

1972603

https://www.phoenixcontact.com/pc/products/1972603

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



PCB headers, nominal cross section: 4 mm<sup>2</sup>, color: gray, nominal current: 20 A, rated voltage (III/2): 630 V, contact surface: Tin, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PC 4/..-GFL, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, number of solder pins per potential: 2, plug-in system: COMBICON PC 4, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard

### Your advantages

- · Well-known mounting principle allows worldwide use
- · Screwable flange for superior mechanical stability
- · Maximum flexibility when it comes to device design one header for connectors with different connection technologies
- · Easy PCB replacement thanks to plug-in modules
- · Plug-in direction parallel to the PCB

#### Commercial data

Item number	1972603
Packing unit	50 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	AADSAE
GTIN	4017918938840
Weight per piece (including packing)	10.173 g
Weight per piece (excluding packing)	9 g
Customs tariff number	85366930
Country of origin	DE



1972603

https://www.phoenixcontact.com/pc/products/1972603

### Technical data

### Product properties

Product type	PCB headers
Product family	PC 4/GFL
Product line	COMBICON Connectors L
Number of positions	4
Pitch	7.62 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Pin layout	Linear pinning
Solder pins per potential	2

### Electrical properties

Nominal current I <sub>N</sub>	20 A
Nominal voltage U <sub>N</sub>	630 V
Degree of pollution	3
Rated voltage (III/3)	400 V
Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	6 kV

### Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning
Flange	
Tightening torque	0.3 Nm 0.7 Nm

### 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 contact area (top layer)	Tin (5 - 7 µm Sn)
Metal surface contact area (middle layer)	Nickel (2 - 5 µm Ni)
Metal surface soldering area (top layer)	Tin (5 - 7 µm Sn)
Metal surface soldering area (middle layer)	Nickel (2 - 5 µm Ni)

Material data - housing



1972603

https://www.phoenixcontact.com/pc/products/1972603

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

Notes on operation	In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be
	plugged in or disconnected when carrying voltage or under load.

#### **Dimensions**

Dimensional drawing	P
Pitch	7.62 mm
Pin dimensions	1 x 0.8 mm

### Electrical tests

#### 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)	400 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	5.5 mm
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
minimum clearance value - non-homogenous field (III/2)	5.5 mm
minimum creepage distance (III/2)	5.5 mm
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 mm

### Environmental and real-life conditions



1972603

https://www.phoenixcontact.com/pc/products/1972603

#### Ambient conditions

Ambient temperature (operation)	-40 °C 100 °C (dependent on the 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	



1972603

https://www.phoenixcontact.com/pc/products/1972603

## Classifications

#### **ECLASS**

	ECLASS-11.0	27460201			
	ECLASS-12.0	27460201			
	ECLASS-13.0	27460201			
ET	ETIM				
	ETIM 8.0	EC002637			
UNSPSC					
	UNSPSC 21.0	39121400			



1972603

https://www.phoenixcontact.com/pc/products/1972603

### 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%

Phoenix Contact 2024 @ - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstraße 8 D-32825 Blomberg +49 (0) 5235-3 00 info@phoenixcontact.com