SIEMENS

Product data sheet

THERM. OVERLOAD RELAY 0.11 - 0.16 A

| Product brand name SIRIUS Protection class IP / frontal/front side IP20 Insulation voltage / with degree of pollution 3 IP20 • rated value V 690 Attitude of installation site / at a height over sea level / N 2000 Ambient temperature IP20 690 • during transport °CC -55 80 • during transport °CC -55 80 • during the operating phase °CC -65 80 • during the operating phase °CC 80 / 10 ms Impulse voltage resistance / rated value KV 6 Real loss power / total / typical W 3.9 tem designation F - • according to DIN KIN 61346-2 F - Trip class CLASS 10 - Size of overload relay So0 - size of the contactor / can be combined - So0 • company-specific So0 - • maximum Q 690 Operating outage / at 3 AC / rated value - -< | General technical data: | | |
|---|---|-----|------------|
| Insulation voltage / with degree of pollution 3 V 690 Attitude of installation site / at a height over sea level / maximum max 2,000 Ambient temperature mc 5580 • during transport °C 5580 • during transport °C 4070 • during the operating phase °C 4070 Relative humidity 4070 80 • during the operating phase % 90 • during the operating phase % 90 resistance against shock 80 / 10 ms Impulse voltage resistance / rated value KV 6 Real loss power / total / typical W 3.9 tem designation F 5 • according to DIN 40719 extendable after IEC 204-2 / according to DIN EN 61346-2 F Trip class CLASS 10 2 Size of the contactor / can be combined 500 500 • company-specific 500 500 500 Value Sooo 500 500 Size of the contactor / can be combined <td< td=""><td>Product brand name</td><td></td><td>SIRIUS</td></td<> | Product brand name | | SIRIUS |
| • rated valueV990Attitude of installation site / at height over sea level / maximumIm2,000Ambient temperatureIm2,000• during transportIm55 80• during storageIm36 80• during the operating phaseIm400• during the operating phaseIm80 /00• during the operating phaseIm90 /00• during the operating phaseIm80 /00 /00• during the operating phaseIm90 /00 /00• during the operating phaseIm90 /00 /00• according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 400 /00Im• company-specificImImI | Protection class IP / frontal/front side | | IP20 |
| Altitude of installation site / at a height over sea level / maximum m 2,000 Ambient temperature • during transport °C 65 80 • during storage °C 40 70 • during the operating phase °C 40 70 Relative humidity 40 70 • during the operating phase °C 8g / 10 ms • during the operating phase /% 90 • during the operating phase /% 8g / 10 ms • during the operating phase /% 8g / 10 ms • during the operating phase /% 8g / 10 ms • during the operating phase /% 8g / 10 ms • during the operating phase /% 8g / 10 ms • during the operating phase /% 8g / 10 ms • during the operating phase /% 8g / 10 ms • during the operating phase /% 8g / 10 ms • indesignation /% 6 9 • according to DIN 40719 extendable after IEC 204-2 / according to INE N 61346-2 F 7 • tip class F 500 500 Size of overload relay So0 500 500 Size of overload relay So0 500 500 <t< td=""><td>Insulation voltage / with degree of pollution 3</td><td>-</td><td></td></t<> | Insulation voltage / with degree of pollution 3 | - | |
| maximumImage: set of the set o | rated value | V | 690 |
| • during transport"C-55 80• during the operating phase"C-55 80• during the operating phase"C-40 70Relative humidity"C90• during the operating phase1/%90Resistance against shock8/10 msImpulse voltage resistance / rated valueKV6Real loss power / total / typicalW3.9• according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719• according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719F• according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719S• according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719S• according to the contactor / can be combined extendableS• company-specificS• acording voltage / at 3 AC / rated valueA <td>-</td> <td>m</td> <td>2,000</td> | - | m | 2,000 |
| Auring storageCSA C• during storage°C-55 80• during the operating phase°C-70Relative humidity°C90• during the operating phase/%90Resistance against shock8g / 10 msImpulse voltage resistance / rated valuekV6Real loss power / total / typicalW3.9• according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN EN 61346-2FTrip classCLASS 10FTrip classS00S00Size of overload relayS00S00Size of overload relayS00S00Maine triccuitS00S00Maine triccuitS00S00Maine foldes / for main current circuit3Operating voltage / at 3 AC / rated valueS00• maximumV690Operating current / at AC-3 / at 400 VA• rated valueAStrice power / at AC-3AStrice power / at AC-3AOreal ing current / at AC-3 / at 400 VA• rated valueAStrice power / at AC-3AOut / at AC-3AOut / at AC-3AOut / at AC-3AAAOut / at AC-3AAAOut / at AC-3AAAAAAA | Ambient temperature | | |
| Adding the operating phase°C40 70Relative humidity• during the operating phase/%90Resistance against shock8g / 10 msImpulse voltage resistance / rated valuekV6Real loss power / total / typicalW3.9Item designationF• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750F• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750FTrip classCLASS 10Trip classS00Size of overload relayS00Size of overload relayS00Size of the contactor / can be combined • company-specificS00Main Circuit:3Number of poles / for main current circuitGOperating voltage / at 3 AC / rated valueV• maximumVOperating current / at AC-3 / at 400 V • rated valueAOperating current / at AC-3 (Ad00 V • rated valueAStroice power / at AC-3A | during transport | °C | -55 80 |
| Relative humidity //% 90 Relative humidity /% 90 Resistance against shock 8g/10 ms Impulse voltage resistance / rated value KV 6 Real loss power / total / typical W 3.9 Item designation V 6 • according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN EN 61346-2 F Trip class CLASS 10 F rota assignement 2 Stool size of overload relay S00 S00 Size of the contactor / can be combined S00 S00 v- company-specific S00 S00 Mumber of poles / for main current circuit 3 3 Operating voltage / at 3 AC / rated value V 690 • maximum V 690 Operating current / at AC-3 / at 400 V A 0.16 • rated value A 0.16 | during storage | °C | -55 80 |
