# **SIEMENS**

Data sheet 3RU2126-1GC0

Overload relay 4.5...6.3 A Thermal For motor protection Size S0, 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                   |

| Size of overload relay   | S0    |
|--|-------|
| Size of contactor can be combined company-specific   | S0    |
| Power loss [W] for rated value of the current  |       |
| • at AC in hot operating state   | 6.6 W |
| • at AC in hot operating state per pole  | 2.2 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   |       |
| <ul> <li>in networks with grounded star point between<br/>auxiliary and auxiliary circuit</li> </ul> | 440 V |
| <ul> <li>in networks with grounded star point between<br/>auxiliary and auxiliary circuit</li> </ul> | 440 V |
| <ul> <li>in networks with grounded star point between<br/>main and auxiliary circuit</li> </ul>      | 440 V |

| <ul> <li>in networks with grounded star point between<br/>main and auxiliary circuit</li> </ul> | 440 V                       |
|---|-----------------------------|
| protection class IP on the front  | IP20                        |
| Protection class IP of the terminal   | IP20                        |
| 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 DIN EN 81346-2   | F                           |
| 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 pick-up value current of the current-  | 4.5 6.3 A                   |
| dependent overload release  |                             |
| Operating voltage   |                             |
| • rated value   | 690 V                       |
| <ul> <li>at AC-3 rated value maximum</li> </ul>   | 690 V                       |
| Operating frequency rated value   | 50 60 Hz                    |
| Operating current rated value   | 6.3 A                       |
| Operating power at AC-3   |                             |
| ● at 400 V rated value  | 2.2 kW                      |
| • at 500 V rated value  | 3 kW                        |
| ● at 690 V rated value  | 4 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                           |
|   |                             |

| ip class  | CLASS 10    |
|---|-------------|
| tective and monitoring functions  | B000 / N300 |
| at 220 V ontact rating of auxiliary contacts according to UL                      | B600 / R300 |
| Operating current of auxiliary contacts at DC-13                                  | 0.11 A      |
| • operating current of auxiliary contacts at DC-13 at 125 V                       | 0.22 A      |
| <ul> <li>Operating current of auxiliary contacts at DC-13<br/>at 110 V</li> </ul> | 0.22 A      |
| <ul> <li>Operating current of auxiliary contacts at DC-13<br/>at 60 V</li> </ul>  | 0.3 A       |
| <ul> <li>operating current of auxiliary contacts at DC-13<br/>at 24 V</li> </ul>  | 2 A         |
| <ul> <li>operating current of auxiliary contacts at AC-15<br/>at 400 V</li> </ul> | 1 A         |
| <ul> <li>Operating current of auxiliary contacts at AC-15<br/>at 230 V</li> </ul> | 2 A         |
| <ul> <li>Operating current of auxiliary contacts at AC-15<br/>at 125 V</li> </ul> | 3 A         |
| <ul> <li>Operating current of auxiliary contacts at AC-15<br/>at 120 V</li> </ul> | 3 A         |
| <ul> <li>Operating current of auxiliary contacts at AC-15<br/>at 110 V</li> </ul> | 3 A         |
| <ul> <li>operating current of auxiliary contacts at AC-15<br/>at 24 V</li> </ul>  | 3 A         |

| Protective and monitoring functions |         |
|-------------------------------------|---------|
| Trip class CLASS 10                 |         |
| Design of the overload release      | thermal |

| UL/CSA ratings                                   |       |
|--|-------|
| Full-load current (FLA) for three-phase AC motor |       |
| • at 480 V rated value                           | 6.3 A |
| • at 600 V rated value                           | 6.3 A |

| Short-circuit protection   |                           |
|--|---------------------------|
| Design of the fuse link  |                           |
| <ul> <li>for short-circuit protection of the auxiliary switch</li> </ul> | fuse gG: 6 A, quick: 10 A |
| required   |                           |

| Installation/ mounting/ dimensions |                    |
|------------------------------------|--------------------|
| mounting position                  | any                |
| Mounting type                      | Contactor mounting |
| Height                             | 102 mm             |
| Width                              | 45 mm              |
| Depth                              | 84 mm              |

| Connections/ Terminals |  |
|------------------------|--|
| Product function       |  |

