

1452709

https://www.phoenixcontact.com/in/products/1452709

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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Plastic, number of slots: 8, number of positions: 4, coding: A, slot assignment: single, status display: Yes, pnp; master cable connection: Fixed connection 180°, PUR/PVC, cable length: 10 m, shielding: no

Your advantages

- · Safety in the field, thanks to molded housing and high degree of protection
- · Convenient: increased machine availability thanks to quick and easy diagnostics
- Save time, thanks to installation with SPEEDCON fast locking system

Commercial Data

Item number	1452709	
Packing unit	1 pc	
Minimum order quantity	1 pc	
Sales Key	BF3	
Product Key	BF3CBA	
Catalog Page	Page 262 (C-2-2019)	
GTIN	4046356553995	
Weight per Piece (including packing)	1,377 g	
Weight per Piece (excluding packing)	1,295.9 g	
Customs tariff number	85444290	
Country of origin	DE	



1452709

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Technical Data

Notes

General	NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties.
General	Unused slots are to be sealed off prior to commissioning. Suitable sealing elements are to be found under "Accessories".

Product properties

Product type	Distributor boxes with M8 to M12 slots
Number of positions	4
Application	Standard
Number of slots	8
Coding	A
LED	yes

Material specifications

Color	anthracite
Material Threaded sleeve	PBT
Material Housing	PBT
Material Molding compound	PUR
Flammability rating according to UL 94	V0
Seal material O-ring	NBR
Contact material	Cu alloy
Contact surface material	gold-plated
Contact carrier material	PA

Dimensions

Dimensional drawing	148,8 © S S S
	3 9 73 107
Width	54 mm
Height	23 mm
Length	149 mm

Connection data

Conductor connection



1452709

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Connection method	Fixed connection	
Tightening torque slot sensor/actuator cable	0.4 Nm	
Tightening torque of mounting screw for fixing the housing	0.5 Nm	
Pin assignment		
Slot/position = Wire color or connection	1 / 4 (A) = WH	
	2 / 4 (A) = GN	
	3 / 4 (A) = YE	
	4 / 4 (A) = GY	
	5 / 4 (A) = PK	
	6 / 4 (A) = RD	
	7 / 4 (A) = BK	
	8 / 4 (A) = VT	
	1-8 / 1 (+ 24 V) = BN	
	1-8 / 3 (0 V) = BU	
	1-8 / 5 (PE) = GNYE	
Signaling		
Status display present	Yes	
Electrical properties		
Max. operating voltage U _{max}	30 V DC	
Local diagnostics	Supply voltage Green LED	
	Status display I/O Yellow LED	
Nominal voltage U _N	24 V DC	
Rated current, total	12 A	
Max. current carrying capacity per path	2 A	
Current carrying capacity per slot	4 A	
Cable/line		
Cable length	10 m	
PUR/PVC black [PUR]		
Dimensional drawing		
Cable weight	107.4 kg/km	
UL AWM Style	20549 (80°C/300 V)	
Number of positions	11	
Shielded	no	



1452709

https://www.phoenixcontact.com/in/products/1452709

Cable type	PUR/PVC black [PUR]		
Conductor structure signal line	19x 0.15 mm		
AWG signal line	22		
Conductor cross section	8x 0.34 mm² (Signal line)		
	3x 0.75 mm² (power line)		
Wire diameter incl. insulation	1.3 mm ±0.1 mm (Signal line)		
	1.8 mm ±0.1 mm (power line)		
External cable diameter	8.5 mm ±0.2 mm		
Outer sheath, material	PUR		
External sheath, color	black RAL 9005		
Conductor material	Bare Cu litz wires		
Material wire insulation	PVC		
Single wire, color	brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet		
Inner sheath thickness	≥ 0.15 mm		
Thickness, outer sheath	≥ 0.38 mm		
Overall twist	Wires twisted in layers		
Max. conductor resistance	≤ 53 Ω/km (Signal line)		
	≤ 26 Ω/km (power line)		
Insulation resistance	≥ 5 MΩ*km		
Nominal voltage, cable	300 V AC		
Test voltage Core/Core	2000 V (50 Hz, 5 min.)		
Minimum bending radius, fixed installation	7.5 x D		
Minimum bending radius, flexible installation	10 x D		
Max. bending cycles	1500000		
Flame resistance	DIN EN 50265		
Resistance to oil	according to VDE 0472 Part 803		
Other resistance	Highly resistant to acids, alkaline solutions and solvents		
Special properties	Silicone-free		
Ambient temperature (operation)	-40 °C 90 °C (cable, fixed installation)		
	-5 °C 80 °C (Cable, flexible installation)		

Standards and regulations

Standards/specifications IEC 61076-2-101
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Environmental and real-life conditions

Ambient conditions

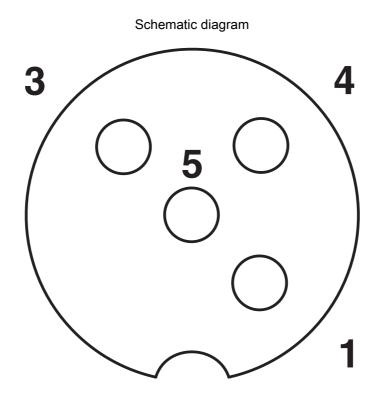
Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C 80 °C



