Printed-circuit board connector - SPC 5/ 4-STF-7,62 - 1996142

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

PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 4, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Clamping space opened by means of fixed screwdriver enables convenient conductor connection
- Integrated double steel spring provides additional safety in the event of temperature and power fluctuations
- Optimized for tight installation situations: operation and conductor connection from one direction
- Screwable flange for superior mechanical stability
- 600 V UL approval in the smallest of dimensions

Key Commercial Data

Packing unit	50 pc
GTIN	4 046356 037884
GTIN	4046356037884

Technical data

Item properties

Brief article description	Printed-circuit board connector
Plug-in system	POWER COMBICON 5
Type of contact	Female connector
Range of articles	SPC 5/..-STF
Pitch	7.62 mm
Number of positions	4
Connection method	Push-in spring connection
Locking	Screw flange

Printed-circuit board connector - SPC 5/ 4-STF-7,62 - 1996142

Technical data

Item properties

Number of levels	1
Number of connections	4
Number of potentials	4

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-in spring connection
pluggable	Yes
Conductor cross section solid	0.2 mm² ... 10 mm²
Conductor cross section flexible	0.2 mm² ... 6 mm²
Conductor cross section AWG / kcmil	24 ... 8
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 6 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 4 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.25 mm² ... 1.5 mm²
Stripping length	15 mm

Specifications for ferrules

Recommended crimping pliers	1212034 CRIMPFOX 6
Ferrules without insulating collar, according to DIN 46228-1	Cross section: 0.5 mm²; Length: 10 mm ... 15 mm
	Cross section: 0.75 mm²; Length: 10 mm ... 15 mm
	Cross section: 1 mm²; Length: 10 mm ... 15 mm
	Cross section: 1.5 mm²; Length: 10 mm ... 15 mm
	Cross section: 2.5 mm²; Length: 12 mm ... 15 mm
	Cross section: 4 mm²; Length: 12 mm ... 15 mm
Recommended crimping pliers	1212034 CRIMPFOX 6
Ferrules with insulating collar, according to DIN 46228-4	Cross section: 0.5 mm²; Length: 10 mm ... 15 mm
	Cross section: 0.75 mm²; Length: 12 mm ... 15 mm
	Cross section: 1 mm²; Length: 12 mm ... 15 mm
	Cross section: 1.5 mm²; Length: 12 mm ... 15 mm
	Cross section: 2.5 mm²; Length: 12 mm ... 15 mm
	Cross section: 4 mm²; Length: 12 mm ... 15 mm

Flange specifications

Printed-circuit board connector - SPC 5/ 4-STF-7,62 - 1996142

Technical data

Flange specifications

Type of locking	Screw locking
Mounting flange	Screw flange

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 (4 - 8 µm Sn)
Metal surface contact 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]	38.5 mm
Width [w]	45.7 mm
Height [h]	19.8 mm
Pitch	7.62 mm
Height (without solder pin)	19.8 mm
Dimension a	22.86 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
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 (dependent on the derating curve)

Termination and connection method

Conductor connection test	The stripped-off ends of the largest conductor can be completely inserted in the opening of the terminal point without using excessive force.
Test result	Test passed
Test – repeated connection and release	IEC 60999-1:1999-11

Printed-circuit board connector - SPC 5/ 4-STF-7,62 - 1996142

Technical data

Termination and connection method

	Test passed
Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	6 mm² / flexible / > 80 N

Mechanical tests according to standard

Visual examination	Test passed IEC 60512-1-1:2002-02
Dimensional test	Test passed IEC 60512-1-2:2002-02
Resistance of marking	Test passed IEC 60068-2-70:1995-12
Result	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	50
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	4 N
Polarization and coding	Test passed IEC 60512-13-5:2006-02

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

Electrical tests - Function

Specification	IEC 60999-1:1999-11

Temperature cycles

Specification	IEC 60999-1:1999-11
Test current (minimum cross section)	5 A DC
Test current (maximum cross section)	32 A DC
Temperature cycles	192

Current carrying capacity / derating curves

Mechanical tests (A)

Insertion strength per pos. approx.	5 N

Printed-circuit board connector - SPC 5/ 4-STF-7,62 - 1996142

Technical data

Mechanical tests (A)

