

PCB terminal block - PLH 5/10-7,5-ZF - 1792180

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PCB terminal block, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², pitch: 7.5 mm, number of positions: 10, connection method: Push-lock spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear double pinning, Solder pin [P]: 3.6 mm

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

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



Key Commercial Data

Packing unit	25 pc
Minimum order quantity	25 pc
GTIN	
GTIN	4046356610742

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	PLH 5/
Pitch	7.5 mm
Number of positions	10
Connection method	Push-lock spring connection
Mounting type	Wave soldering
Pin layout	Linear double pinning
Number of levels	1
Number of connections	10

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Technical data

Item properties

Number of potentials	10
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Electrical parameters

Nominal current	41 A
Nom. voltage	1000 V
Rated voltage	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

Connection method	Push-lock spring connection
Conductor cross section solid	0.2 mm² ... 6 mm²
Conductor cross section flexible	0.2 mm² ... 6 mm²
Conductor cross section AWG / kcmil	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

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

Material data - housing

Housing color	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

Dimensions for the product

Length [l]	22.7 mm
Width [w]	76 mm

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Dimensions for the product

Height [h]	27.7 mm
Pitch	7.5 mm
Height (without solder pin)	24.1 mm
Solder pin [P]	3.6 mm
Pin spacing	12.5 mm
Pin dimensions	1.2 x 1.5 mm

Dimensions for PCB design

Hole diameter	2 mm
Pin spacing	12.5 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	25
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

Connection test	IEC 60998-2-2:2002-12
Test result	Test passed
Test for conductor damage and slackening	IEC 60998-2-2:2002-12
	Test passed

Pull-out test

Pull-out test	IEC 60998-2-2:2002-12
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	6 mm ² / solid / > 80 N
	6 mm ² / flexible / > 80 N

Mechanical tests according to standard

Test specification	IEC 60998-2-2 (in parts)
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Electrical tests

Rated current	41 A
Conductor cross section	6 mm ²
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

Air clearances and creepage distances

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Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
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)	5 mm
Minimum creepage distance value (II/2)	5 mm

Temperature-rise test

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

Current carrying capacity / derating curves

Caption	Type: PLH 5/...-7,5(-ZF)
Specification	Following IEC 60512-5-2:2002-02
Number of positions	5
Reduction factor	1

Vibration test

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

Resistance to ageing, humidity and penetration of solids

Dry heat	168 h/100°C
Humid heat	48 h/30 °C/92 %

Insulation resistance

Specification	IEC 60998-1:2002-12
Result	Test passed
Insulation resistance, neighboring positions	10 GΩ

Glow-wire test

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

Mechanical strength/tumbling barrel test

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Technical data

Mechanical strength/tumbling barrel test

Specification	IEC 60998-1:2002-12
Height of fall	50 cm
Number of drop cycles	50
Rotation speed	5 rpm