| • during the operating phase/ %90Resistance against shock8g / 10 msImpulse voltage resistance / rated valuekV6Real loss power / total / typicalW3.9tem designation • according to DIN 40719 extendable after IEC 204-2 / according to IEC 750F• according to DIN EN 61346-2FTrip classCLASS 10Type of assignement2Size of overload relayS00size of the contactor / can be combined • company-specificS00Mumber of poles / for main current circuit3Operating voltage / at 3 AC / rated value • maximum3Operating current / at AC-3/ at 400 V • rated valueAAccording to power / at AC-3AStrip ce power / at AC-3AAccording come / at AC-3A< | during the operating phase | °C | -40 70 |
| Resistance against shock 8g / 10 ms Impulse voltage resistance / rated value kV 6 Real loss power / total / typical W 3.9 Item designation F F • according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to DIN EN 61346-2 F Trip class CLASS 10 Z Size of overload relay S00 S00 Size of the contactor / can be combined S00 S00 • company-specific S00 S00 Main circuit: S00 S00 Number of poles / for main current circuit 3 3 Operating voltage / at 3 AC / rated value V 690 • maximum V 690 690 Operating voltage / at AC-3 / at 400 V A 0.16 • rated value A 0.16 500 | Relative humidity | | |
| Impulse voltage resistance / rated valuekV6Real loss power / total / typicalW3.9Item designationW3.9• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750F• according to DIN EN 61346-2FTrip classCLASS 10Type of assignement2Size of overload relayS00Size of the contactor / can be combined • company-specificS00Main circuit:S00Number of poles / for main current circuit3Operating voltage / at 3 AC / rated value • maximumV690Operating current / at AC-3 / at 400 V • rated valueA0.16CLASS | during the operating phase | / % | 90 |
| Real loss power / total / typicalW3.9Item designationV3.9• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750F• according to DIN EN 61346-2FTrip classCLASS 10Type of assignement2Size of overload relayS00Size of the contactor / can be combined • company-specificS00Main circuit:S00Number of poles / for main current circuit3Operating voltage / at 3 AC / rated valueV• maximumVOperating current / at AC-3 / at 400 V • rated valueA0.16A | Resistance against shock | | 8g / 10 ms |
| tem designationImage: Construct of the construct | Impulse voltage resistance / rated value | kV | 6 |
| • according to DIN 40719 extendable after IEC 204-2 / according to IEC 750F• according to DIN EN 61346-2FTrip classCLASS 10Type of assignement2Size of overload relayS00Size of overload relayS00Size of the contactor / can be combined • company-specificS00Main circuit:Number of poles / for main current circuitS00Operating voltage / at 3 AC / rated value • maximumV690Operating current / at AC-3 / at 400 V • rated valueA0.16Service power / at AC-3II | Real loss power / total / typical | W | 3.9 |
| to IEC 750F• according to DIN EN 61346-2FTrip classCLASS 10Type of assignement2Size of overload relayS00Size of the contactor / can be combined • company-specificS00Main circuit:S00Mumber of poles / for main current circuit3Operating voltage / at 3 AC / rated value • maximumV690Operating current / at AC-3 / at 400 V • rated valueA0.16A | Item designation | | |
| Trip classCLASS 10Type of assignement2Size of overload relayS00Size of the contactor / can be combined • company-specificS00Main circuit:S00Main circuit:S00Number of poles / for main current circuitS0Operating voltage / at 3 AC / rated value • maximumVOperating current / at AC-3 / at 400 V • rated valueAOperating voltage / at AC-3AService power / at AC-3A | | | F |
| Type of assignement2Size of overload relayS00Size of the contactor / can be combined • company-specificS00Main circuit:S00Main circuit:S00Number of poles / for main current circuit3Operating voltage / at 3 AC / rated value • maximumV690Operating current / at AC-3 / at 400 V • rated valueA0.16Service power / at AC-3II | according to DIN EN 61346-2 | | F |
| Size of overload relay S00 Size of the contactor / can be combined S00 • company-specific S00 Main circuit: S00 Number of poles / for main current circuit 3 Operating voltage / at 3 AC / rated value V • maximum V Operating current / at AC-3 / at 400 V A • rated value A Service power / at AC-3 I | Trip class | | CLASS 10 |
| Size of the contactor / can be combined Image: Company-specific S00 Main circuit: S00 Number of poles / for main current circuit 3 Operating voltage / at 3 AC / rated value Image: Company - specific • maximum V 690 Operating current / at AC-3 / at 400 V Image: Company - specific • rated value A 0.16 Service power / at AC-3 Image: Company - specific | Type of assignement | | 2 |
| • company-specificS00Main circuit:Number of poles / for main current circuit3Operating voltage / at 3 AC / rated value9• maximumVOperating current / at AC-3 / at 400 V690• rated valueA• rated valueAService power / at AC-3AC-3 | Size of overload relay | | S00 |
| Main circuit: 3 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 A 0.16 Service power / at AC-3 A 0.16 | Size of the contactor / can be combined | | |
| Number of poles / for main current circuit3Operating voltage / at 3 AC / rated value3• maximumV690Operating current / at AC-3 / at 400 VA0.16• rated valueA0.16 | • company-specific | | S00 |
| Operating voltage / at 3 AC / rated value Note of the second se | Main circuit: | | |
| • maximumV690Operating current / at AC-3 / at 400 VA690• rated valueA0.16Service power / at AC-3CC | Number of poles / for main current circuit | | 3 |
| Operating current / at AC-3 / at 400 V A • rated value A 0.16 | Operating voltage / at 3 AC / rated value | | |
| • rated value A 0.16 Service power / at AC-3 | • maximum | V | 690 |
| Service power / at AC-3 | Operating current / at AC-3 / at 400 V | | |
| | rated value | А | 0.16 |
| • at 400 V / rated value kW 0.04 | Service power / at AC-3 | | |
| | • at 400 V / rated value | kW | 0.04 |

