SIEMENS

Data sheet

3RU2116-1EC0



Overload relay 2.8...4.0 A Thermal For motor protection Size S00, Class 10 Contactor mounting Main circuit: Spring-type terminal Auxiliary circuit: spring-type terminal Manual-Automatic-Reset

| product brand name | SIRIUS |
|--|------------------------|
| product designation | thermal overload relay |
| product type designation | 3RU2 |
| General technical data | |
| size of overload relay | S00 |
| size of contactor can be combined company-specific | S00 |
| power loss [W] for rated value of the current at AC in hot operating state | 5.7 W |
| • per pole | 1.9 W |
| insulation voltage with degree of pollution 3 at AC rated value | 690 V |
| surge voltage resistance rated value | 6 kV |
| maximum permissible voltage for protective separation | |
| in networks with ungrounded star point between auxiliary and auxiliary circuit | 440 V |
| in networks with grounded star point between auxiliary and auxiliary circuit | 440 V |
| in networks with ungrounded star point between main and auxiliary circuit | 440 V |
| in networks with grounded star point between main and auxiliary circuit | 440 V |
| shock resistance according to IEC 60068-2-27 | 8g / 11 ms |
| reference code according to IEC 81346-2 | F |
| Substance Prohibitance (Date) | 10/01/2009 |
| SVHC substance name | Lead - 7439-92-1 |
| Weight | 0.175 kg |
| Ambient conditions | |
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature | |
| during operation | -40 +70 °C |
| during storage | -55 +80 °C |
| during transport | -55 +80 °C |
| temperature compensation | -40 +60 °C |
| relative humidity during operation | 10 95 % |
| Environmental footprint | |
| Global Warming Potential [CO2 eq] total | 40 kg |
| Global Warming Potential [CO2 eq] during manufacturing | 1.01 kg |
| global warming potential [CO2 eq] during sales | 0.044 kg |
| Global Warming Potential [CO2 eq] during operation | 39 kg |
| Global Warming Potential [CO2 eq] after end of life | 0.022 kg |
| Main circuit | |
| number of poles for main current circuit | 3 |
| adjustable current response value current of the current- | 2.8 4 A |

| dependent overload release | |
|---|-----------------------------|
| operating voltage | |
| • rated value | 690 V |
| • at AC-3e rated value maximum | 690 V |
| operating frequency rated value | 50 60 Hz |
| operational current rated value | 4 A |
| operational current at AC-3e at 400 V rated value | 4 A |
| operating power | |
| • at AC-3 | |
| — at 400 V rated value | 1.5 kW |
| — at 500 V rated value | 2.2 kW |
| — at 690 V rated value | 3 kW |
| • at AC-3e | |
| — at 400 V rated value | 1.5 kW |
| — at 500 V rated value | 2.2 kW |
| — at 690 V rated value | 3 kW |
| Auxiliary circuit | |
| design of the auxiliary switch | integrated |
| number of NC contacts for auxiliary contacts | 1 |
| • note | for contactor disconnection |
| number of NO contacts for auxiliary contacts | 1 |
| • note | for message "Tripped" |
| number of CO contacts for auxiliary contacts | 0 |
| operational current of auxiliary contacts at AC-15 | |
| • at 24 V | 3 A |
| • at 110 V | 3 A |
| • at 120 V | 3 A |
| • at 125 V | 3 A |
| • at 230 V | 2 A |
| • at 400 V | 1A |
| • at 690 V | 0.75 A |
| operational current of auxiliary contacts at DC-13 | |
| • at 24 V | 2 A |
| • at 60 V | 0.3 A |
| • at 110 V | 0.22 A |
| • at 125 V | 0.22 A |
| • at 220 V | 0.11 A |
| contact rating of auxiliary contacts according to UL | B600 / R300 |
| Protective and monitoring functions | |
| trip class | CLASS 10 |
| design of the overload release | thermal |
| UL/CSA ratings | |
| full-load current (FLA) for 3-phase AC motor | |
| at 480 V rated value | 4 A |
| at 400 V rated value at 600 V rated value | 4 A 4 A |
| Short-circuit protection | |
| design of the fuse link | |
| for short-circuit protection of the auxiliary switch required | fuse gG: 6 A, quick: 10 A |
| Installation/ mounting/ dimensions | |
| | 2014 |
| mounting position | any Contactor mounting |
| fastening method | Contactor mounting |
| height | 87 mm |
| width | 45 mm |
| depth | 70 mm |
| Connections/ Terminals | |
| product component removable terminal for auxiliary and control circuit | No |
| type of electrical connection | |
| for main current circuit | spring-loaded terminals |
| for main current circuit for auxiliary and control circuit | spring-loaded terminals |
| | |
| arrangement of electrical connectors for main current | Top and bottom |

