

## Changeover switch - RS20-US-S0220-0102-014H-001 - 3069714

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Changeover switch, without 0 position, Connection method: Screw connection, Number of positions: 1, Function: 1 - 2, Switching zones: 1, Switching program number: S0220, 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 pc                                                                                                    |
| GTIN                                 | <br>4 046356 785266 |
| Weight per Piece (excluding packing) | 86.59 g                                                                                                 |
| Custom tariff number                 | 85365080                                                                                                |
| Country of origin                    | Ireland                                                                                                 |

### Technical data

#### General

|                          |              |
|--------------------------|--------------|
| Number of connections    | 4            |
| Color                    | silver/black |
| Rotary switch function   | 1 - 2        |
| Switching program number | S0220        |
| Switching angle          | 60 °         |
| Rated continuous current | 20 A         |
| Maximum load current     | 20 A         |
| Rated surge voltage      | 6 kV         |
| Rated insulation voltage | 690 V        |

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## Technical data

### General

|                                                                                                                                              |                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Additional text                                                                                                                              | Valid for networks with grounded neutral point, surge voltage category III, pollution degree 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)                                                                            |
|                                                                                                                                              | 150 A (380 - 440 V)                                                                            |
|                                                                                                                                              | 80 A (660 - 690 V)                                                                             |
| IP immunity to short-circuiting with maximum backup fuse                                                                                     | 25 A                                                                                           |
| Additional text                                                                                                                              | gL/gG characteristics                                                                          |
| Rated short-time current resistance                                                                                                          | 140 A                                                                                          |
| Additional text                                                                                                                              | 1 s current                                                                                    |

### Dimensions

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## Technical data

### Dimensions

|                    |          |
|--------------------|----------|
| Width              | 48 mm    |
| Length             | 62.5 mm  |
| Height             | 48 mm    |
| Hole diameter      | 7 mm     |
| Height             | 29.00 mm |
| Installation depth | 33.50 mm |

### Ambient conditions

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

### 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/kcmil min.                                                              | 20                   |
| Conductor cross section AWG/kcmil max.                                                              | 14                   |
| Conductor cross section stranded min.                                                               | 0.75 mm <sup>2</sup> |
| Conductor cross section stranded max.                                                               | 2.5 mm <sup>2</sup>  |
| Min. AWG conductor cross section, stranded                                                          | 18                   |
| Max. AWG conductor cross section, stranded                                                          | 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>  |

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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 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | EC002498 |
| ETIM 5.0 | EC002498 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211811 |
| UNSPSC 7.0901 | 39121410 |
| UNSPSC 11     | 39121410 |
| UNSPSC 12.01  | 39121410 |
| UNSPSC 13.2   | 39121410 |

### Approvals

#### Approvals

#### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

#### Ex Approvals

#### Approvals submitted

#### Approval details

|                                                                                               |       |
|-----------------------------------------------------------------------------------------------|-------|
| UL Listed  |       |
| mm²/AWG/kcmil                                                                                 | 20-12 |
| Nominal current I <sub>N</sub>                                                                | 20 A  |
| Nominal voltage U <sub>N</sub>                                                                | 300 V |

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## Approvals

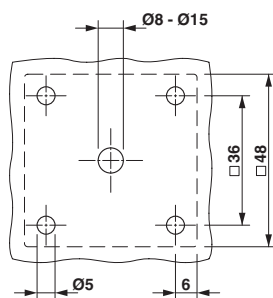
|                                                                                              |       |
|----------------------------------------------------------------------------------------------|-------|
| cUL Listed  |       |
| mm²/AWG/kcmil                                                                                | 20-12 |
| Nominal current I <sub>N</sub>                                                               | 20 A  |
| Nominal voltage U <sub>N</sub>                                                               | 300 V |

|     |
|-----|
| EAC |
|-----|

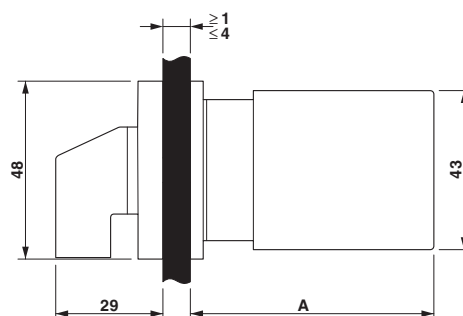
|                                                                                                |
|------------------------------------------------------------------------------------------------|
| cULus Listed  |
|------------------------------------------------------------------------------------------------|

## Drawings

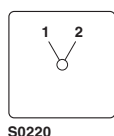
Drilling diagram



Dimensioned drawing



Circuit diagram



S0220

