

1596271

https://www.phoenixcontact.com/us/products/1596271

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



M23, Cable connector, series: RC, angled, shielded: no, Screw locking mechanism, No. of pos.: 8+1, Direction of rotation: Standard, contact connection type: Socket, Solder cup, coding: N. This product is in the process of being discontinued. This product must no longer be considered for new projects. Please contact your sales representative for alternatives.

Commercial data

Item number	1596271
Packing unit	8 pc
Minimum order quantity	8 pc
Note	Made to order (non-returnable)
Sales key	AB31
Product key	ABRAFC
GTIN	4046356210447
Weight per piece (including packing)	150.19 g
Weight per piece (excluding packing)	144.708 g
Customs tariff number	85366990
Country of origin	DE



https://www.phoenixcontact.com/us/products/1596271



Technical data

Product properties

Product type	Circular connector (cable-side)
Thread type	M23

Material specifications

Flammability rating according to UL 94	V0

Connector

Insulating body

Material (Contact) CuZn Material (Contact surface) Ni/Au Insertion/withdrawal cycles 50 Connection method Solder cup Contact switching type Socket Application Signal Number of positions 9 Direction of rotation Standard Connection profile 8+1 Number Contact (Contact group 1) 1 Diameter Contact (Contact group 1) 2 mm Litz wire cross-section min. Contact (Contact group 1) 2.5 mm² Rated current Contact (Contact group 1) 20 A (for max. connection cross section) Rated voltage Contact (Contact group 1) 48 V AC Overvoltage category III Degree of pollution 3 Number Contact (Contact group 2) 8 Diameter Contact (Contact (Contact group 2) 1 mm Litz wire cross-section min. Contact (Contact group 2) 0.08 mm² Litz wire cross-section min. Contact (Contact group 2) 1 mm² Rated ourrent Contact (Contact group 2) 8 A (for max. connection cross section) Rated current Contact (Contact group 2) 8 A (for	Coding	N
Material (Contact surface) Insertion/withdrawal cycles Connection method Contact switching type Socket Application Number of positions Direction of rotation Connection profile Number Contact (Contact group 1) Litz wire cross-section max. Contact group 1) Rated surge voltage Covervoltage category Ill Degree of pollution Rated current Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Rated current Contact (Contact group 2) Litz wire cross-section max. Contact group 1) Rated surge voltage Overvoltage category Ill Degree of pollution 3 Number Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact group 2) Litz wire cross-section max. Contact group 2) Rated current Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated current Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2)	Material (Insulating body)	PBT
Insertion/withdrawal cycles Connection method Contact switching type Socket Application Number of positions Direction of rotation Standard Connection profile 8+1 Number Contact (Contact group 1) Diameter Contact (Contact group 1) Litz wire cross-section min. Contact (Contact group 1) Rated voltage Contact (Contact group 1) Rated surge voltage Overvoltage actegory Diameter Contact (Contact group 1) Rated current Contact (Contact group 1) Rated current Contact (Contact group 1) Rated voltage category Ill Degree of pollution 3 Number Contact (Contact group 2) Diameter Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated current Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2)	Material (Contact)	CuZn
Connection method Contact switching type Socket Application Signal Number of positions 9 Direction of rotation Standard Connection profile 8+1 Number Contact (Contact group 1) 1 Diameter Contact (Contact group 1) Litz wire cross-section min. Contact (Contact group 1) Rated current Contact (Contact group 1) Rated voltage Contact (Contact group 1) Pegree of pollution Number Contact (Contact group 2) Diameter Contact (Contact group 1) Rated current Contact (Contact group 1) Rated surge voltage 1.5 kV Overvoltage category III Degree of pollution 3 Number Contact (Contact group 2) 1 mm Litz wire cross-section min. Contact (Contact group 2) 1 mm Litz wire cross-section min. Contact (Contact group 2) 1 mm Litz wire cross-section min. Contact (Contact group 2) 1 mm Rated current Contact (Contact group 2) 1 mm Rated current Contact (Contact group 2) 1 mm² Rated current Contact (Contact group 2) 8 A (for max. connection cross section) Rated voltage Contact (Contact group 2) 8 A (for max. connection cross section) Rated voltage Contact (Contact group 2) 8 A (for max. connection cross section) Rated voltage Contact (Contact group 2) 8 A (for max. connection cross section)	Material (Contact surface)	Ni/Au
