

1743090

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PCB connector, nominal cross section: 2.5 mm², color: black, nominal current: 16 A (see derating curve), rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of rows: 1, number of positions: 8, product range: MVSTBW 2,5 HC/..-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -90 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5 HC, locking: Screw locking mechanism, mounting method: Screw flange, type of packaging: packed in cardboard

### Your advantages

- · Well-known connection principle allows worldwide use
- · Low temperature rise, thanks to maximum contact force
- · Allows connection of two conductors
- · Integrated double steel spring provides additional safety in the event of temperature and power fluctuations
- · Screwable flange for superior mechanical stability

#### Commercial data

Item number	1743090
Packing unit	50 pc
Minimum order quantity	50 pc
Product key	AACAKG
GTIN	4046356300421
Weight per piece (including packing)	19.498 g
Weight per piece (excluding packing)	17.373 g
Country of origin	IN



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### Technical data

### Product properties

Product type	PCB connector
Product family	MVSTBW 2,5 HC/STF
Product line	COMBICON Connectors M
Number of positions	8
Pitch	5.08 mm
Number of rows	1
Mounting type	Screw flange

### Electrical properties

#### Properties

Nominal current I <sub>N</sub>	16 A (see derating curve)
Nominal voltage U <sub>N</sub>	320 V
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

### Connection data

#### Connection technology

Туре	Standard
Connector system	COMBICON MSTB 2,5 HC
Nominal cross section	2.5 mm²
Contact connection type	Socket

#### Interlock

Locking type	Screw locking mechanism
Mounting type	Screw flange
Tightening torque	0.3 Nm

### Conductor connection

Connection method	Screw connection with tension sleeve
Conductor/PCB connection direction	-90 °
Conductor cross-section rigid	0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 12
Conductor cross-section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> 2.5 mm <sup>2</sup>
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm² 2.5 mm²
2 conductors with same cross section, solid	0.2 mm² 1 mm²



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2 conductors with same cross section, flexible	0.2 mm² 1.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 1 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> 1.5 mm <sup>2</sup>
Stripping length	7 mm
Drive form screw head	Slotted (L)
Tightening torque	0.5 Nm 0.6 Nm
Specifications for ferrules without insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
Specifications for ferrules with insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6

### 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 - 8 μm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 µm Sn)

#### Material data - housing

Color (Housing)	black (9005)
Insulating material	PA
Insulating material group	1
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

Dimensional drawing	h
Pitch	5.08 mm
Width [w]	40.64 mm



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Height [h]	26 mm
Length [I]	12.6 mm

### Mounting

#### Flange

Tightening torque	0.3 Nm

#### 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.

#### Environmental and real-life conditions

#### 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

#### 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)	250 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 mm
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 mm
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

### Packaging specifications



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## **Approvals**

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cULus Recognized Approval ID: E60425-19931011				
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
В				
	300 V	16 A	30 - 12	-
D				
	300 V	10 A	30 - 12	-

	VDE approval of drawings Approval ID: 40050079				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		250 V	16 A	-	0.2 - 2.5



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## Classifications

ETIM 9.0

#### **ECLASS**

	ECLASS-13.0	27460202
	ECLASS-15.0	27460202
ET	IM	

EC002638



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## 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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