

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Changeover switch, without 0 position, with electrically isolated contacts, connection method: Screw connection, number of positions: 1, function: 1 - 2 symmetrical, switching zones: 1, switching program number: S0720, rated continuous current: 20 A, voltage: 690 V

#### Your advantages

- The compact rotary switch is designed for use in energy technology applications with the available switching programs
- The use of high-quality materials results in a long mechanical and electrical service life
- Comprehensive approvals ensure international use
- High level of safety thanks to non-conductive plastic parts
- The terminal points are designed in such a way that shock protection according to BGV A2 is ensured

# RoHS

### Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 785181
GTIN	4046356785181
Weight per Piece (excluding packing)	80.000 g
Custom tariff number	85365080
Country of origin	Austria

## Technical data

#### General

Number of connections	4
Color	silver/black
Rotary switch function	1 - 2 symmetrical
Switching program number	S0720



# Technical data

#### General

Switching angle	60 °
Rated continuous current	20 A
Maximum load current	20 A
Rated surge voltage	6 kV
Rated insulation voltage	690 V (Valid for networks with grounded neutral point, overvoltage category III, degree of pollution 3)
Rated operating current according to AC-15 (switching of solenoid drives, contactors, valves, pulling electromagnets)	5 A (220 - 240 V)
	4 A (380 - 440 V)
Rated operating current according to AC-21A (switching of ohmic loads including small overloads)	20 A
Rated operating current according to AC-22A (switching of mixed ohmic and inductive loads, including small overloads)	20 A (220 - 500 V)
	20 A (660 - 690 V)
Switching power according to AC-3 (squirrel-cage motors: direct starting, switching off motors during operation, star-delta startup (CH16B))	3 kW (220 - 240 V; 3-phase, 3-pos.)
	5.5 kW (380 - 440 V; 3-phase, 3-pos.)
	5.5 kW (500 V; 3-phase, 3-pos.)
	5.5 kW (660 - 690 V; 3-phase, 3-pos.)
	0.6 kW (110 - 120 V; 1-phase, 2-pos.)
	2.2 kW (220 - 240 V; 1-phase, 2-pos.)
	3 kW (380 - 440 V; 1-phase, 2-pos.)
Switching power according to AC-4 (squirrel-cage motors: starting, reversing, plugging, inching)	0.55 kW (220 - 240 V; 3-phase, 3-pos.)
	1.5 kW (380 - 440 V; 3-phase, 3-pos.)
	1.5 kW (500 V; 3-phase, 3-pos.)
	1.5 kW (660 - 690 V; 3-phase, 3-pos.)
	0.3 kW (110 - 120 V; 1-phase, 2-pos.)
	0.75 kW (220 - 240 V; 1-phase, 2-pos.)
	1.5 kW (380 - 440 V; 1-phase, 2-pos.)
Switching power according to AC-23A (frequent switching of motors or other highly inductive loads)	3.7 kW (220 - 240 V; 3-phase, 3-pos.)
	7.5 kW (380 - 440 V; 3-phase, 3-pos.)
	7.5 kW (500 V; 3-phase, 3-pos.)
	7.5 kW (660 - 690 V; 3-phase, 3-pos.)
	0.75 kW (110 - 120 V; 1-phase, 2-pos.)
	2.5 kW (220 - 240 V; 1-phase, 2-pos.)
	3.7 kW (380 - 440 V; 1-phase, 2-pos.)
Breaking capacity	150 A (220 - 240 V)



# Technical data

### General

	150 A (380 - 440 V)	
	80 A (660 - 690 V)	
Maximum power dissipation for nominal condition 0.9 W		
Ambient temperature (operation)	-35 °C 55 °C (Open, at 100% load, with peaks up to 60°C)	
Short-circuit resistance $I_{P}$ with max. backup fuse	25 A (gL/gG characteristics)	
Rated short-time current resistance	140 A (1 s current)	

#### Dimensions

Width	48 mm
Length	62.5 mm
Height	48 mm
Hole diameter	7 mm
Height	29 mm
Installation depth	33.5 mm

### Ambient conditions

Ambient temperature (operation)	-35 °C 55 °C (Open, at 100% load, with peaks up to 60°C)
· ····································	

