

ECLASS

ECLASS-13.0	27141134
ECLASS-15.0	27141134

ETIM

ETIM 9.0	EC001283

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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