

## Step switch - RS20-US-S0240-0103-014H-001 - 3069717

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Step switch, with 0 position, Connection method: Screw connection, Number of positions: 1, Function: Three steps, Switching zones: 2, Switching program number: S0240, Rated continuous current: 20 A, Voltage: 690 V

### Why buy this product

- ✓ 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 STK
GTIN	 4 046356 785280
GTIN	4046356785280
Weight per Piece (excluding packing)	80.000 g
Custom tariff number	85365080
Country of origin	Ireland

### Technical data

#### General

Number of connections	8
Color	silver/black
Rotary switch function	Three steps
Switching program number	S0240

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## Technical data

### General

Switching angle	45 °
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)

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## Technical data

### General

	150 A (380 - 440 V)
	80 A (660 - 690 V)
Ambient temperature (operation)	-35 °C ... 55 °C (Open, at 100% load, with peaks up to 60°C)
IP immunity to short-circuiting with maximum 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

Ambient temperature (operation)	-35 °C ... 55 °C (Open, 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 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 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 mm²
2 conductors with the same cross section/stranded, with ferrule and without plastic sleeve, maximum	2.5 mm²
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

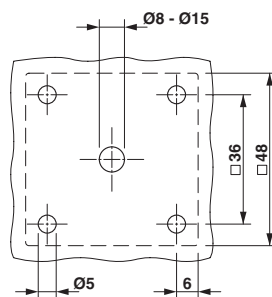
Flammability rating according to UL 94	V0
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### Environmental Product Compliance

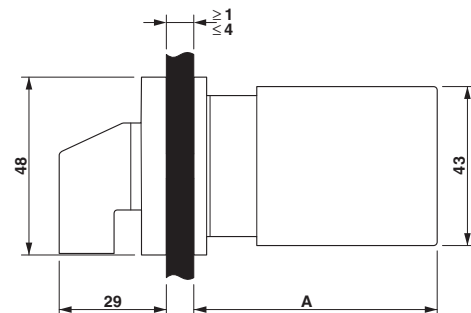
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

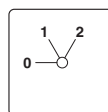
Drilling diagram



Dimensional drawing



Circuit diagram



S0240



1	3
2	4
0	
1	X
2	X

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### Classifications

#### eCl@ss

eCl@ss 4.0	27141111
eCl@ss 4.1	27141111
eCl@ss 5.0	27141133
eCl@ss 5.1	27141133
eCl@ss 6.0	27141133
eCl@ss 7.0	27141133
eCl@ss 8.0	27144016
eCl@ss 9.0	27144016

#### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002498
ETIM 5.0	EC002611
ETIM 6.0	EC002611

#### UNSPSC

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

### Approvals

#### Approvals

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##### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

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##### Ex Approvals


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#### Approval details

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### Approvals

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 357353
mm²/AWG/kcmil		20-12	
Nominal current IN		20 A	
Nominal voltage UN		300 V	

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 357353
mm²/AWG/kcmil		20-12	
Nominal current IN		20 A	
Nominal voltage UN		300 V	

EAC		EAC-Zulassung
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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

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### Accessories

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