| Leven Provide conductor cross-sections Final conductor cross-sectio | circuit | | | | | | |
|---|-------------------------------------|---|--------------------------------|--|--------------------------|-------------------------|--|
| evaluation of the standard is a contract of the stand | | onductor cross-sections | | | | | |
| - side of standed in functions one opposes in a standard in the standard standard in the standard standard | | | | | | | |
| f. neight stranded with core and processing in (0.52.5 mm?) t. W.W.G. ables for main contracts t. G. S | | | | $1 \times (0.5 \ 1 \text{ mm}^2)$ | | | |
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| net AWS cables for main contacts pro d'onnectables conductor cross-sections solid or standed a solid or standed a solid or standed a solid or standed a final y contacts b contacts a solid or standed without core end processing b (DS 2 S mm¹) b (DS 2 S mm²) b (DS 1 S m²) b (DS 1 S m²)<td colspan="3"></td><td></td><td></td><td></td> | | | | | | | |
| type of connectable conductor cross-sections Provession of the second | | | ssing | | | | |
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| • or AVNG cables for availably contacts 2x (2014) design of screwdriver shaf. Diameter 3 mm Stod of the screwdriver thy 30 X0,5 mm Stod of the screwdriver thy 50 FT Stod of the screwdriver thy 22 00 a EG 5108 22 00 a I' value 60 FT Stod of the screwdriver thy 200 a I' control field interval or service life according to EC 20 a Stod of the screwdriver thy 1920 touch protection class IP on the front according to IEC 6052 20 a Electrical States 1920 touch protection class IP on the front according to IEC 60523 1920 deplay version for switching status State switch Approvals Certificates 0 for use in hazard- coust locations Cord use in hazard- cus locations Test Certificates Or use in hazard- cus locations State Screw Use Screw </td <td colspan="3"></td> <td></td> <td>(0.75 2.5 mm²)</td> <td></td> | | | | | (0.75 2.5 mm²) | | |
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| for proof test interval or service life according to IEC 6052 Electrical Stafey protection class IP on the front according to IEC 6052 touch protection on the front according to IEC 6052 interval or service life according to IEC 6052 | IEC 61508 | | | | | | |
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| Information on the packaging | For use in hazard- ous locations | CA Test Certificates Special Test Certificates ate | Type Test Cer ates/Test Rep | Marine / Ship tific- bort ABS | BUREAU VERITAS | ČŠ DNV DNV | |
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https://support.industry.siemens.com/cs/ww/en/view/109813875 Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2116-1EC0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-1EC0

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

rt.industry.siemens.com/cs/ww/en/ps/3RU2116-1EC0 https://supp

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-1EC0&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-1EC0/char

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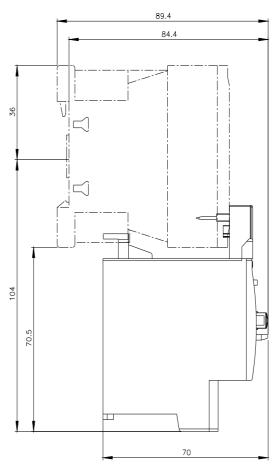
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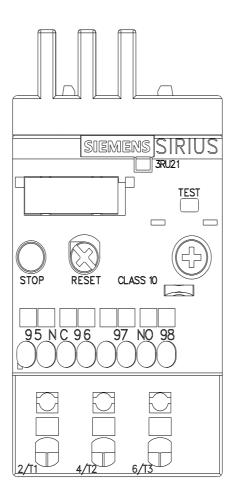
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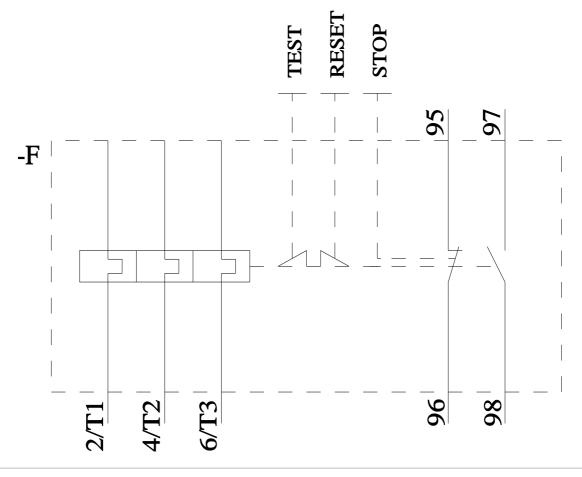
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Further characteristics (e.g. electrical endurance, switching frequency)

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