#### Connection data

Conductor cross section solid min.	0.5 mm²	
Conductor cross section solid max.	2.5 mm <sup>2</sup>	
Conductor cross section AWG min.	20	
Conductor cross section AWG max.	14	
Conductor cross section flexible min.	0.75 mm <sup>2</sup>	
Conductor cross section flexible max.	2.5 mm <sup>2</sup>	
Min. AWG conductor cross section, flexible	18	
Max. AWG conductor cross section, flexible	14	
Conductor cross section / stranded with ferrule without plastic sleeve min.	2.5 mm <sup>2</sup>	
Conductor cross section / stranded with ferrule without plastic sleeve max.	. 2.5 mm <sup>2</sup>	
Conductor cross section / stranded with ferrule with plastic sleeve min.	1.5 mm <sup>2</sup>	
Conductor cross section / stranded, with ferrule with plastic sleeve max.	1.5 mm <sup>2</sup>	
2 conductors with same cross section, solid min.	0.5 mm <sup>2</sup>	
2 conductors with same cross section, solid max.	2.5 mm <sup>2</sup>	
Two conductors with the same cross section, AWG solid min.	20	
Two conductors with the same cross section, AWG solid max.	14	
2 conductors with same cross section, stranded min.	0.75 mm²	
2 conductors with same cross section, stranded max.	2.5 mm <sup>2</sup>	
Two conductors with the same cross section, AWG stranded, min.	18	
Two conductors with the same cross section, AWG stranded, max.	14	

01/24/2019 Page 3 / 7

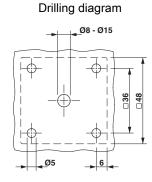


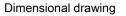
# Technical data

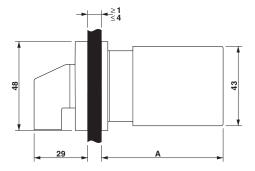
### Connection data

2 conductors with the same cross section/stranded, with ferrule and without plastic sleeve, minimum	2.5 mm <sup>2</sup>		
2 conductors with the same cross section/stranded, with ferrule and without plastic sleeve, maximum	2.5 mm <sup>2</sup>		
2 conductors with the same cross section/stranded, with ferrule and plastic sleeve, minimum	1.5 mm²		
2 conductors with the same cross section/stranded, with ferrule and plastic sleeve, maximum	1.5 mm²		
Standards and Regulations			
Flammability rating according to UL 94	V0		
Environmental Product Compliance			
China RoHS	Environmentally friendly use period: unlimited = EFUP-e		
	No hazardous substances above threshold values		

## Drawings

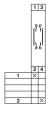






Circuit diagram





01/24/2019 Page 4 / 7



# Classifications

### eCl@ss

eCl@ss 4.0	27141111
eCl@ss 4.1	27141111
eCl@ss 5.0	27141133
eCl@ss 5.1	27144000
eCl@ss 6.0	27144000
eCl@ss 7.0	27144016
eCl@ss 9.0	27269290

#### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002498
ETIM 5.0	EC002611

## UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39122207

# Approvals

#### Approvals

#### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

#### Ex Approvals

## Approval details

UL Listed	U) LISTED	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 357353
Nominal voltage UN			300 V	
Nominal current IN			20 A	

01/24/2019 Page 5 / 7



## Approvals

mm²/AWG/kcmil	20-12

	cUL Listed	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 357353
Nomina	l voltage UN		300 V	
Nomina	I current IN		20 A	
mm²/AV	VG/kcmil		20-12	

EAC

EHC

EAC-Zulassung



### Accessories

Accessories

Device marking

Label - EML-RS (45,7X45,7)R SR - 0803187



Label, roll, silver/glossy, unmarked, can be marked with: THERMOMARK ROLL, THERMOMARK X, THERMOMARK S1.1, mounting type: adhered/inserted

Label - EML-RS (45,7X45,7)R - 0803387



Label, roll, white, unmarked, can be marked with: THERMOMARK ROLL, THERMOMARK X, THERMOMARK S1.1, mounting type: adhered/inserted



Phoenix Contact 2019  $\ensuremath{\mathbb{C}}$  - all rights reserved http://www.phoenixcontact.com