Standards and Regulations

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

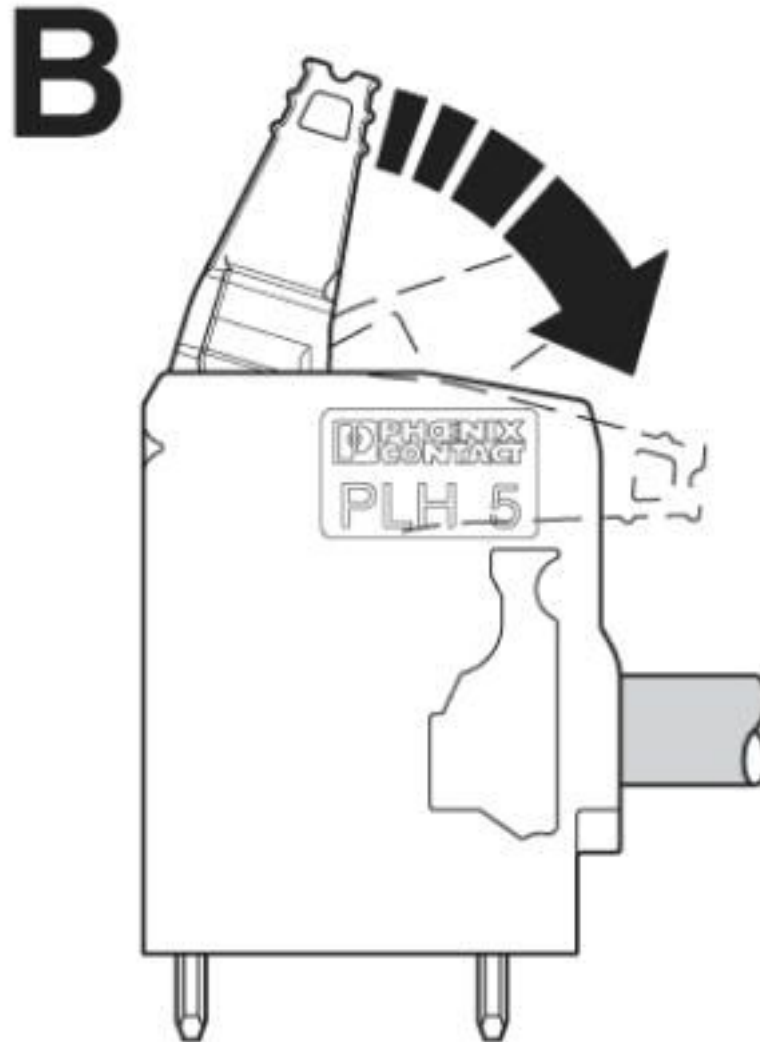
Environmental Product Compliance

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

Drawings

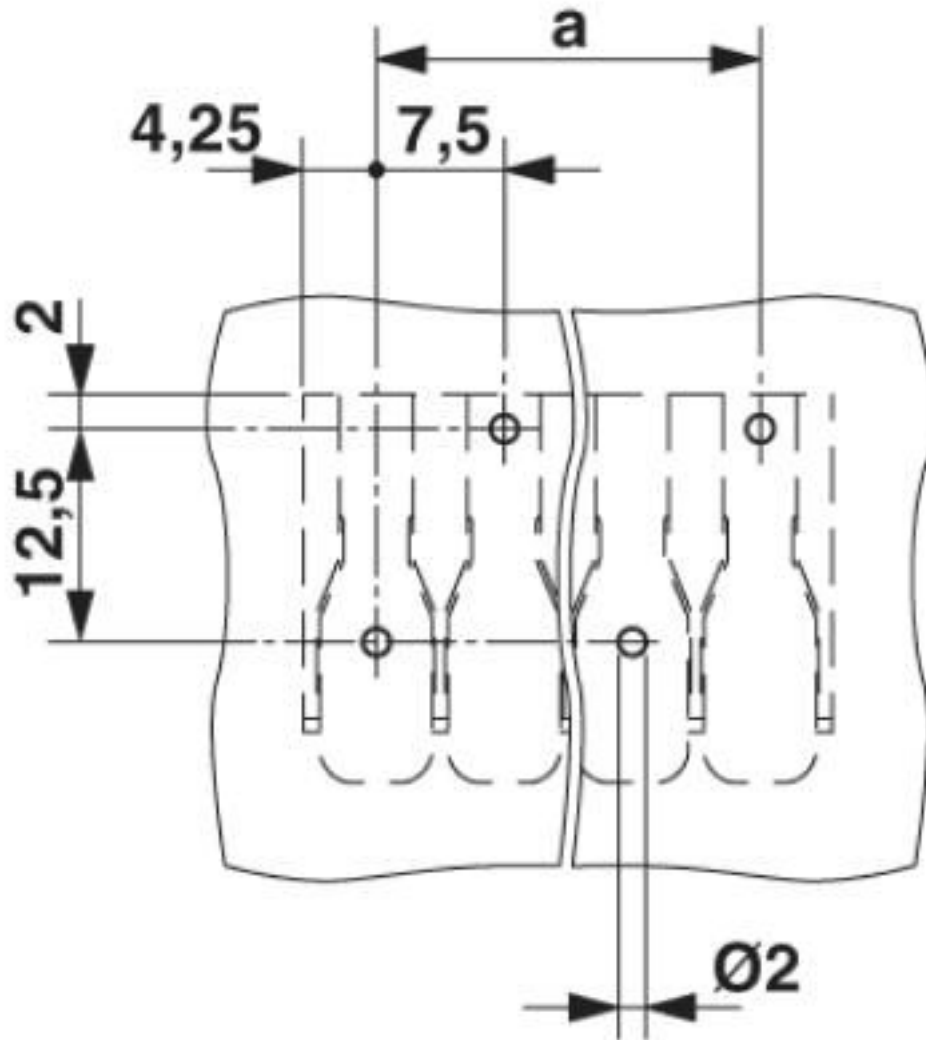
PCB terminal block - PLH 5/10-7,5-ZF - 1792180