Withdraw strength per pos. approx.	4 N
Polarization when inserted requirement >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R_1	0.5 mΩ
Insertion/withdrawal cycles	50
Contact resistance R_2	0.6 mΩ
Impulse withstand voltage at sea level	9.8 kV
Power-frequency withstand voltage	4.26 kV

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	9.8 kV
Power-frequency withstand voltage	4.26 kV

Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

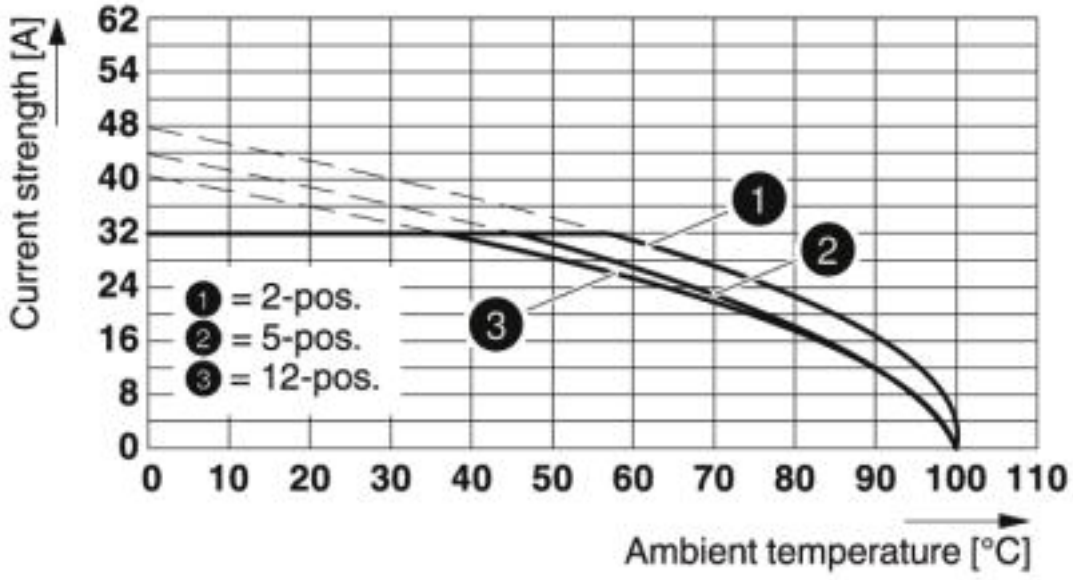
Environmental Product Compliance

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

Drawings

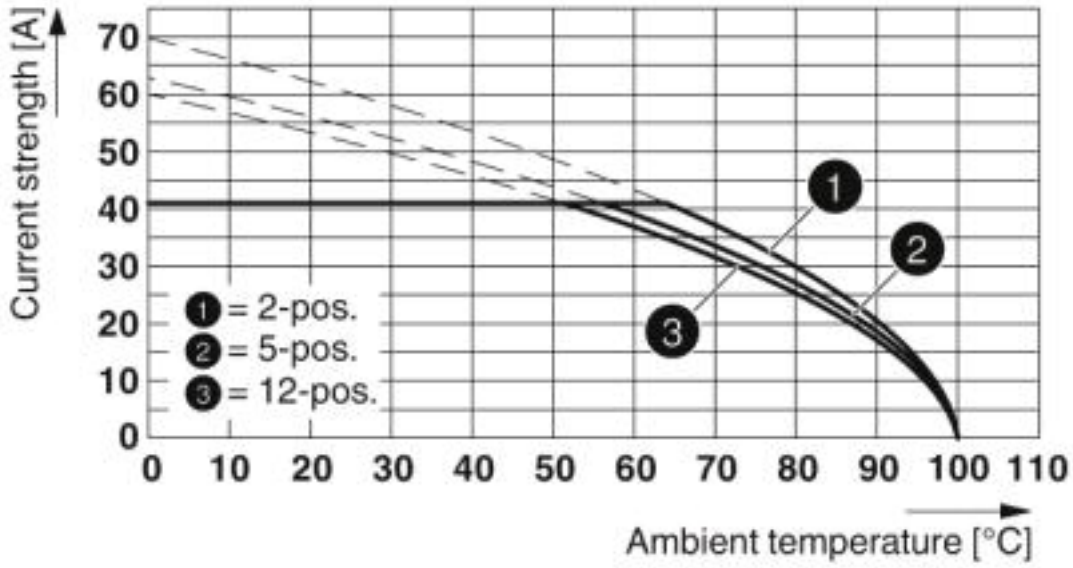
Printed-circuit board connector - SPC 5/ 4-STF-7,62 - 1996142