Contact switching type Application Signal Number of positions Direction of rotation Standard Connection profile 8+1 Number Contact (Contact group 1) Diameter Contact (Contact group 1) Litz wire cross-section min. Contact (Contact group 1) Rated current Contact (Contact group 1) Rated voltage Contact (Contact group 1) Page of pollution Number Contact (Contact group 2) Diameter Contact (Contact group 3) Rated surge voltage 1.5 kV Overvoltage category Ill Degree of pollution 3 Number Contact (Contact group 2) Diameter Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2)	Insertion/withdrawal cycles	50
Application Number of positions Direction of rotation Standard Connection profile 8+1 Number Contact (Contact group 1) Diameter Contact (Contact group 1) Litz wire cross-section min. Contact (Contact group 1) Rated current Contact (Contact group 1) Rated voltage Contact (Contact group 1) Rated surge voltage Overvoltage category Ill Degree of pollution Number Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 3) Rated voltage Contact (Contact group 4) Rated voltage Contact (Contact group 5) Rated surge voltage 1.5 kV Overvoltage category Ill Degree of pollution 3 Number Contact (Contact group 2) 1 mm Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) 8 A (for max. connection cross section) Rated voltage Contact (Contact group 2) 8 A (for max. connection cross section)	Connection method	Solder cup
Number of positions Direction of rotation Standard Connection profile Number Contact (Contact group 1) Diameter Contact (Contact group 1) Litz wire cross-section min. Contact (Contact group 1) Rated current Contact (Contact group 1) Rated voltage Contact (Contact group 1) Rated surge voltage Overvoltage category Diameter Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 3) Number Contact (Contact group 4) Based voltage Contact (Contact group 5) Number Contact (Contact group 6) Litz wire cross-section min. Contact (Contact group 6) Litz wire cross-section min. Contact (Contact group 6) Litz wire cross-section min. Contact (Contact group 7) Litz wire cross-section min. Contact (Contact group 6) Litz wire cross-section max. Contact (Contact group 7) Rated current Contact (Contact group 7) Rated current Contact (Contact group 7) Rated current Contact (Contact group 7) Rated voltage Contact (Contact group 7)	Contact switching type	Socket
Direction of rotation Connection profile 8+1 Number Contact (Contact group 1) Diameter Contact (Contact group 1) Litz wire cross-section min. Contact (Contact group 1) Rated current Contact (Contact group 1) Rated voltage Contact (Contact group 1) Rated surge voltage Overvoltage category Diameter Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 1) Rated surge voltage 1.5 kV Overvoltage category III Degree of pollution Number Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2)	Application	Signal
Connection profile 8+1 Number Contact (Contact group 1) 1 Diameter Contact (Contact group 1) 2 mm Litz wire cross-section min. Contact (Contact group 1) 0.08 mm² Litz wire cross-section max. Contact (Contact group 1) 2.5 mm² Rated current Contact (Contact group 1) 48 V AC 74 V DC Rated surge voltage 1.5 kV Overvoltage category III Degree of pollution 3 Number Contact (Contact group 2) 8 Diameter Contact (Contact group 2) 1 mm Litz wire cross-section min. Contact (Contact group 2) 0.08 mm² Litz wire cross-section max. Contact (Contact group 2) 1 mm² Rated current Contact (Contact group 2) 8 A (for max. connection cross section) Rated voltage Contact (Contact group 2) 48 V AC	Number of positions	9