Functional drawing



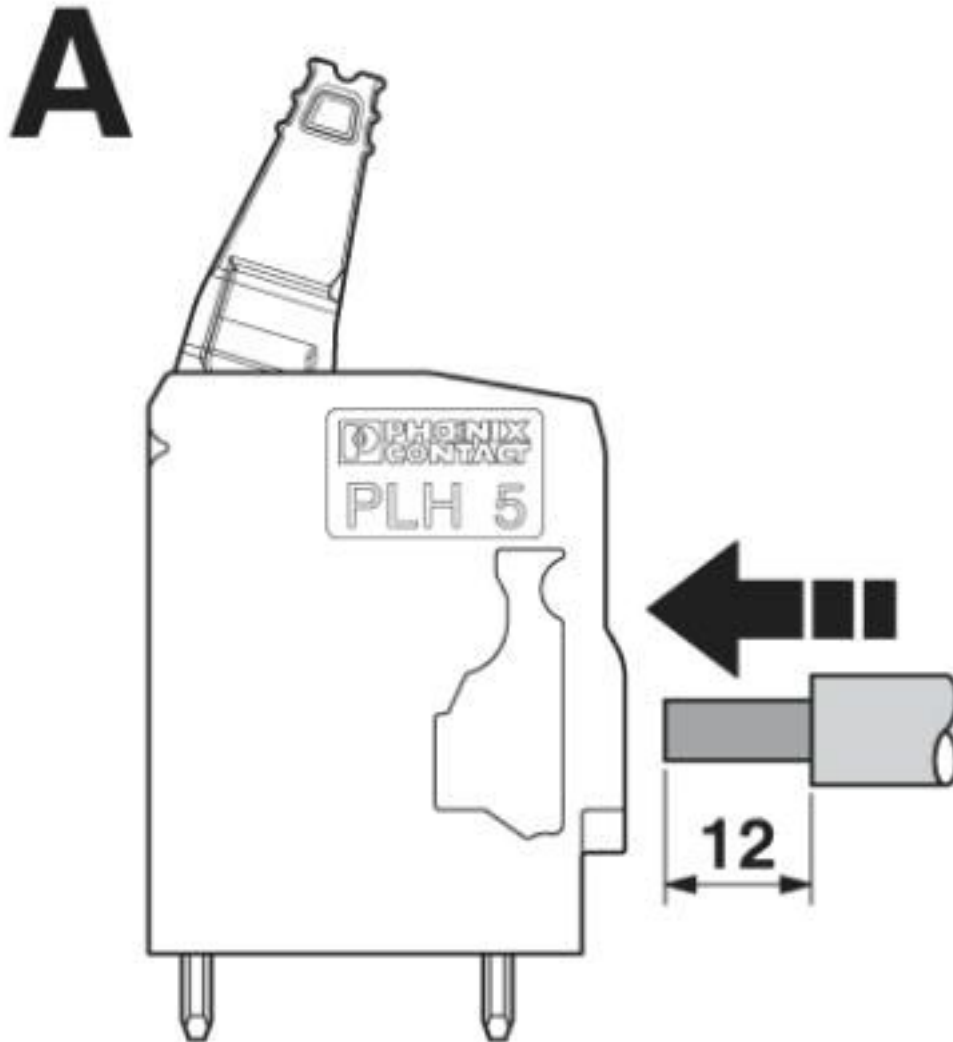
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Drilling diagram



