Printed-circuit board connector - PC 5/12-G-7,62 - 1720563

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The figure shows a 5-pos. version of the product

PCB headers, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm², number of positions: 12, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm

Your advantages

- Well-known mounting principle allows worldwide use
- Standard header – also suitable for connectors with automatically locking Click and Lock system
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies

Key Commercial Data

Packing unit	50 pc
GTIN	4 046356 113755
GTIN	4046356113755

Technical data

Item properties

Brief article description	Feed-through header
Plug-in system	POWER COMBICON 5
Type of contact	Male connector
Range of articles	PC 5/..-G
Pitch	7.62 mm
Number of positions	12
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without
Number of levels	1
Number of connections	12
Number of potentials	12

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Technical data

Electrical parameters

Nominal current	41 A
Nom. voltage	630 V
Rated voltage	630 V
Rated voltage (III/2)	630 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	6 kV
Rated surge voltage (III/2)	6 kV
Rated surge voltage (II/2)	6 kV

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 contact area (top layer)	Tin (4 - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 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]	29.25 mm
Width [w]	94.24 mm
Height [h]	19.29 mm
Pitch	7.62 mm
Height (without solder pin)	14.29 mm
Solder pin [P]	5 mm
Pin spacing	7.62 mm
Pin dimensions	0.8 x 1 mm

Dimensions for PCB design

Hole diameter	1.3 mm
Pin spacing	7.62 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50

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Technical data

Packaging information

Denomination packing units	Pcs.

General product information

Note	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.

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

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)	5.5 mm
Minimum clearance - inhomogeneous field (III/2)	5.5 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	8 mm
Minimum creepage distance value (III/2)	5.5 mm
Minimum creepage distance value (II/2)	5.5 mm

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6.5 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-5:1992-08
Contact resistance R_1	0.4 mΩ
Insertion/withdrawal cycles	50
Contact resistance R_2	0.5 mΩ
Impulse withstand voltage at sea level	7.3 kV
Power-frequency withstand voltage	3.31 kV
Insulation resistance, neighboring positions	$>10^{12}$ Ω

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	12
Conductor cross section	10 mm²
Test current	41 A
Upper limiting temperature requirements <100 °C	Test passed

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Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm^3 SO_2 on 300 dm^3/40 °C/1 cycle
Impulse withstand voltage at sea level	7.3 kV
Power-frequency withstand voltage	3.31 kV

Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Back of hand safety with IP10 access probe

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

Standards and Regulations

Connection in acc. with standard	EN-VDE
	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