Diagram



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

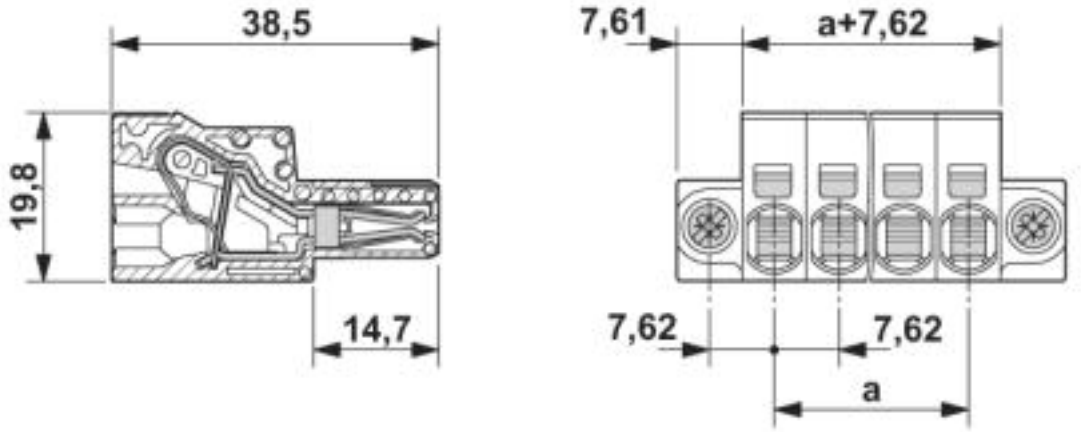
Diagram



Type: SPC 5/...-STF-7,62 with DFK-PC 5/...-STF-7,62
Conductor cross section: 10 mm²

Printed-circuit board connector - SPC 5/ 4-STF-7,62 - 1996142

Dimensional drawing



Classifications

eCl@ss

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
eCl@ss 7.0	27440309
eCl@ss 8.0	27440309
eCl@ss 9.0	27440309

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002638
ETIM 5.0	EC002638
ETIM 6.0	EC002638
ETIM 7.0	EC002638

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

Printed-circuit board connector - SPC 5/ 4-STF-7,62 - 1996142

Approvals

Approvals

Approvals

EAC / cULus Recognized

Ex Approvals

Approval details

EAC	EAC	B.01687

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

	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	35 A	35 A
mm²/AWG/kcmil	24-8	24-8

Accessories

Accessories

Cable end sleeve

Ferrule - AI 4 -15 GY - 1200264

Ferrule, sleeve length: 15 mm, length: 23 mm, color: gray

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

Printed-circuit board connector - SPC 5/ 4-STF-7,62 - 1996142

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

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

Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517

Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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

Printed-circuit board connector - SPC 5/ 4-STF-7,62 - 1996142

Accessories

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 - DFK-PC 5/ 4-GF-SH-7,62 - 1716085

Feed-through header, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm², number of positions: 4, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm

Printed-circuit board connector - DFK-PC 5/ 4-GFU-SH-7,62 - 1716195

Feed-through header, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm², number of positions: 4, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.26 mm

Printed-circuit board connector - DFK-PCV 5/ 4-GF-7,62 - 1716412

Feed-through header, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm², number of positions: 4, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm

Printed-circuit board connector - PC 5/ 4-GF-7,62 - 1720819

PCB headers, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm², number of positions: 4, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm

Printed-circuit board connector - SPC 5/ 4-STF-7,62 - 1996142

Accessories

Printed-circuit board connector - PCV 5/ 4-GF-7,62 - 1720929

PCB headers, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm², number of positions: 4, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.26 mm

Printed-circuit board connector - PC 5/ 4-GFU-7,62 - 1721038

PCB headers, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm², number of positions: 4, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.2 mm

Printed-circuit board connector - DFK-PC 5/ 4-GF-7,62 - 1727715

Feed-through header, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm², number of positions: 4, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.9 mm

Printed-circuit board connector - DFK-PC 5/ 4-GFU-7,62 - 1727935

Feed-through header, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm², number of positions: 4, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.26 mm

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