Number Contact (Contact group 1) Diameter Contact (Contact group 1) Litz wire cross-section min. Contact (Contact group 1) Litz wire cross-section max. Contact (Contact group 1) Rated current Contact (Contact group 1) Rated voltage Contact (Contact group 1) Rated surge voltage Overvoltage category Ill Degree of pollution Number Contact (Contact group 2) Diameter Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2) 48 V AC	Direction of rotation	Standard
Diameter Contact (Contact group 1) Litz wire cross-section min. Contact (Contact group 1) Litz wire cross-section max. Contact (Contact group 1) Rated current Contact (Contact group 1) Rated voltage Contact (Contact group 1) Rated surge voltage Covervoltage category Degree of pollution Number Contact (Contact group 2) Diameter Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2)	Connection profile	8+1
Litz wire cross-section min. Contact (Contact group 1) Litz wire cross-section max. Contact (Contact group 1) Rated current Contact (Contact group 1) Rated voltage Contact (Contact group 1) Rated surge voltage Covervoltage category III Degree of pollution Number Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated current Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2)	Number Contact (Contact group 1)	1
Litz wire cross-section max. Contact (Contact group 1) Rated current Contact (Contact group 1) Rated voltage Contact (Contact group 1) Rated surge voltage Rated surge voltage 1.5 kV Overvoltage category III Degree of pollution Number Contact (Contact group 2) Diameter Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2)	Diameter Contact (Contact group 1)	2 mm
Rated current Contact (Contact group 1) Rated voltage Contact (Contact group 1) Rated surge voltage Rated surge voltage 1.5 kV Overvoltage category III Degree of pollution Number Contact (Contact group 2) Diameter Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated current Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2) 48 V AC	Litz wire cross-section min. Contact (Contact group 1)	0.08 mm²
Rated voltage Contact (Contact group 1) Rated surge voltage 1.5 kV Overvoltage category III Degree of pollution 3 Number Contact (Contact group 2) Diameter Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2) Rated voltage Contact (Contact group 2) 48 V AC	Litz wire cross-section max. Contact (Contact group 1)	2.5 mm²
Rated surge voltage 1.5 kV Overvoltage category III Degree of pollution 3 Number Contact (Contact group 2) Diameter Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2) Rated voltage Contact (Contact group 2) 48 V AC	Rated current Contact (Contact group 1)	20 A (for max. connection cross section)
Rated surge voltage Overvoltage category III Degree of pollution 3 Number Contact (Contact group 2) Diameter Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2) 48 V AC	Rated voltage Contact (Contact group 1)	48 V AC
Overvoltage category Degree of pollution Number Contact (Contact group 2) Diameter Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2) Rated voltage Contact (Contact group 2) 48 V AC		74 V DC
Degree of pollution 3 Number Contact (Contact group 2) 8 Diameter Contact (Contact group 2) 1 mm Litz wire cross-section min. Contact (Contact group 2) 0.08 mm² Litz wire cross-section max. Contact (Contact group 2) 1 mm² Rated current Contact (Contact group 2) 8 A (for max. connection cross section) Rated voltage Contact (Contact group 2) 48 V AC	Rated surge voltage	1.5 kV
Number Contact (Contact group 2) Diameter Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2) 8 48 V AC	Overvoltage category	III
Diameter Contact (Contact group 2) Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2) 48 V AC	Degree of pollution	3
Litz wire cross-section min. Contact (Contact group 2) Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2) 48 V AC	Number Contact (Contact group 2)	8
Litz wire cross-section max. Contact (Contact group 2) Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2) 48 V AC	Diameter Contact (Contact group 2)	1 mm
Rated current Contact (Contact group 2) Rated voltage Contact (Contact group 2) 8 A (for max. connection cross section) 48 V AC	Litz wire cross-section min. Contact (Contact group 2)	0.08 mm²
Rated voltage Contact (Contact group 2) 48 V AC	Litz wire cross-section max. Contact (Contact group 2)	1 mm²
	Rated current Contact (Contact group 2)	8 A (for max. connection cross section)
48 V AC	Rated voltage Contact (Contact group 2)	48 V AC
		48 V AC