1452709

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Drawings



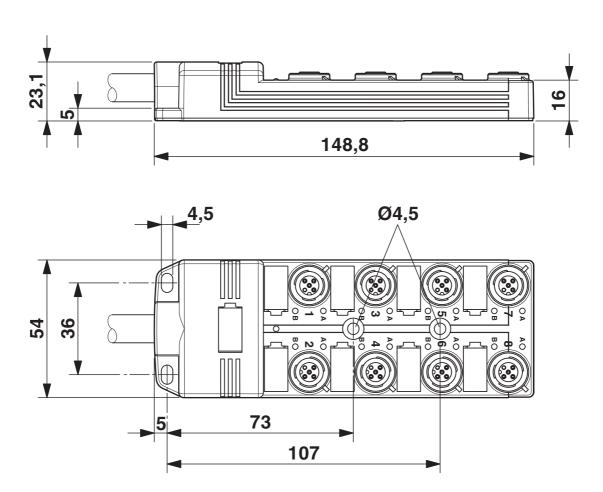
M12 slot, socket, 4-pos.



1452709

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Dimensional drawing

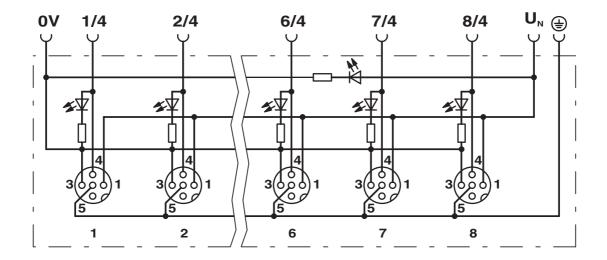




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Circuit diagram





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Approvals

. 7.1	cUL Recognized Approval ID: FILE E 118976				
		Nominal Voltage U_N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
		24 V	-	-	-

91 U	UL Recognized Approval ID: FILE E 118976				
		Nominal Voltage U_N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
Signal		-	2 A	-	-
		24 V	4 A	-	-



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Classifications

ECLASS

	ECLASS-11.0	27440108			
	ECLASS-12.0	27440108			
	ECLASS-13.0	27440108			
ΕT	ETIM				
	ETIM 8.0	EC002585			
UN	UNSPSC				
	UNSPSC 21.0	31251500			



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Environmental Product Compliance

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



1452709

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Accessories

PROT-MS SCO - Screw plug

1553129

https://www.phoenixcontact.com/in/products/1553129



M12 screw plug with fast-locking system for unoccupied M12 female connectors of sensor/actuator cables, boxes, and flush-type connectors

TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/in/products/1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors



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TSD-M 1,2NM - Torque screwdriver

1212224

https://www.phoenixcontact.com/in/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 Nm

TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

https://www.phoenixcontact.com/in/products/1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits



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SAC BIT M12-D15 - Tool

1208432

https://www.phoenixcontact.com/in/products/1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

SACC BIT M12-D20 - Tool

1208445

https://www.phoenixcontact.com/in/products/1208445

Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive





1452709

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UC-EM (17,5X9) - Snap-in markers

0827490

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Snap-in markers, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID, BLUEMARK ID COLOR, BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, lettering field size: 17. 5 x 9 mm, Number of individual labels: 20

UC-EM (17,5X9) CUS - Snap-in markers

0828238

https://www.phoenixcontact.com/in/products/0828238

Snap-in markers, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: 17. 5 x 9 mm, Number of individual labels: 20





1452709

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UCT-EM (17,5X9) - Snap-in markers

0801491

https://www.phoenixcontact.com/in/products/0801491



Snap-in markers, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, lettering field size: 17.5 x 9 mm, Number of individual labels: 24

UCT-EM (17,5X9) CUS - Snap-in markers

0801575

https://www.phoenixcontact.com/in/products/0801575

UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications





1452709

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UC-EM (17,5X9) YE - Snap-in markers

0827494

https://www.phoenixcontact.com/in/products/0827494

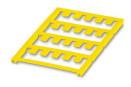


Snap-in markers, Sheet, yellow, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, lettering field size: 17.5 x 9 mm, Number of individual labels: 20

UC-EM (17,5X9) YE CUS - Snap-in markers

0828239

https://www.phoenixcontact.com/in/products/0828239



Snap-in markers, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm, Number of individual labels: 20



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UCT-EM (17,5X9) YE - Snap-in markers

0801492

https://www.phoenixcontact.com/in/products/0801492



Snap-in markers, Sheet, yellow, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, lettering field size: 17. 5 x 9 mm, Number of individual labels: 24

UCT-EM (17,5X9) YE CUS - Snap-in markers

0801576

https://www.phoenixcontact.com/in/products/0801576

UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications





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UTA 136 - DIN rail adapter

2853996

https://www.phoenixcontact.com/in/products/2853996

Universal DIN rail adapter, for screwing on switchgear



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