

SAC-3P- 1,0-PVC/M12FRS PE - Power cable



1411648

<https://www.phoenixcontact.com/us/products/1411648>

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.



Power cable, 3-position, PVC, black, free cable end, on Socket angled M12, coding: S, cable length: 1 m, For alternating current up to 16 A/690 V

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Protection against incorrect connection using special S-coding

Commercial data

Item number	1411648
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF05
Product key	AF1CBB
GTIN	4046356936743
Weight per piece (including packing)	110 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	PL

SAC-3P- 1,0-PVC/M12FRS PE - Power cable



1411648

<https://www.phoenixcontact.com/us/products/1411648>

Technical data

Product properties

Product type	Power cable
Application	Energy supply
Number of positions	3
No. of cable outlets	1
Shielded	no
Coding	S

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	V0
Material of grip body	PP
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	690 V AC
Nominal current I_N	16 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100
-----------------------------	-------

Connector

Connection 1

Type	free cable end
------	----------------

Connection 2

Type	Socket angled M12
Coding type	S (Power)

Cable/line

Cable length	1 m
--------------	-----

PVC black [PVC]

SAC-3P- 1,0-PVC/M12FRS PE - Power cable



1411648

<https://www.phoenixcontact.com/us/products/1411648>

Dimensional drawing	
Cable weight	80 kg/km
UL AWM Style	2517 (105 °C / 300 V)
Number of positions	3
Shielded	no
Cable type	PVC black [PVC]
Conductor structure, voltage supply	30x 0.25 mm
AWG power supply	16
Conductor cross-section	3x 1.5 mm ²
Wire diameter incl. insulation	2.4 mm ±0.1 mm
External cable diameter	6.80 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	black
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	black 1, black 2, green/yellow
Overall twist	3 wires, twisted
Max. conductor resistance	≤ 13.3 Ω/km (at 20 °C)
Insulation resistance	≥ 10 MΩ*km (at 20 °C)
Nominal voltage, cable	300 V AC
Test voltage	2000 V AC
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	12 x D
Smallest bending radius, fixed installation	34 mm
Smallest bending radius, movable installation	82 mm
Flame resistance	according to IEC 60332-1 According to DIN EN 60332-1-2 According to VW-1 According to FT1
Ambient temperature (operation)	-40 °C ... 90 °C (cable, fixed installation) -5 °C ... 90 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65 IP67 (without preloading, as additional test in accordance with IEC 60529)
----------------------	--

SAC-3P- 1,0-PVC/M12FRS PE - Power cable



1411648

<https://www.phoenixcontact.com/us/products/1411648>

Ambient temperature (operation) (male connector/female connector)

-25 °C ... 85 °C (Plug / socket)

Standards and regulations

Standard designation

M12 connector

Standards/specifications

IEC 61076-2-111

SAC-3P- 1,0-PVC/M12FRS PE - Power cable

1411648

<https://www.phoenixcontact.com/us/products/1411648>



Drawings

Dimensional drawing



M12 x 1 socket, angled

SAC-3P- 1,0-PVC/M12FRS PE - Power cable

1411648

<https://www.phoenixcontact.com/us/products/1411648>

Schematic diagram



Pin assignment of M12 socket, 3-pos., S-coded, socket side view

Circuit diagram



Contact assignment of the M12 socket

SAC-3P- 1,0-PVC/M12FRS PE - Power cable



1411648

<https://www.phoenixcontact.com/us/products/1411648>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1411648>

 UL Listed Approval ID: FILE E 468743				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	300 V	12 A	- 16	- 16

 cUL Listed Approval ID: FILE E 468743				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	300 V	12 A	- 16	-

 EAC-RoHS Approval ID: RU D-DE.HB35.B.00387	
--	--

SAC-3P- 1,0-PVC/M12FRS PE - Power cable



1411648

<https://www.phoenixcontact.com/us/products/1411648>

Classifications

ECLASS

ECLASS-13.0	27060327
ECLASS-15.0	27060327

ETIM

ETIM 10.0	EC001855
-----------	----------

UNSPSC

UNSPSC 21.0	26121600
-------------	----------

SAC-3P- 1,0-PVC/M12FRS PE - Power cable



1411648

<https://www.phoenixcontact.com/us/products/1411648>

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%
-------------------------------------	----------------------------

EF3.1 Climate Change

CO2e kg	1.118 kg CO2e
---------	---------------

Phoenix Contact 2026 © - 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