PLH 5/ 8-7,5-ZF - PCB terminal block

1792164

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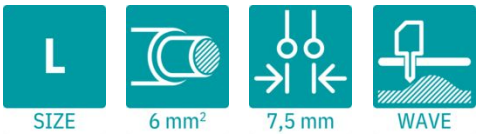
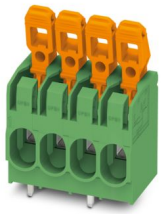




The figure shows a 4-pos. version of the product

PCB terminal block, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm^2, number of potentials: 8, number of rows: 1, number of positions per row: 8, product range: PLH 5/, pitch: 7.5 mm, connection method: Push-lock spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Zigzag pinning M, Solder pin [P]: 3.6 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard

Your advantages

- Tool-free lever principle enables time-saving connection and release of conductors with/without ferrules
- Defined contact force ensures that contact remains stable over the long term
- Time-saving push-in connection when lever is closed
- Unrestricted 600-V-UL approval thanks to compact zig-zag pinning
- Quick and convenient testing using integrated test option

Commercial data

Item number	1792164
Packing unit	1 pc
Sales key	AA14
Product key	AANTAB
GTIN	4046356610728
Weight per piece (including packing)	31.82 g
Weight per piece (excluding packing)	31.78 g
Customs tariff number	85369010
Country of origin	SK

Technical data

Product properties

Product type	PCB terminal block
Product family	PLH 5/
Product line	COMBICON Terminals L
Number of positions	8
Pitch	7.5 mm
Number of connections	8
Number of rows	1
Number of potentials	8
Pin layout	Zigzag pinning M
Solder pins per potential	1

Electrical properties

Properties

Nominal current I_N	41 A
Nominal voltage U_N	1000 V
Rated voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

Connection data

Connection technology

Nominal cross section	6 mm²

Conductor connection

Connection method	Push-lock spring connection
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 ... 6 mm²
Conductor cross-section AWG	24 ... 10
Conductor cross-section, flexible, with ferrule, without plastic sleeve	0.2 mm² ... 6 mm²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.2 mm² ... 6 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 2.5 mm²
Stripping length	12 mm

Mounting

Mounting type	Wave soldering

Pin layout	Zigzag pinning M

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
Metal surface terminal point (top layer)	Tin (10 µm - 16 µm Sn)
Metal surface soldering area (top layer)	Tin (10 µm - 16 µm Sn)

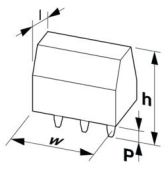
Material data - housing

Color (Housing)	green (6021)
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

Material data – actuating element

Insulating material	PA GF
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions

Dimensional drawing	
Pitch	7.5 mm
Width [w]	61 mm
Height [h]	27.7 mm
Length [l]	22.7 mm
Installed height	24.1 mm
Solder pin length [P]	3.6 mm
Pin dimensions	1.2 x 1.5 mm

PCB design

Pin spacing	12.5 mm

Hole diameter	2 mm

Mechanical tests

Connection test

Specification	IEC 60998-2-2:2002-12
Result	Test passed

Test for conductor damage and slackening

Specification	IEC 60998-2-2:2002-12
Result	Test passed

Pull-out test

Specification	IEC 60998-2-2:2002-12
Conductor cross-section/conductor type/tractive force setpoint/actual value	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	6 mm² / solid / > 80 N
	6 mm² / flexible / > 80 N

Flexion test

Specification	IEC 60998-2-2:2002-12
Result	Test passed

Electrical tests

Temperature-rise test

Specification	IEC 60998-2-1:2002-12
Requirement temperature-rise test	Increase in temperature ≤ 45 K

Insulation resistance

Specification	IEC 60998-1:2002-12
Insulation resistance, neighboring positions	> 5 MΩ

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	12.5 mm
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
minimum clearance value - non-homogenous field (III/2)	8 mm
minimum creepage distance (III/2)	5 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5 mm