Housing

Туре	Cable connector housing
Thread type	M23



1596271

https://www.phoenixcontact.com/us/products/1596271

Design	angled
Type of locking	Screw locking mechanism
Pg screw connection	Pg9
Material (Housing)	GD-Zn
Material (Housing surface)	Ni
Material (Rotating parts)	CuZn
Degree of protection (plugged in)	IP65
	IP67

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67

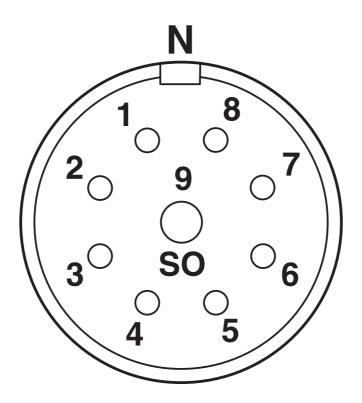


https://www.phoenixcontact.com/us/products/1596271



Drawings

Schematic diagram



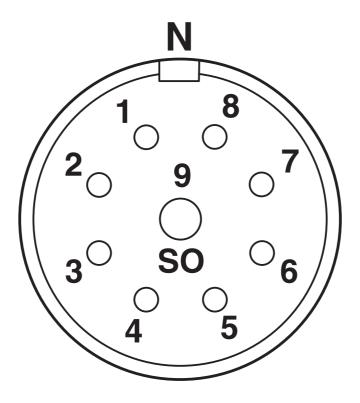
Connector pin assignment



https://www.phoenixcontact.com/us/products/1596271



Schematic diagram



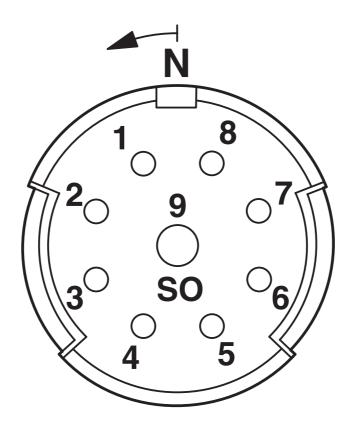
Connector pin assignment



https://www.phoenixcontact.com/us/products/1596271



Schematic diagram



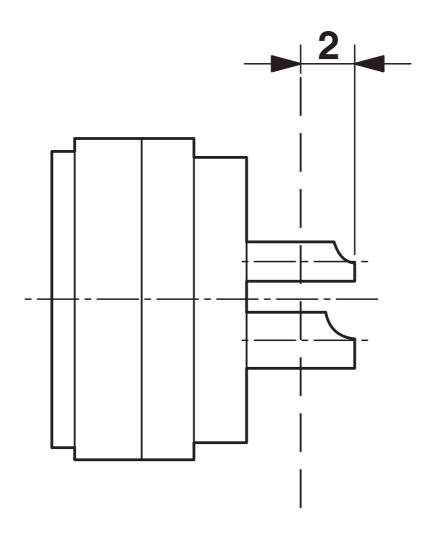
Connector pin assignment



1596271

https://www.phoenixcontact.com/us/products/1596271

Schematic diagram



Dimensional drawing



1596271

https://www.phoenixcontact.com/us/products/1596271

Classifications

ECLASS

	ECLASS-13.0	27440116
	ECLASS-15.0	27440116
E 1	TIM	
_ I	IIVI	
	ETIM 9.0	EC002635
U	NSPSC	
	UNSPSC 21.0	39121400



1596271

https://www.phoenixcontact.com/us/products/1596271

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	edf4b920-1ae4-467b-b1eb-6f5f3704bde6

Phoenix Contact 2025 @ - all rights reserved https://www.phoenixcontact.com

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com