

Product data sheet 3RU2116-0FB0

THERM. OVERLOAD RELAY 0.35 - 0.50 A

| General technical data: | | | |
|--|-----|------------|--|
| Product brand name | | SIRIUS | |
| Protection class IP / frontal/front side | | IP20 | |
| Insulation voltage / with degree of pollution 3 | | | |
| • rated value | V | 690 | |
| Altitude of installation site / at a height over sea level / maximum | m | 2,000 | |
| Ambient temperature | | | |
| during transport | °C | -55 80 | |
| during storage | °C | -55 80 | |
| during the operating phase | °C | -40 70 | |
| Relative humidity | | | |
| during the operating phase | / % | 90 | |
| Resistance against shock | | 8g / 10 ms | |
| Impulse voltage resistance / rated value | kV | 6 | |
| Real loss power / total / typical | W | 3.9 | |
| Item designation | | | |
| according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 | | F | |
| according to DIN EN 61346-2 | | F | |
| Trip class | | CLASS 10 | |
| Type of assignement | | 2 | |
| Size of overload relay | | S00 | |
| Size of the contactor / can be combined | | | |
| • company-specific | | S00 | |

| Main circuit: | | |
|--|----|------|
| Number of poles / for main current circuit | | 3 |
| Operating voltage / at 3 AC / rated value | | |
| • maximum | V | 690 |
| Operating current / at AC-3 / at 400 V | | |
| rated value | Α | 0.5 |
| Service power / at AC-3 | | |
| • at 400 V / rated value | kW | 0.12 |

| • at 500 V / rated value | kW | 0.18 |
|--|----|----------|
| • at 690 V / rated value | W | 250 |
| Adjustable response current | | |
| of the current-dependent overload release | Α | 0.35 0.5 |
| Operating current / of the fuse link / rated value | А | 2 |

| Auxiliary circuit: | | | |
|--|---|--|--|
| Contact reliability / of the auxiliary contacts | | < 1 error per 100 million operating cycles | |
| Number of NC contacts / for auxiliary contact | | 1 | |
| Number of NO contacts / for auxiliary contact | | 1 | |
| Number of change-over switches / for auxiliary contact | | 0 | |
| Operating current / of the auxiliary contacts | | | |
| • at AC-15 | | | |
| • at 24 V | Α | 3 | |
| • at 110 V | Α | 3 | |
| • at 120 V | Α | 3 | |
| • at 125 V | Α | 3 | |
| • at 230 V | Α | 2 | |
| • at 400 V | Α | 1 | |
| • at DC-13 | | | |
| • at 24 V | Α | 1 | |
| • at 110 V | Α | 0.22 | |
| • at 125 V | Α | 0.22 | |
| • at 220 V | Α | 0.11 | |

| Short-circuit: | |
|---|---------------|
| Design of the fuse link / for short-circuit protection of the auxiliary switch / required | fuse gG: 10 A |

| Installation/mounting/dimensions: | | |
|---|----|-----------------|
| built in orientation | | vertical |
| Type of fixing/fixation | | direct mounting |
| Width | mm | 45 |
| Height | mm | 87 |
| Depth | mm | 73 |
| distance, to be maintained, to the ranks assembly | | |
| • forwards | mm | 0 |
| • backwards | mm | 0 |
| • upwards | mm | 6 |
| • downwards | mm | 6 |
| • sidewards | mm | 6 |



| distance, to be maintained, to earthed part | | |
|---|----|---|
| • forwards | mm | 0 |
| • backwards | mm | 0 |
| • upwards | mm | 6 |
| • downwards | mm | 6 |
| • sidewards | mm | 6 |
| distance, to be maintained, conductive elements | | |
| • forwards | mm | 0 |
| • backwards | mm | 0 |
| • upwards | mm | 6 |
| • downwards | mm | 6 |
| • sidewards | mm | 6 |
| | | |

| Connections: | | | |
|---|--|--|--|
| design of the electrical connection | | | |
| for main current circuit | screw-type terminals | | |
| for auxiliary and control current circuit | screw-type terminals | | |
| Product function / removable terminal for auxiliary and control circuit | No | | |
| Type of the connectable conductor cross-section | | | |
| • for main contacts | | | |
| • unifilar | 2 x (0.5 1.5 mm2), 2 x (0.75 2.5 mm2), 2 x (0.5 4 mm2) | | |
| • stranded wire | 2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2), 2x 0.5 mm2 2x 4 mm2 | | |
| • stranded wire | | | |
| with conductor end processing | 2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2) | | |
| • at AWG-conductors / for main contacts | 2x (20 16), 2x (18 14) | | |
| for auxiliary contacts | | | |
| • solid | 2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2) | | |
| • finely stranded | | | |
| with wire 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) | | |

| Certificates/approvals: | |
|-----------------------------|-----------|
| verification of suitability | CE/UL/CSA |
| • ATEX | No |

| Safety: | | |
|---|---|-------|
| Mean time to failure (MTTF) / with high demand rate | | |
| according to SN 31920 | а | 2,280 |
| Proportion of dangerous failures | | |



| • with low demand rate / according to SN 31920 | % | 50 |
|--|-----|-------------|
| • with high demand rate / according to SN 31920 | % | 50 |
| Failure rate (FIT value) / with low demand rate | | |
| according to SN 31920 | FIT | 50 |
| T1 value / for proof test interval or service life | | |
| according to IEC 61508 | а | 20 |
| Protection against electrical shock | | finger-safe |

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Global Industry Mall (Online ordering system)

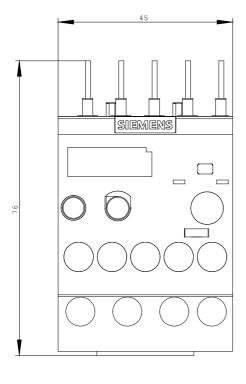
http://www.siemens.com/industrial-controls/mall

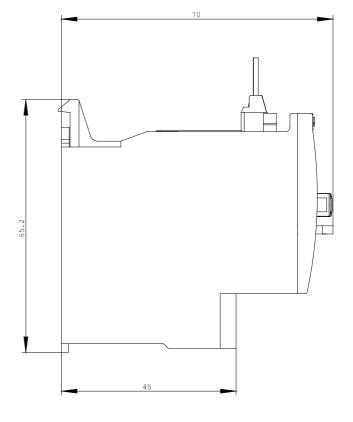
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

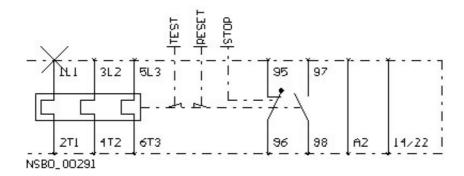
http://support.automation.siemens.com/WW/view/en/3RU2116-0FB0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-0FB0







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