SIEMENS

Product data sheet

3RT1046-1AH24



CONTACTOR, AC-3 45 KW/400 V, AC 48 V, 50 HZ, 2 NO + 2 NC 3-POLE, SIZE S3, SCREW CONNECTION

| General technical data: | | | | |
|---|---|------------|--|--|
| product brand name | | SIRIUS | | |
| Size of the contactor | | \$3 | | |
| Protection class IP / on the front | | IP20 | | |
| Degree of pollution | | 3 | | |
| Installation altitude / at a height over sea level / maximum | m | 2,000 | | |
| Ambient temperature / during operating | °C | -25 +60 | | |
| Mechanical operating cycles as operating time | | | | |
| of the contactor / typical | | 10,000,000 | | |
| of the contactor with added auxiliary switch block / typical | | 10,000,000 | | |
| of the contactor with added electronics-compatible auxiliary switch block / typical | | 5,000,000 | | |
| Main circuit: | | | | |
| Number of NC contacts / for main contacts | Number of NC contacts / for main contacts 0 | | | |
| Number of NO contacts / for main contacts | | 3 | | |
| Operating current | | | | |
| • at AC-1 / at 400 V | | | | |
| • at 40 °C ambient temperature / rated value | А | 120 | | |
| • at AC-3 / at 400 V / rated value | А | 95 | | |
| • at AC-4 / at 400 V / rated value | А | 80 | | |

| with 1 current path / at DC-1 at 24 V / rated value at 110 V / rated value | A A | 100 9 |
|--|--------|----------|
| | | |
| • at 110 V / rated value | А | 0 |
| | | 3 |
| • with 2 current paths in series / at DC-1 | | |
| • at 24 V / rated value | А | 100 |
| • at 110 V / rated value | А | 100 |
| • with 3 current paths in series / at DC-1 | | |
| • at 24 V / rated value | А | 100 |
| • at 110 V / rated value | А | 100 |
| • with 1 current path / at DC-3 / at DC-5 | | |
| • at 24 V / rated value | А | 40 |
| • at 110 V / rated value | А | 2.5 |
| • with 2 current paths in series / at DC-3 / at DC-5 | | |
| • at 24 V / rated value | А | 100 |
| • at 110 V / rated value | А | 100 |
| • with 3 current paths in series / at DC-3 / at DC-5 | | |
| • at 24 V / rated value | А | 100 |
| • at 110 V / rated value | А | 100 |
| Service power | | |
| • at AC-2 / at 400 V / rated value | kW | 45 |
| • at AC-3 / at 400 V / rated value | kW | 45 |
| • at AC-4 / at 400 V / rated value | W | 45,000 |
| Control circuit: | | |

| Voltage type / of control feed voltage | | AC |
|--|-----|---|
| Operating range factor control supply voltage rated value / of the magnet coil | | |
| • at 50 Hz | | |
| • for AC | | 0.8 1.1 |
| • at 60 Hz | | |
| • for AC | | 0.8 1.1 |
| Apparent pull-in power / of the solenoid / for AC | V·A | 298 |
| Apparent holding power / of the solenoid / for AC | V·A | 27 |
| Inductive power factor / with the pull-in power of the coil | | 0.7 |
| Inductive power factor / with the pull-in power of the coil | | 0.29 |
| Auxiliary circuit: | | |
| Contact reliability / of the auxiliary contacts | | 1 faulty switching per 100 million (17 V, 1 mA) |

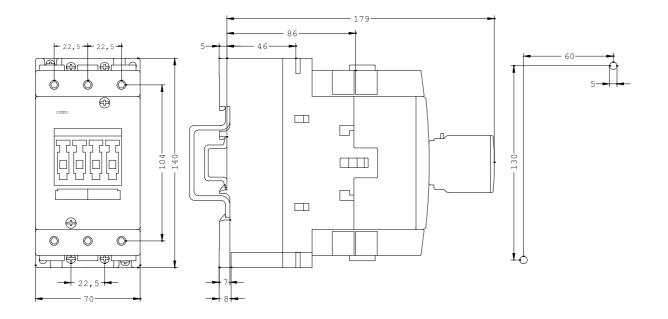
| Contact reliability / of the auxiliary contacts | 1 faulty switching per 100 million (17 V, 1 mA) |
|--|---|
| Number of NC contacts / for auxiliary contacts / instantaneous switching | 2 |
| Number of NO contacts / for auxiliary contacts / instantaneous switching | 2 |

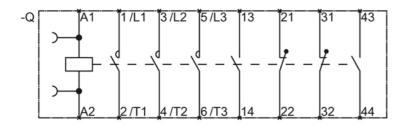
| Short-circuit: | | |
|---|----|--|
| Design of the fuse link | | |
| for short-circuit protection of the auxiliary switch / required | | fuse gL/gG: 10 A |
| for short-circuit protection of the main circuit | | |
| with type of assignment 1 / required | | fuse gL/gG: 250 A |
| at type of coordination 2 / required | | fuse gL/gG: 160 A |
| Installation/mounting/dimensions: | | |
| Mounting type | | screw and snap-on mounting onto 35 mm and 75 mm standard mounting rail |
| series installation | | Yes |
| Width | mm | 70 |
| Height | mm | 146 |
| Depth | mm | 188 |
| Distance, to be maintained, to earthed part / sidewards | mm | 6 |
| Connection type: | | |
| Design of the electrical connection | | |
| for main current circuit | | screw-type terminals |
| for auxiliary and control current circuit | | screw-type terminals |
| Type of the connectable conductor cross-section | | |
| • for main contacts | | |
| • solid | | 2x (2.5 16 mm²) |
| • stranded | | 2x (10 50 mm²) |
| finely stranded | | |
| with conductor end processing | | 2x (2.5 35 mm²) |
| without conductor final cutting | | 2x (10 35 mm²) |
| for AWG conductors / for main contacts | | 2x (10 1/0) |
| for auxiliary contacts | | |
| • solid | | 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²), max. 2x (0.75 4 mm ²) |
| finely stranded | | |
| with conductor end processing | | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) |
| for AWG conductors / for auxiliary contacts | | 2x (20 16), 2x (18 14), 1x 12 |

Certificates/approvals:

| General Product Ap | pproval | | | Functional Safety / Safety of Machinery | Declaration of Conformity |
|--|--------------------|---|----------------------------|---|------------------------------|
| | (SA) CSA | EHC | | Type Examination | EG-Konf. |
| Test Certificates | Shipping Appro | val | | | |
| Special Test Certificate | ABS | GL | Lloyd's Register Lrs | RINA | RMRS |
| other | | | | | |
| Confirmation | other | Environmental Confirmations | | | |
| Further informatio | n: | | | | |
| Information- and Dov http://www.siemens.co | | | | | |
| Industry Mall (Online http://www.siemens.co | | | | | |
| Cax online generator http://www.siemens.co | | | | | |
| | | s, Characteristics, FAQs, W/view/en/3RT1046-1AH2 | • | | |
| Image database (pro | duct images, 2D di | imension drawings, 3D m | odels, device circu | iit diagrams,) | |

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1046-1AH24





last change:

Jul 28, 2014