

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

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, 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

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 785266 |
| GTIN | 4046356785266 |
| 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 |
| Switching program number | S0220 |

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

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) |

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

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 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section AWG min. | 20 |
| Conductor cross section AWG max. | 14 |
| Conductor cross section flexible min. | 0.75 mm ² |
| Conductor cross section flexible max. | 2.5 mm ² |
| 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 ² |
| Conductor cross section / stranded with ferrule without plastic sleeve max. | 2.5 mm ² |
| Conductor cross section / stranded with ferrule with plastic sleeve min. | 1.5 mm ² |
| Conductor cross section / stranded, with ferrule with plastic sleeve max. | 1.5 mm ² |
| 2 conductors with same cross section, solid min. | 0.5 mm ² |
| 2 conductors with same cross section, solid max. | 2.5 mm ² |
| 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 ² |
| 2 conductors with same cross section, stranded max. | 2.5 mm ² |
| Two conductors with the same cross section, AWG stranded, min. | 18 |
| Two conductors with the same cross section, AWG stranded, max. | 14 |

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

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

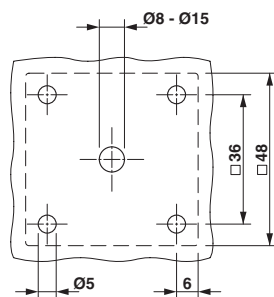
| | |
|----------------------------------------|----|
| Flammability rating according to UL 94 | V0 |
|----------------------------------------|----|

Environmental Product Compliance

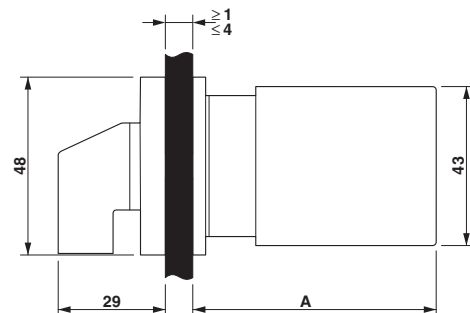
| | |
|------------|---------------------------------------------------------|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

Drawings

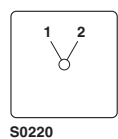
Drilling diagram



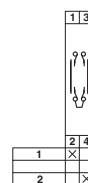
Dimensional drawing



Circuit diagram



S0220



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

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 |  | 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 | | |


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

Approvals

| | |
|---------------|-------|
| | |
| mm²/AWG/kcmil | 20-12 |

| | | | |
|--------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| cUL 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 | |
| mm²/AWG/kcmil | | 20-12 | |

| | | |
|-----|-----------------------------------------------------------------------------------|---------------|
| EAC |  | EAC-Zulassung |
|-----|-----------------------------------------------------------------------------------|---------------|

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

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

