PTQ 0,3/ 2-2,5-L THR R32 - PCB terminal block

1703375

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PCB terminal block, nominal current: 4 A, rated voltage (III/2): 160 V, nominal cross section: 0.34 mm^2, number of potentials: 2, number of rows: 1, number of positions per row: 2, product range: PTQ 0,3/..-THR, pitch: 2.5 mm, connection method: Displacement connection, mounting: THR soldering / wave soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Zigzag pinning W, Solder pin [P]: 2 mm, number of solder pins per potential: 1, type of packaging: 32 mm wide tape

Your advantages

- Connection without conductor pretreatment for huge time savings
- Finger-operated QUICKON insulation displacement connection enables repeated conductor connection
- Designed for integration into the SMT soldering process
- Supplied in tape-on-reel packing according to IEC 60286-3 for automated mounting
- Anti-rotation pins reduce the mechanical strain on the soldering spots
- Satisfies CAT5 requirements in accordance with EN 50173 and ISO/IEC 11801

Commercial data

Item number	1703375
Packing unit	250 pc
Minimum order quantity	250 pc
Sales key	AA11
Product key	AAKKAA
GTIN	4046356649087
Weight per piece (including packing)	2.704 g
Weight per piece (excluding packing)	2.566 g
Customs tariff number	85369010
Country of origin	PL

Technical data

Product properties

Product type	Printed circuit board terminal
Product family	PTQ 0,3/..-THR
Product line	COMBICON Terminals XS
Type	PC termination block
Number of positions	2
Pitch	2.5 mm
Number of connections	2
Number of rows	1
Number of potentials	2
Pin layout	Zigzag pinning W
Solder pins per potential	1

Data management status

Article revision	00

Electrical properties

Nominal current I_N	4 A
Nominal voltage U_N	160 V
Rated voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	200 V
Rated surge voltage (II/2)	2.5 kV

Connection data

Connection technology

Type	PC termination block
Nominal cross section	0.34 mm²

Conductor connection

Connection method	Displacement connection
Conductor cross section rigid	0.14 mm² ... 0.34 mm²
Conductor cross section flexible	0.14 mm² ... 0.34 mm²
Conductor cross section AWG	26 ... 22

Mounting

Mounting type	THR soldering / wave soldering
Pin layout	Zigzag pinning W

Processing notes

Process	Reflow/wave soldering
Moisture Sensitive Level	MSL 1
Classification temperature T_c	260 °C
Solder cycles in the reflow	3

Material specifications

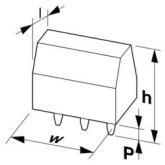
Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (3 - 5 µm Sn)
Metal surface terminal point (middle layer)	Nickel (1.3 - 3 µm Ni)
Metal surface soldering area (top layer)	Tin (3 - 5 µm Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 - 3 µm Ni)

Material data - housing

Color (Housing)	black (9005)
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

Dimensions

Dimensional drawing	
Pitch	2.5 mm
Width [w]	7 mm
Height [h]	10 mm
Length [l]	17.55 mm
Installed height	8 mm
Solder pin length [P]	2 mm
Pin dimensions	0.9 x 0.4 mm

PCB design

Pin spacing	2.5 mm
Hole diameter	1.1 mm

Mechanical tests

Connection test

Specification	IEC 60998-2-3:2002-12

Result	Test passed

Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N

Electrical tests

Temperature-rise test

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

Short-time withstand current

Specification	IEC 60998-2-3:2002-12

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

Temperature cycles

Specification	IEC 60998-2-3:2002-12
Result	Test passed

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	IIIa
Comparative tracking index (IEC 60112)	CTI 175
Rated insulation voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	2.5 mm
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	1.6 mm
Rated insulation voltage (II/2)	200 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	2 mm

Environmental and real-life conditions

Glow-wire test

Specification	IEC 60998-1:2002-12
Time of exposure	5 s

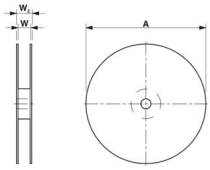
Shocks

Specification	IEC 60068-2-27:2008-02
Pulse shape	Half-sine
Acceleration	15g
Shock duration	11 ms
Test directions	X-, Y- and Z-axis

