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Changeover switch, without 0 position, connection method: Screw connection, number of positions: 2, function: 1 - 2, switching zones: 2, switching program number: S0221, 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
- The rotary switch is free from cadmium and compliant with the RoHS directive

# RoHS

### Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 785204
GTIN	4046356785204
Weight per Piece (excluding packing)	100.000 g
Custom tariff number	85365080
Country of origin	Austria

## Technical data

#### General

Number of connections	8
Color	silver/black
Rotary switch function	1 - 2
Switching program number	S0221



## 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 1.8 W		
Ambient temperature (operation)	-35 °C 55 °C (Open, at 100% load, with peaks up to 60°C)	
Short-circuit resistance I <sub>P</sub> with max. backup fuse	25 A (gL/gG characteristics)	
Rated short-time current resistance	140 A (1 s current)	

#### Dimensions

Width	48 mm
Length	72 mm
Height	48 mm
Hole diameter	7 mm
Height	29 mm
Installation depth	43 mm

### Ambient conditions

Amb	bient temperature (operation)	-35 °C 55	5 °C (Open	n, at 100% load, with peaks up to 60°C)	
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#### Connection data

Conductor cross section solid min.	0.5 mm <sup>2</sup>
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 mm²
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 mm <sup>2</sup>
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

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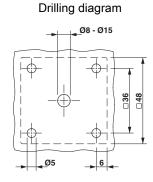


# Technical data

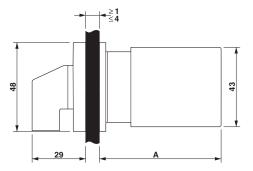
### Connection data

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 mm <sup>2</sup>	
2 conductors with the same cross section/stranded, with ferrule and plastic sleeve, maximum	1.5 mm <sup>2</sup>	
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

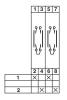


#### Dimensional drawing



Circuit diagram







## 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	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	

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## 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	l current IN		20 A	
mm²/AV	VG/kcmil		20-12	

EAC

EHC

EAC-Zulassung

cULus Listed	
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### 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



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