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Drilling diagram

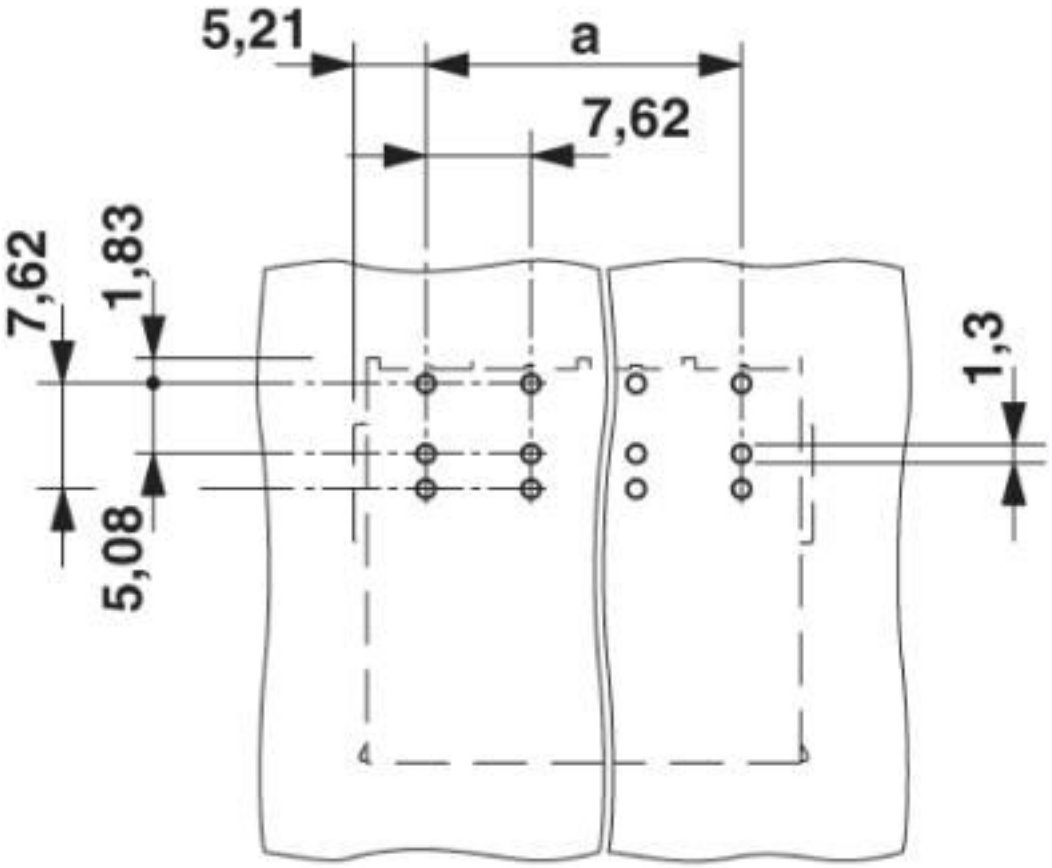

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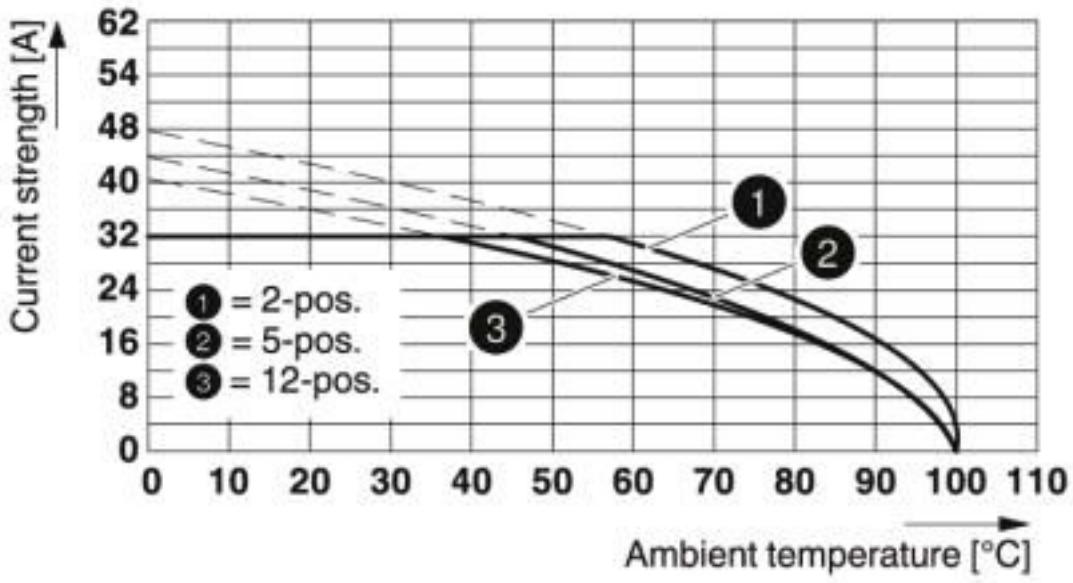
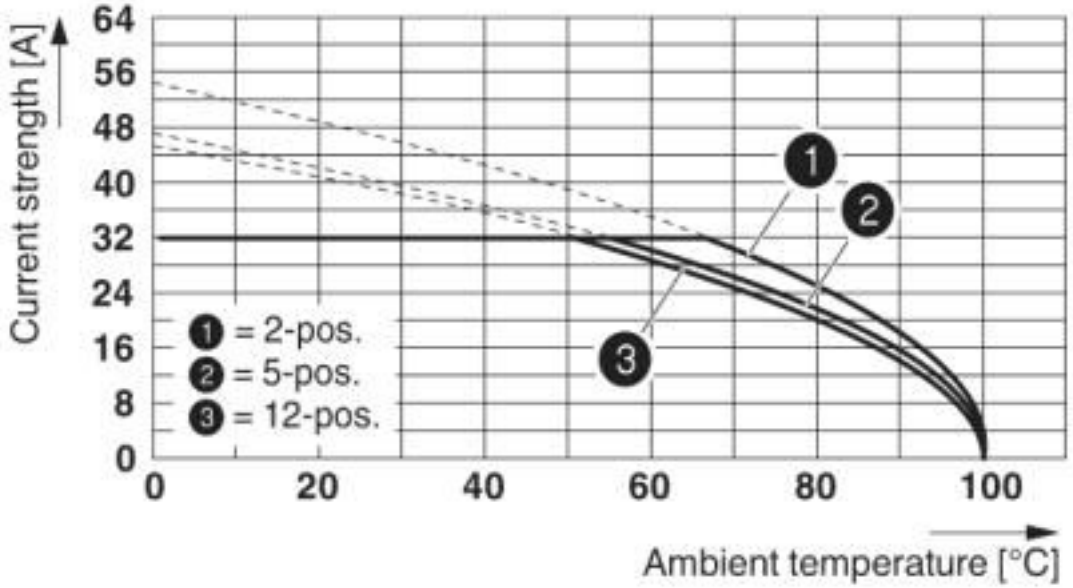
Diagram