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Functional drawing



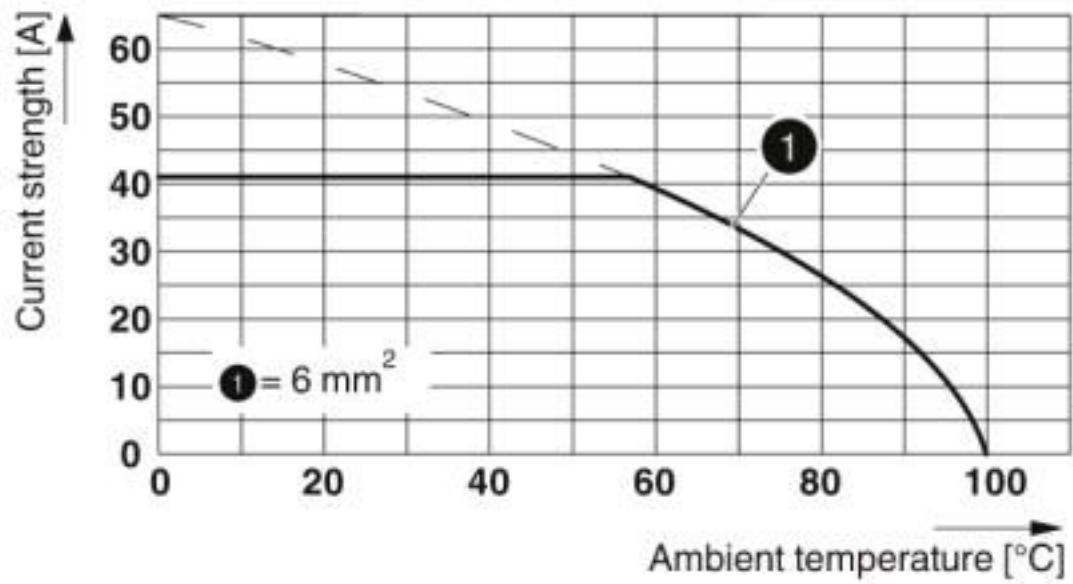
PCB terminal block - PLH 5/10-7,5-ZF - 1792180

Functional drawing



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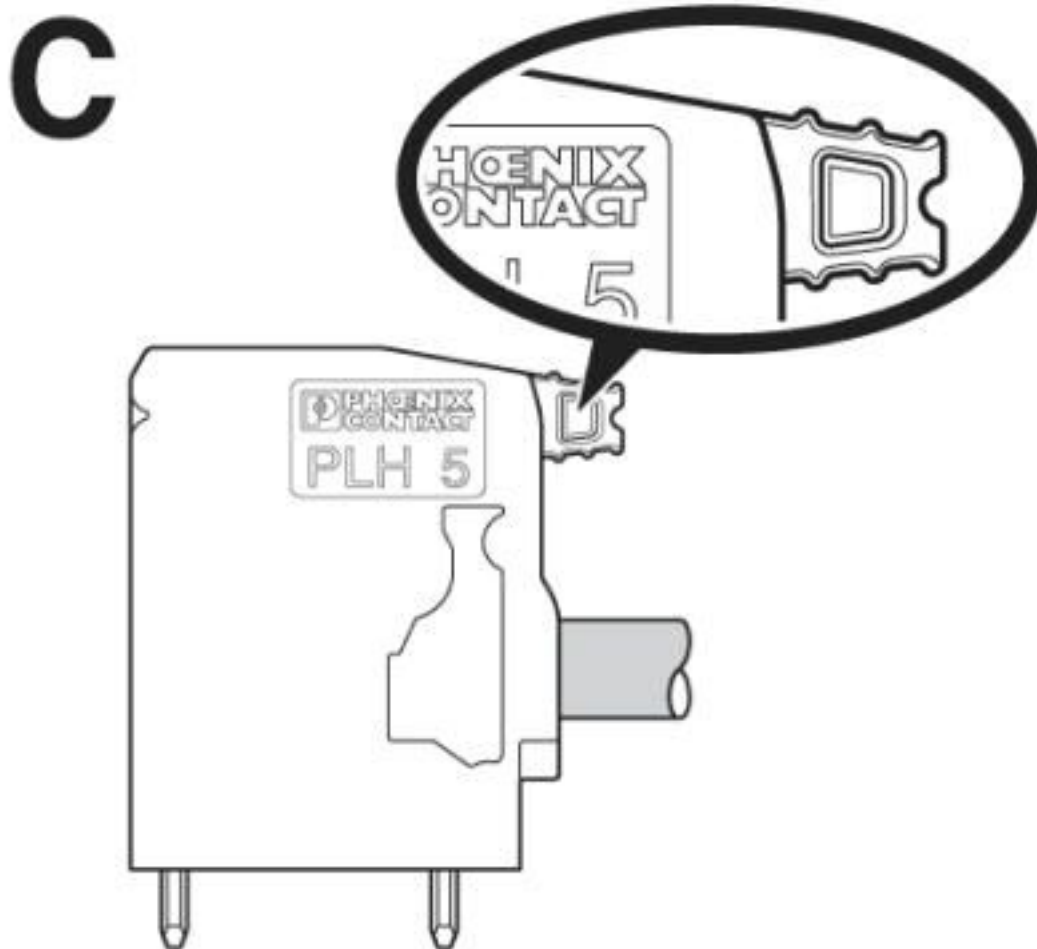
Diagram