| • at 500 V / rated value | kW | 0.06 |
|---|----|-----------|
| • at 690 V / rated value | W | 60 |
| Adjustable response current | | |
| of the current-dependent overload release | А | 0.11 0.16 |
| Operating current / of the fuse link / rated value | А | 0.5 |

| 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 | А | 3 |
| • at 110 V | А | 3 |
| • at 120 V | А | 3 |
| • at 125 V | А | 3 |
| • at 230 V | А | 2 |
| • at 400 V | А | 1 |
| • at DC-13 | | |
| • at 24 V | А | 1 |
| • at 110 V | А | 0.22 |
| • at 125 V | А | 0.22 |
| • at 220 V | А | 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 | | spring-loaded terminals | | |
| for auxiliary and control current circuit | | spring-loaded terminals | | |
| Product function / removable terminal for auxiliary and control circuit | _ | No | | |
| Type of the connectable conductor cross-section | _ | | | |
| for main contacts | | | | |
| • unifilar | | 2x (0.5 4 mm2) | | |
| stranded wire | | 2x (0.5 4 mm2) | | |
| stranded wire | | | | |
| with conductor end processing | | 2 x (0.5 2.5 mm2) | | |
| without conductor final cutting | | 2x (0.5 2.5 mm2) | | |
| at AWG-conductors / for main contacts | | 1x (20 12) | | |
| for auxiliary contacts | | | | |
| • solid | | 2x (0.5 2.5 mm2) | | |
| finely stranded | | | | |
| with wire end processing | | 2x (0.5 1.5 mm2) | | |
| without conductor final cutting | | 2 x (0.5 1.5 mm2) | | |
| for AWG conductors / for auxiliary contacts | | 2x (20 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:

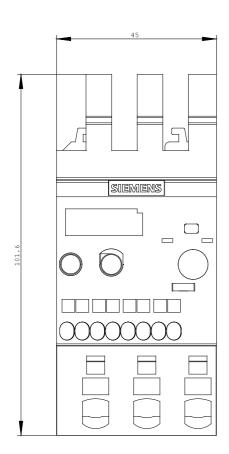
Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

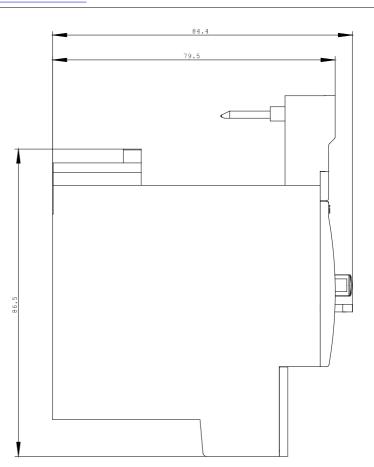
Global Industry Mall (Online ordering system)

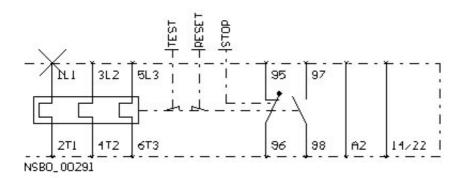
http://www.siemens.com/industrial-controls/mall

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RU2116-0AC0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-0AC0







last change:

Apr 26, 2010