Derating curve for: SPC 5/...-ST-7,62 with PC 5/...-G-7,62

Diagram



Derating curve for: PC 5/...-ST1-7,62 with PC 5/...-G-7,62
Conductor cross section: 6 mm²

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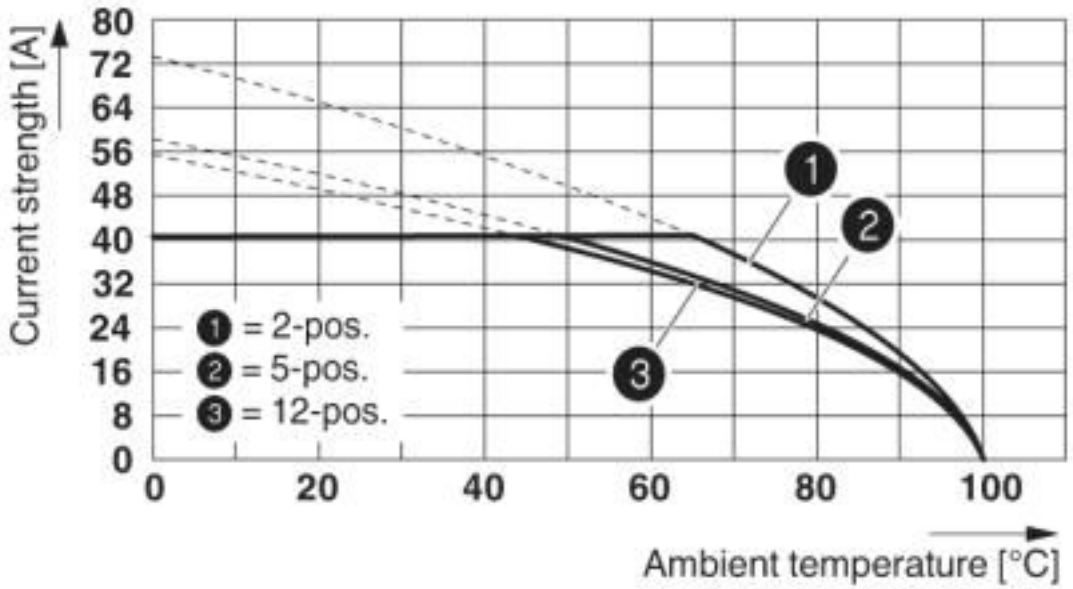
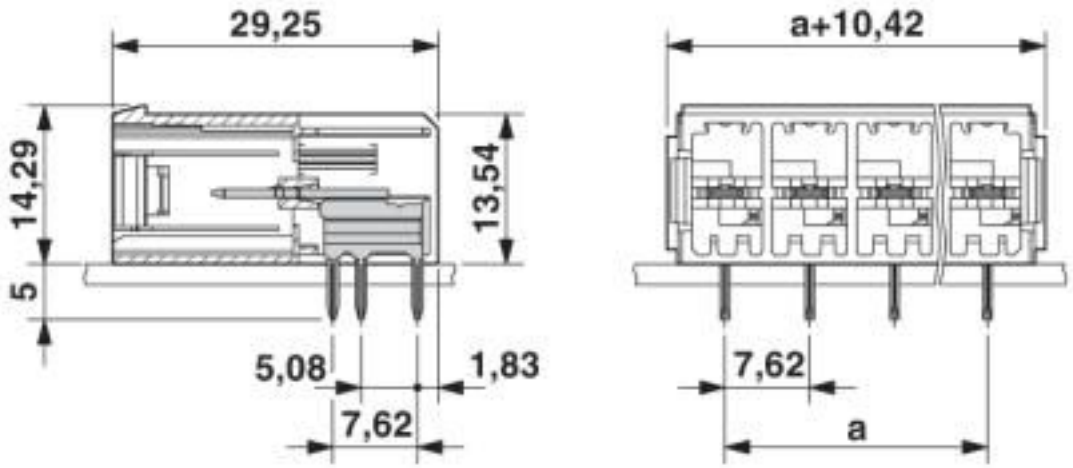
Diagram



