PC 6/ 2-ST-BUS-7,62 - PCB connector

1044740

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PCB connector, nominal cross section: 16 mm^2, color: green, nominal current: 32 A, rated voltage (III/2): 1000 V, contact surface: Sn, contact connection type: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: PC 6/..-ST-BUS, pitch: 7.62 mm, connection method: Displacement connection, screw head form: T15 Torx®, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 6, locking: without, mounting method: without, type of packaging: packed in cardboard

Your advantages

- Potentials can be easily looped through – ideal for BUS applications
- Connection without conductor pretreatment for huge time savings

Commercial data

Item number	1044740
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	AA04
Product key	AADAEA
GTIN	4055626622842
Weight per piece (including packing)	31.08 g
Weight per piece (excluding packing)	31 g
Customs tariff number	85366990
Country of origin	SK

Technical data

Product properties

Product type	PCB connector
Product family	PC 6/..-ST-BUS
Product line	COMBICON Connectors L
Number of positions	2
Pitch	7.62 mm
Number of connections	2
Number of rows	1
Number of potentials	2
Mounting type	without

Fitting of components

Partial assembly	No

Electrical properties

Properties

Nominal current I_N	32 A
Nominal voltage U_N	1000 V
Contact resistance	0.7 mΩ
Rated voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

Connection data

Connection technology

Connector system	COMBICON PC 6
Nominal cross section	16 mm²
Contact connection type	Socket

Interlock

Locking type	without
Mounting type	without

Conductor connection

Connection method	Displacement connection
Conductor/PCB connection direction	0 °
Conductor cross-section flexible	16 mm² (H07V-K / Maximum outer diameter 8.1 mm)
Drive form screw head	Torx® (T15)
Tightening torque	3 Nm

Conductor connection

Connection method	Displacement connection
Conductor/PCB connection direction	0 °
Drive form screw head	Torx® (T15)
Tightening torque	3 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	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (4 µm - 8 µm Sn)
Metal surface contact area (top layer)	Tin (4 µm - 8 µm Sn)

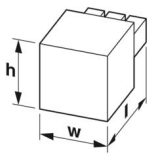
Material data - housing

Color (Housing)	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

Material data – actuating element

Color (Actuating element)	orange (2003)

Dimensions

Dimensional drawing	
Pitch	7.62 mm
Width [w]	24.4 mm
Height [h]	58 mm
Length [l]	28.75 mm

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.

Mechanical tests

Conductor connection

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

Test for conductor damage and slackening

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

Repeated connection and disconnection

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

Pull-out test

Specification	IEC 60998-2-3:2002-12
Conductor cross-section/conductor type/tractive force setpoint/actual value	16 mm² / flexible / > 100 N

Insertion and withdrawal forces

Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	13 N
Withdraw strength per pos. approx.	16 N

Torque test

Specification	IEC 60998-2-3:2002-12

Resistance of inscriptions

Specification	IEC 60068-2-70:1995-12
Result	Test passed

Polarization and coding

Specification	IEC 60512-13-5:2006-02
Result	Test passed

Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

Environmental and real-life conditions

Durability test

Specification	IEC 60512-9-1:2010-03

Impulse withstand voltage at sea level	9.8 kV
Contact resistance R_1	0.7 mΩ
Contact resistance R_2	0.7 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm^3 SO_2 on 300 dm^3/40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	4.26 kV

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	50 m/s² (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Glow-wire test

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

Glow-wire test

Specification	IEC 60998-1:2002-12
Temperature	650 °C
Time of exposure	5 s

Ambient conditions

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

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	3

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 |

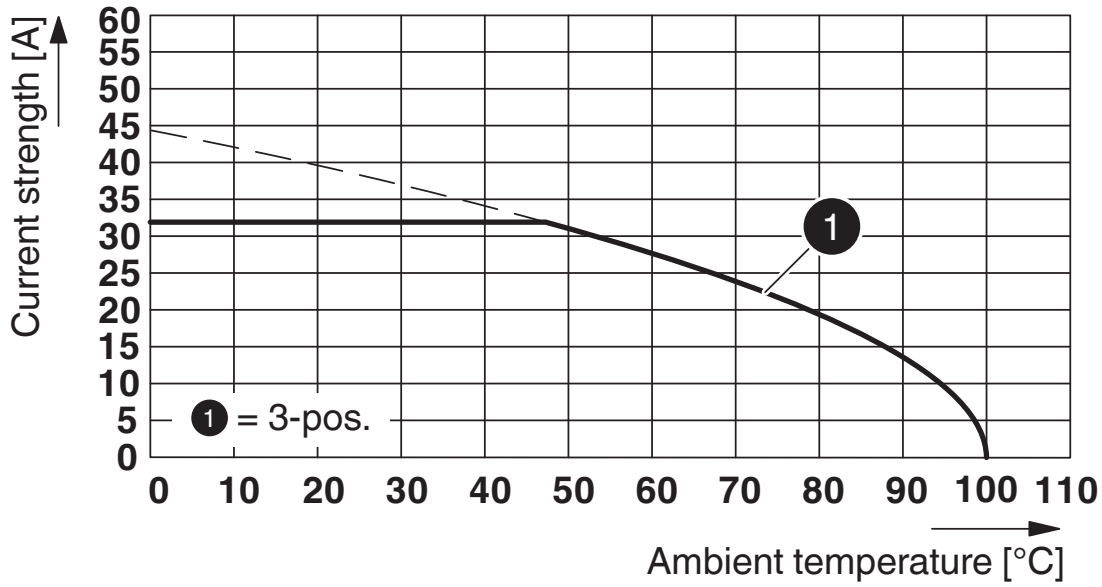
Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	12.5 mm
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
minimum clearance value - non-homogenous field (III/2)	8 mm
minimum creepage distance (III/2)	8 mm
Rated insulation voltage (II/2)	1000 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

Packaging specifications

Type of packaging	packed in cardboard

Drawings

Diagram



Type: PC 6/...-ST-BUS-7,62 with PC 6/...-G1-7,62 BK

Approvals

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cULus Recognized
Approval ID: E60425-20010727

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
Standard	600 V	30 A	6	-
C				
Standard	600 V	30 A	6	-
F				
USR application only	600 V	30 A	6	-

VDE approval of drawings
Approval ID: 40050635

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Only flexible conductors	1000 V	32 A	-	16

Classifications

ECLASS

ECLASS-13.0	27460202
ECLASS-15.0	27460202

ETIM

ETIM 10.0	EC002638

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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