Environmental and real-life conditions

Vibration test

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

Glow-wire test

Specification	IEC 60998-1:2002-12
Temperature	850 °C
Time of exposure	5 s

Ambient conditions

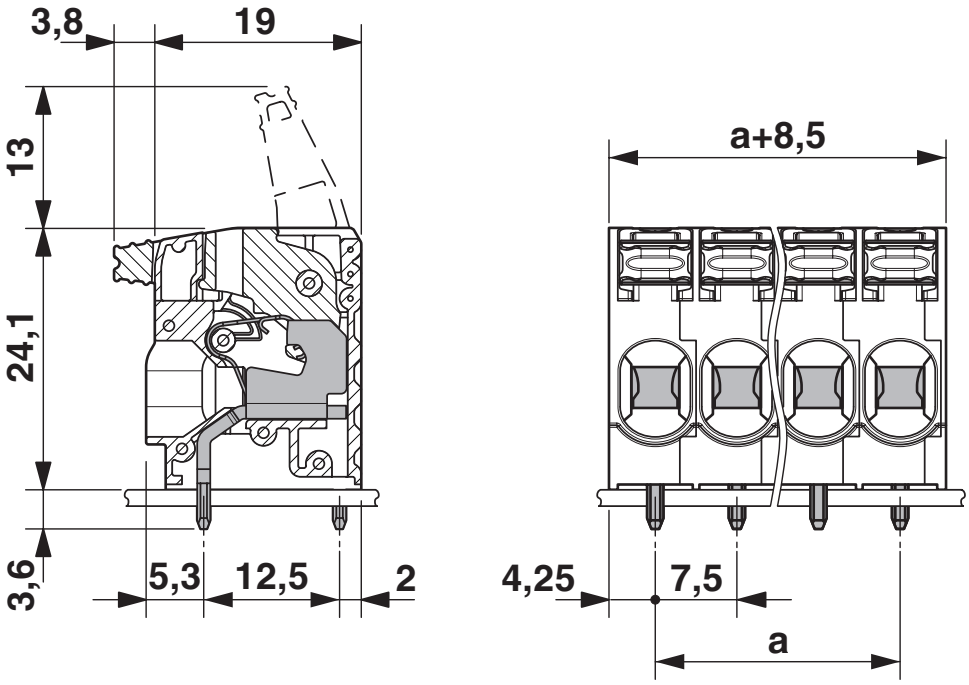
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)