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

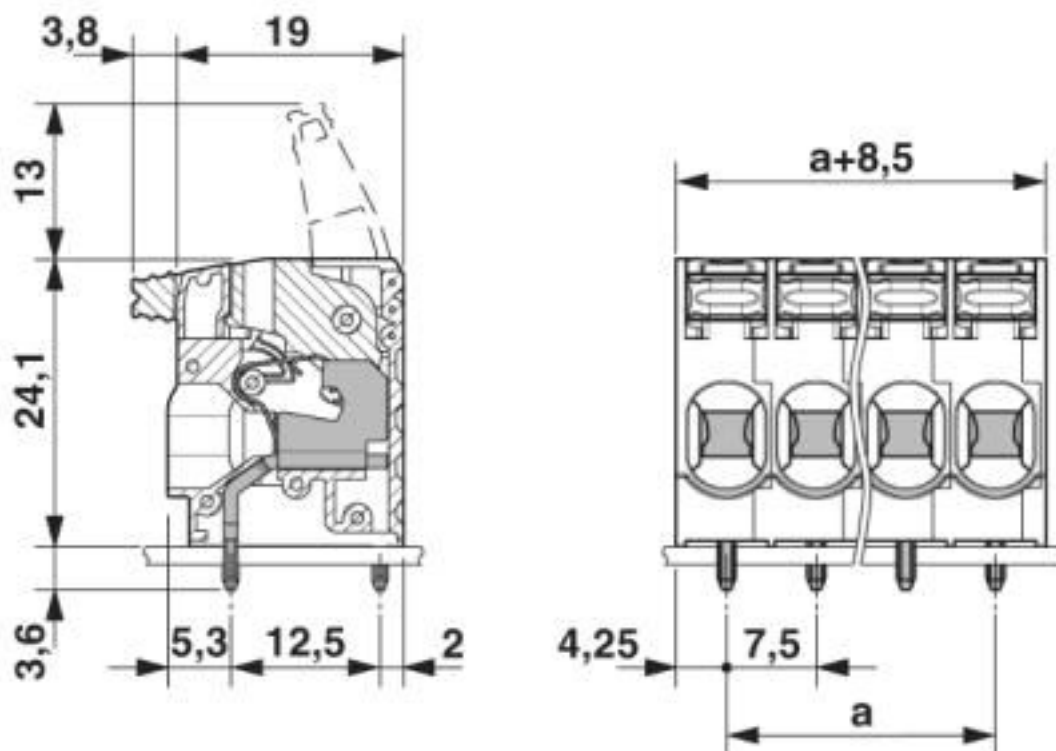
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Functional drawing



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Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 8.0	27440401
eCl@ss 9.0	27440401

ETIM

ETIM 4.0	EC002637
ETIM 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409

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Classifications

UNSPSC

UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

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	40041250
Nominal voltage UN	1000 V		
Nominal current IN	41 A		
mm²/AWG/kcmil	0.2-6		

EAC		B.01687
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20110524
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	27 A	27 A	
mm²/AWG/kcmil	24-10	24-10	

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Accessories

Accessories

Crimping tool

Crimping pliers - CRIMPFOX 6 - 1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

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