## **SIEMENS**

Data sheet 3RU2136-4JD1



Overload relay 54...65 A Thermal For motor protection Size S2, Class 10 Stand-alone installation Main circuit: Screw 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   | S2                     |
| size of contactor can be combined company-specific                                     | S2                     |
| power loss [W] for rated value of the current at AC in hot operating state             | 15.6 W                 |
| • per pole   | 5.2 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 safe isolation in<br>networks with grounded star point |                        |
| <ul> <li>between auxiliary and auxiliary circuit</li> </ul>                            | 415 V                  |
| <ul> <li>between auxiliary and auxiliary circuit</li> </ul>                            | 415 V                  |
| <ul> <li>between main and auxiliary circuit</li> </ul>                                 | 690 V                  |
| between main and auxiliary circuit   | 690 V                  |
| shock resistance acc. to IEC 60068-2-27  | 8g / 11 ms             |
| type of protection according to ATEX directive 2014/34/EU                              | Ex II (2) GD           |
| certificate of suitability according to ATEX directive 2014/34/EU                      | DMT 98 ATEX G 001      |
| reference code acc. to IEC 81346-2   | F                      |
| Substance Prohibitance (Date)  | 15.10.2014 00:00:00    |
| Ambient conditions   |                        |
| installation altitude at height above sea level maximum                                | 2 000 m                |
| ambient temperature  |                        |
| <ul><li>during operation</li></ul>   | -40 +70 °C             |
| during storage   | -55 +80 °C             |
| during transport   | -55 +80 °C             |
| temperature compensation   | -40 +60 °C             |
| relative humidity during operation   | 10 95 %                |
| Main circuit   |                        |
| number of poles for main current circuit   | 3                      |
| adjustable current response value current of the current-dependent overload release    | 54 65 A                |
| operating voltage  |                        |
| rated value  | 690 V                  |
| at AC-3 rated value maximum  | 690 V                  |
| operating frequency rated value  | 50 60 Hz               |

| operational current rated value   | 65 A  |
|---|---|
| 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  | 1 A   |
| operational current of auxiliary contacts at DC-13                                    | 2 A   |
| at 24 V     at 60 V   | 0.3 A   |
| • at 110 V  | 0.22 A  |
| • at 125 V  | 0.22 A  |
| • at 220 V  | 0.11 A  |
| design of the miniature circuit breaker for short-circuit                             | 6A (SCC less than equal to 0.5 kA; U less than equal to 260V) |
| protection of the auxiliary switch required   | ,   |
| 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  | 65 A  |
| at 600 V rated value  | 65 A  |
| Short-circuit protection  |   |
| design of the fuse link   |   |
| <ul> <li>for short-circuit protection of the auxiliary switch<br/>required</li> </ul> | fuse gG: 6 A, quick: 10 A                                     |
| Installation/ mounting/ dimensions  |   |
| mounting position   | any   |
| fastening method  | stand-alone installation                                      |
| height  | 105 mm  |
| width   | 55 mm   |
| depth   | 117 mm  |
| Connections/ Terminals  |   |
| product component removable terminal for auxiliary                                    | No  |
| and control circuit   |   |
| type of electrical connection   |   |
| for main current circuit     for a publication and control circuit                    | screw-type terminals  |
| for auxiliary and control circuit   | spring-loaded terminals                                       |
| arrangement of electrical connectors for main current circuit                         | Top and bottom  |
| type of connectable conductor cross-sections  |   |
| for main contacts   |   |
| — solid or stranded   | 2x (1 35 mm²), 1x (1 50 mm²)                                  |
| <ul> <li>finely stranded with core end processing</li> </ul>                          | 2x (1 25 mm²), 1x (1 35 mm²)                                  |
| at AWG cables for main contacts   | 2x (18 2), 1x (18 1)  |
| type of connectable conductor cross-sections  |   |
| for auxiliary contacts  |   |
| — solid or stranded   | 2x (0.5 2.5 mm²)  |
| <ul> <li>finely stranded with core end processing</li> </ul>                          | 2x (0.5 1.5 mm²)  |
| — finely stranded without core end processing   | 2x (0.5 2.5 mm²)  |
| at AWG cables for auxiliary contacts  | 2x (20 14)  |

| tightening torque  |   |
|--|---|
| <ul> <li>for main contacts with screw-type terminals</li> </ul>                                    | 3 4.5 N·m   |
| design of screwdriver shaft  | Diameter 5 6 mm                                       |
| size of the screwdriver tip  | Pozidriv PZ 2   |
| design of the thread of the connection screw   |   |
| <ul> <li>for main contacts</li> </ul>  | M6  |
| Safety related data  |   |
| T1 value for proof test interval or service life acc. to IEC 61508                                 | 20 y  |
|  |   |
| protection class IP on the front acc. to IEC 60529   | IP20  |
| protection class IP on the front acc. to IEC 60529 touch protection on the front acc. to IEC 60529 | IP20 finger-safe, for vertical contact from the front |
| •  |   |
| touch protection on the front acc. to IEC 60529  |   |

**General Product Approval** 

For use in hazardous locations













**Declaration of** Conformity

**Test Certificates** 

Marine / Shipping



Special Test Certific-<u>ate</u>

Type Test Certificates/Test Report







Marine / Shipping

other Railway









Confirmation

**Special Test Certific-**<u>ate</u>

## **Further information**

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=3RU2136-4JD1

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2136-4JD1

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4JD1

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

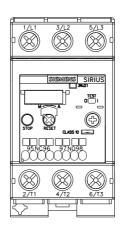
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2136-4JD1&lang=en

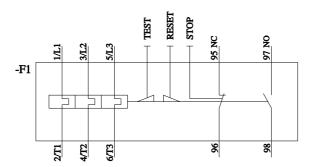
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4JD1/char

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4JD1&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4JD1&objecttype=14&gridview=view1</a>







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