Packaging specifications

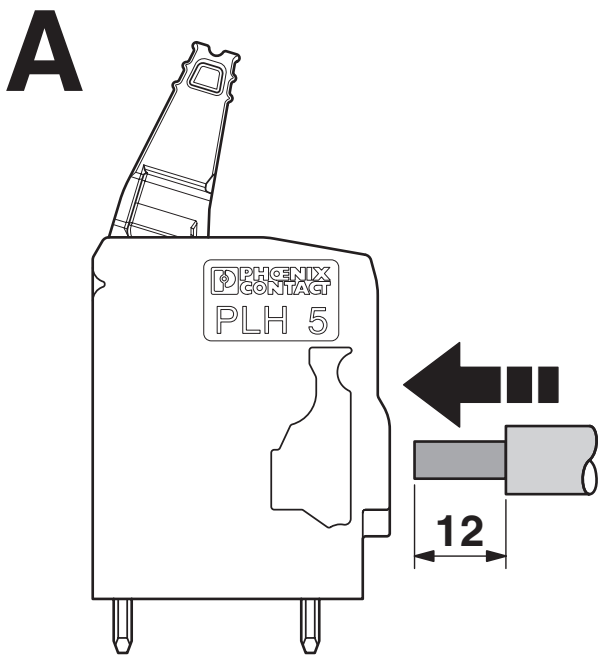
Type of packaging	packed in cardboard

Drawings

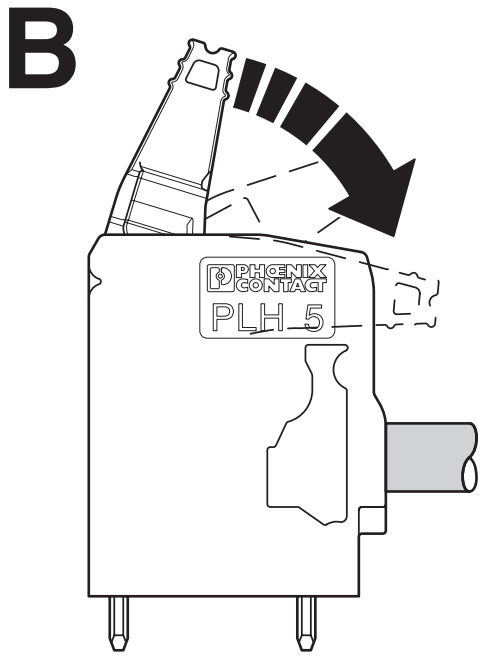
Dimensional drawing



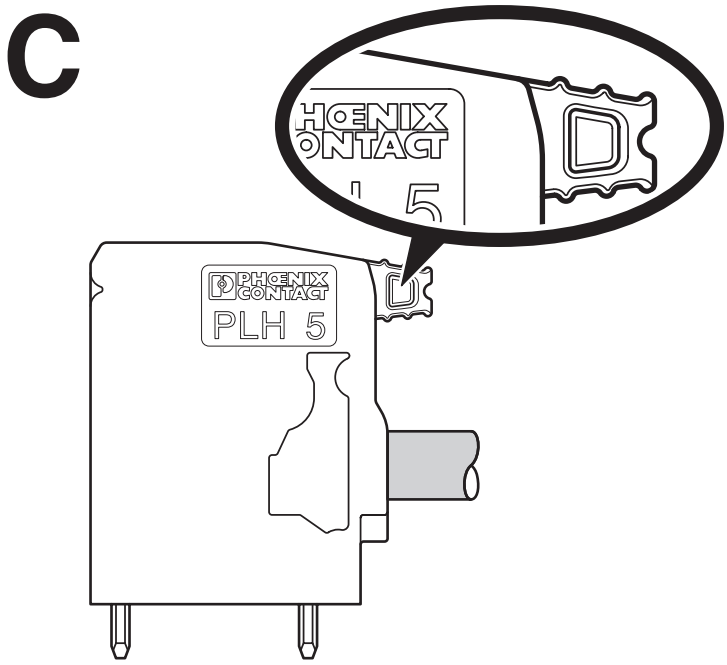
Functional drawing



Functional drawing

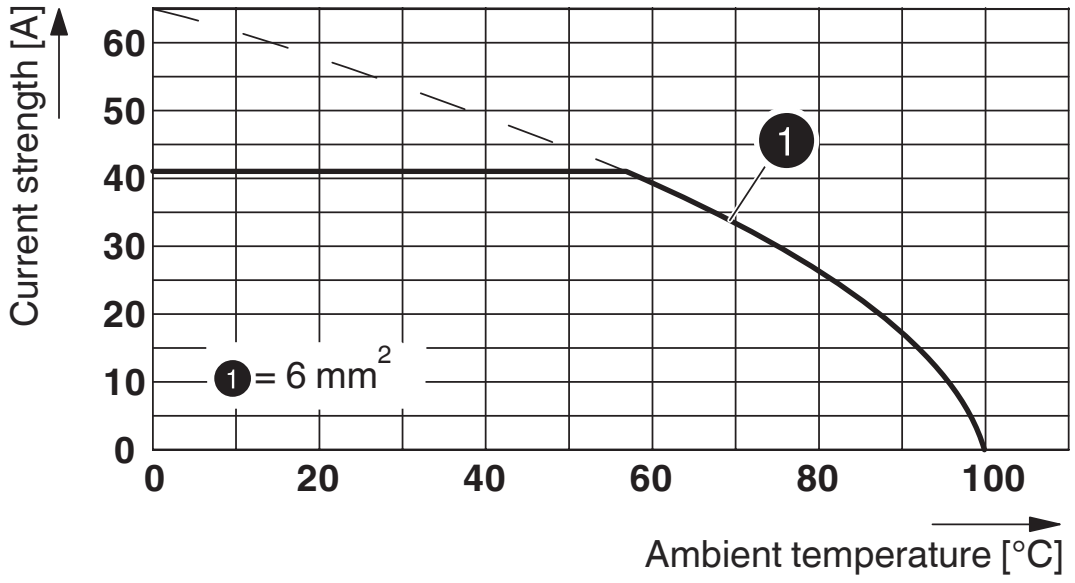


Functional drawing



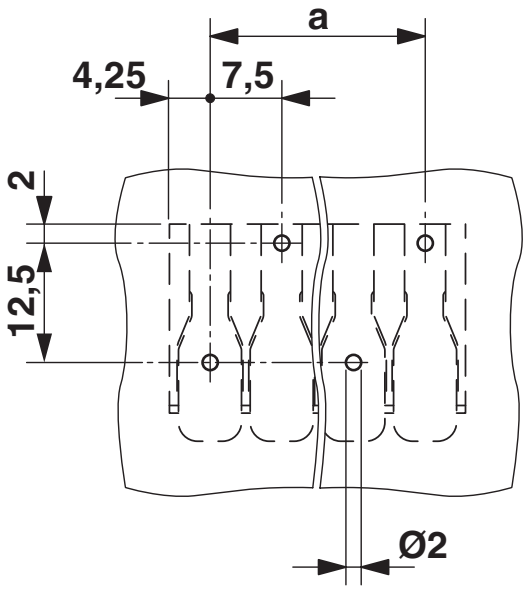
Functional drawing

Diagram



Type: PLH 5/...-7,5(-ZF)

Drilling plan/solder pad geometry



Approvals

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cULus Recognized
Approval ID: E60425-20110524

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	600 V	27 A	24 - 10	-
C				
	600 V	27 A	24 - 10	-

VDE approval of drawings
Approval ID: 40041250

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	1000 V	41 A	-	0.2 - 6

Classifications

ECLASS

ECLASS-13.0	27460101

ETIM

ETIM 9.0	EC002643

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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