

## Step switch - RS20-US-S0250-0303-014H-001 - 3069718

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Step switch, without 0 position, Connection method: Screw connection, Number of positions: 2, Function: Three steps, Switching zones: 3, Switching program number: S0250, 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

### Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 785259
GTIN	4046356785259

### Technical data

#### General

Number of connections	12
Color	silver/black
Rotary switch function	Three steps
Switching program number	S0250
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)

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## Technical data

### General

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)
	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)
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	81.5 mm

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### Dimensions

Height	48 mm
Hole diameter	7 mm
Height	29 mm
Installation depth	52.5 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
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
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### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
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# Step switch - RS20-US-S0250-0303-014H-001 - 3069718

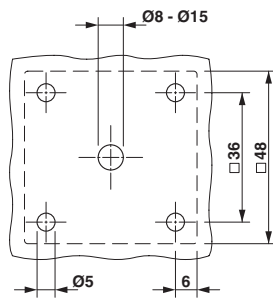
## Technical data

### Environmental Product Compliance

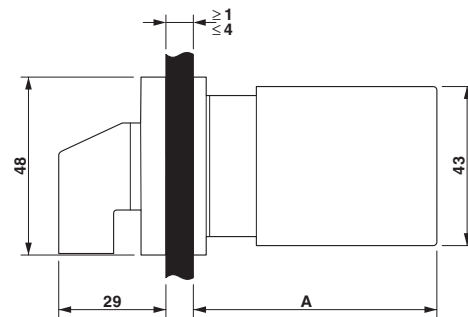
	No hazardous substances above threshold values
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## Drawings

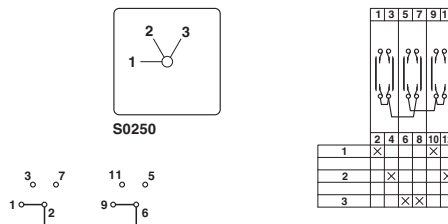
Drilling diagram



Dimensional drawing



Circuit diagram



## Approvals

### Approvals

### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

### Ex Approvals


## Approval details

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
mm <sup>2</sup> /AWG/kcmil		20-12	

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## Approvals

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
mm <sup>2</sup> /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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