Ambient conditions

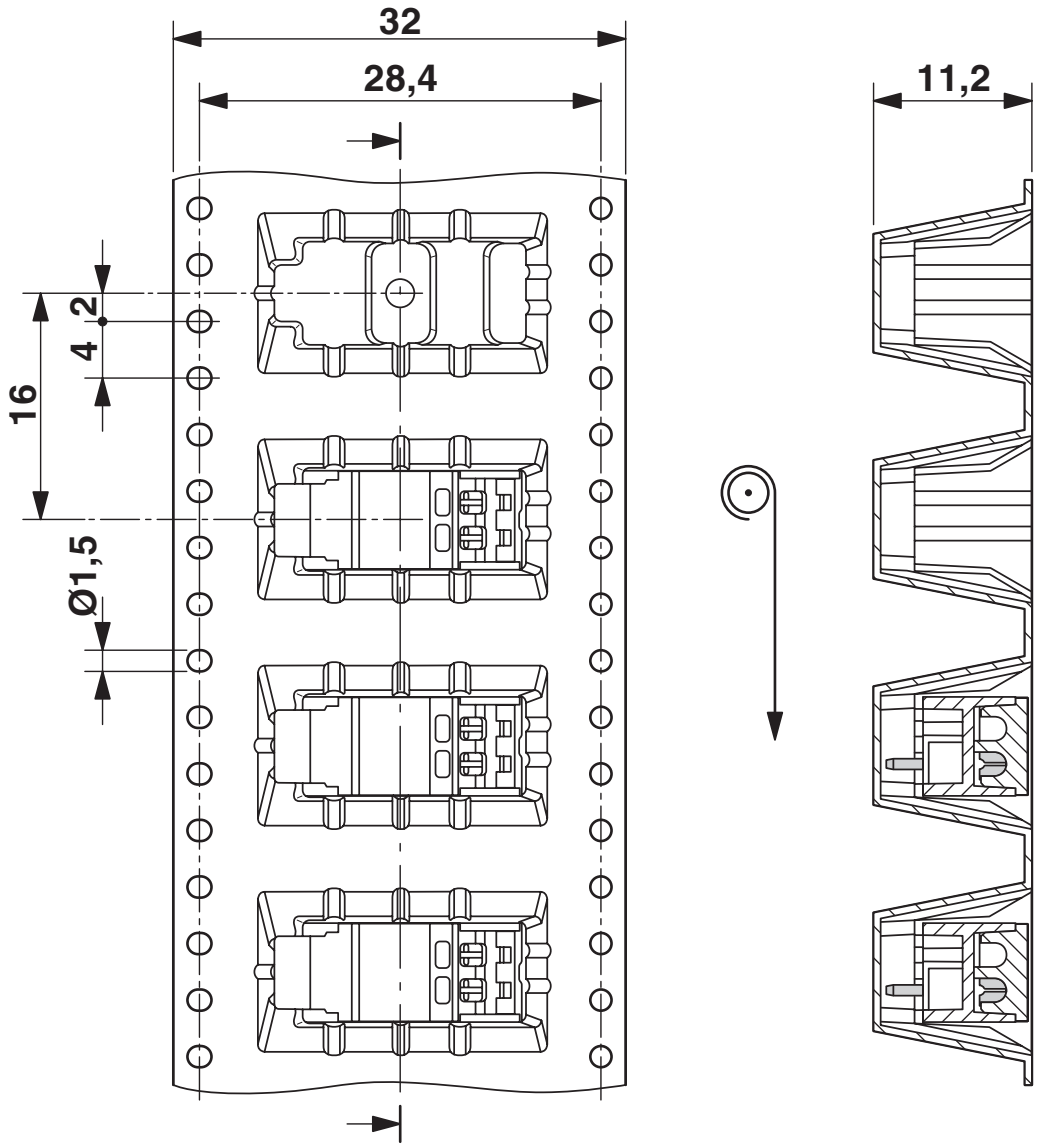
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

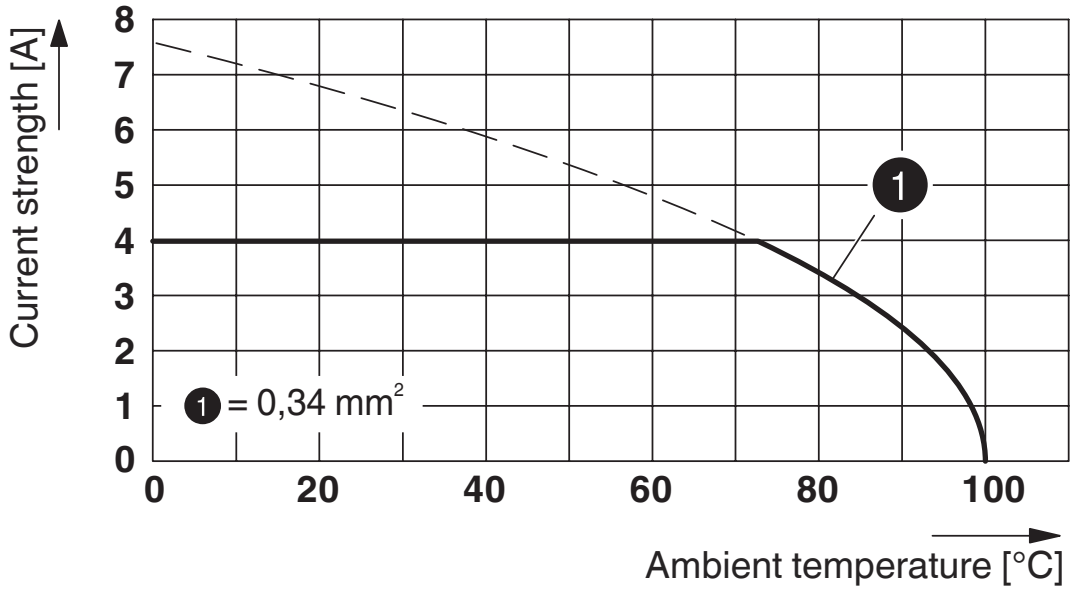
Dimensional drawing	
Type of packaging	32 mm wide tape
[W] tape width	32 mm
[W2] coil overall dimension	38.4 mm
[A] coil diameter	330 mm
Outer packaging type	Transparent-Bag
ESD level	(D) electrostatically conductive
Specification	DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07