Derating curve for: PC 5/...-ST1-7,62 with PC 5/...-G-7,62
Conductor cross section: 10 mm²

Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700

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Classifications

eCl@ss

eCl@ss 7.0	27440402
eCl@ss 8.0	27440402
eCl@ss 9.0	27440402

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002637
ETIM 5.0	EC002637
ETIM 6.0	EC002637
ETIM 7.0	EC002637

UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

Approvals

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Approvals

EAC / cULus Recognized

Ex Approvals

Approval details

EAC	EAC	B.01687

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Approvals

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19920722

	B	C	D
Nominal voltage UN	300 V	150 V	300 V
Nominal current IN	41 A	41 A	10 A

Accessories

Accessories

Coding element

Coding profile - CP-PC RD - 1701967

Coding profile, for plugging into the coding ribs of the plug at a later date, insulating material, color: Red

Labeled terminal marker

Marker card - SK 7,62/3,8:FORTL.ZAHLEN - 0804549

Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: 7.62 x 3.8 mm

Marker card - SK 3,8 REEL P7,62 WH CUS - 0825128

Marker card, Card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: continuous x 3.8#mm

Shroud

Accessories - POWERCOMBICON PCB-SHIELD - 1968387

Accessories, number of positions: 1, pitch: 0 mm, contact surface: Tin

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Accessories

Terminal marking

Marker card - SK U/3,8 WH:UNBEDRUCKT - 0803906

Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 3.8 mm, Number of individual labels: 1440

Marker strip - SK 3,8 WH:REEL - 0805218

Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 90000 mm, lettering field size: continuous x 3.8#mm, Number of individual labels: 210000

Additional products

Printed-circuit board connector - TSPC 5/12-ST-7,62 - 1728552

PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 12, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - PC 5/12-ST1-7,62 - 1777820

PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 12, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Printed-circuit board connector - SPC 5/12-ST-7,62 - 1996113

PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 12, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

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Accessories

Printed-circuit board connector - TSPC 5/12-STCL-7,62 - 1765515

PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 12, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

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Printed-circuit board connector - SPC 5/12-STCL-7,62 - 1718588

PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 12, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

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Printed-circuit board connector - PC 5/12-STCL1-7,62 - 1778162

PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 12, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

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Printed-circuit board connector - IPC 5/12-G-7,62 - 1708488

PCB headers, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm², number of positions: 12, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm

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Printed-circuit board connector - IPC 5/12-GU-7,62 - 1708705

PCB headers, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm², number of positions: 12, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm

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Accessories

Printed-circuit board connector - IPCV 5/12-G-7,62 - 1708925

PCB headers, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm², number of positions: 12, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm

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