Drawings

Dimensional drawing

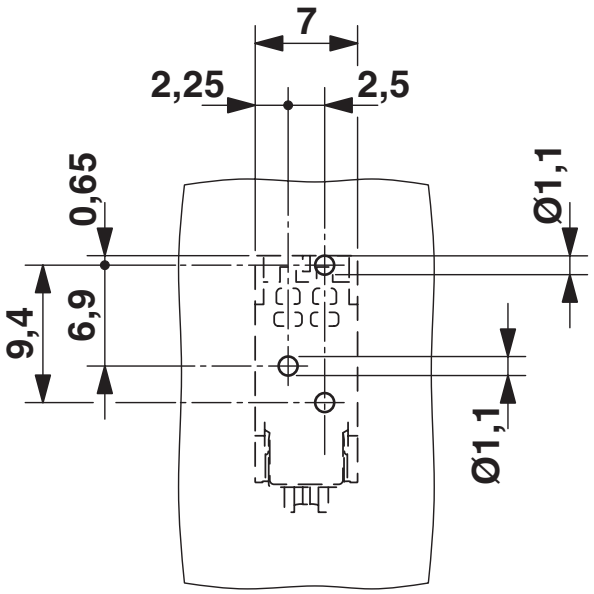


Diagram

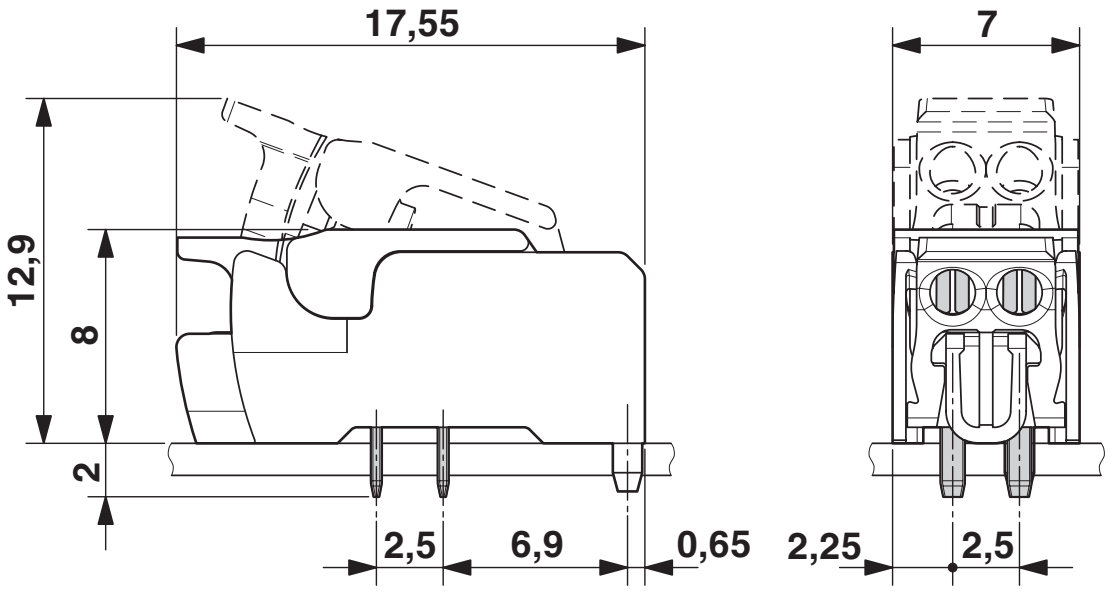


Type: PTQ 0,3/..-2,5(-L) THR R32

Drilling plan/solder pad geometry



Dimensional drawing



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1703375

cULus Recognized
Approval ID: E60425-20110108

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	150 V	2 A	24	-

VDE Gutachten mit Fertigungsüberwachung
Approval ID: 40034315

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	130 V	4 A	-	- 0.2

Classifications

ECLASS

ECLASS-11.0	27460101
ECLASS-12.0	27460101
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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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com