| <ul> <li>removable terminal for auxiliary and control circuit</li> </ul>                        | No                                  |
|---|-------------------------------------|
| <ul> <li>Type of electrical connection for main current circuit</li> </ul>                      | spring-loaded terminals             |
| <ul> <li>Type of electrical connection for auxiliary and<br/>control current circuit</li> </ul> | spring-loaded terminals             |
| Arrangement of electrical connectors for main current circuit                                   | Top and bottom                      |
| Type of connectable conductor cross-sections  |                                     |
| • for main contacts   |                                     |
| <ul> <li>single or multi-stranded</li> </ul>  | 1x (1 10 mm²)                       |
| <ul> <li>finely stranded with core end processing</li> </ul>                                    | 1x (1 6 mm²)                        |
| <ul> <li>finely stranded without core end<br/>processing</li> </ul>                             | 1x (1 6 mm²)                        |
| <ul> <li>at AWG conductors for main contacts</li> </ul>   | 1x (18 8)                           |
| Type of connectable conductor cross-sections  |                                     |
| <ul> <li>for auxiliary contacts</li> </ul>  |                                     |
| <ul> <li>single or multi-stranded</li> </ul>  | 2x (0,5 2,5 mm²)                    |
| <ul> <li>finely stranded with core end processing</li> </ul>                                    | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) |
| <ul> <li>finely stranded without core end<br/>processing</li> </ul>                             | 2x (0.5 1.5 mm²)                    |
| <ul> <li>at AWG conductors for auxiliary contacts</li> </ul>                                    | 2x (20 14)                          |
| Design of screwdriver shaft   | Diameter 3 mm                       |
| Size of the screwdriver tip   | 3,0 x 0,5 mm                        |
| Safety related data   |                                     |
| Failure rate [FIT]  |                                     |
| • with low demand rate acc. to SN 31920   | 50 FIT                              |
| MTTF with high demand rate  | 2 280 y                             |
| T1 value for proof test interval or service life acc. to IEC 61508                              | 20 y                                |
| Display   |                                     |
| Display version   |                                     |
| <ul><li>for switching status</li></ul>  | Slide switch                        |
| Certificates/ approvals   |                                     |

#### **General Product Approval**















**IECE**x

#### **Declaration of Conformity**

**Test Certificates** 

#### Marine / Shipping



Miscellaneous

Type Test Certificates/Test Report

Special Test Certificate





other

### Marine / Shipping











Confirmation

## Railway

Vibration and Shock

## 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=3RU2126-1GC0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-1GC0

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

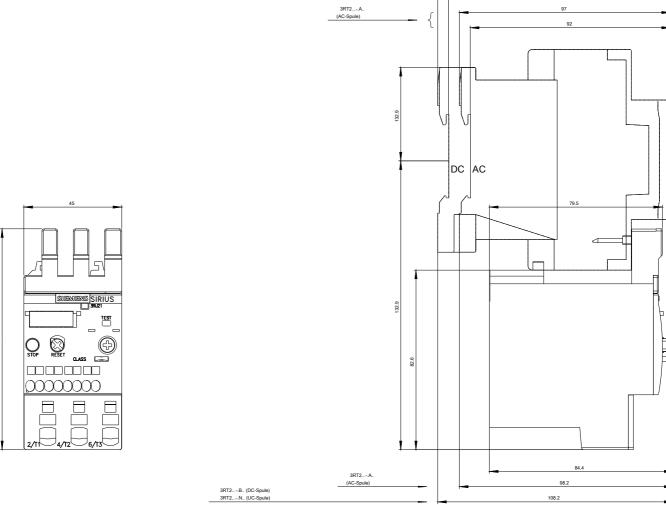
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1GC0

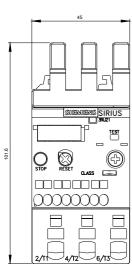
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)  $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2126-1GC0\&lang=en.pdf}}$ 

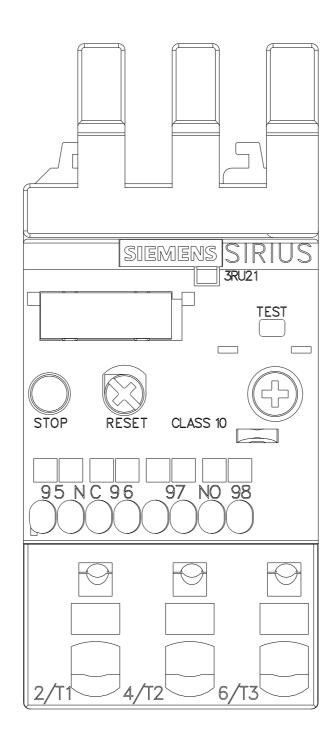
Characteristic: Tripping characteristics, I2t, Let-through current

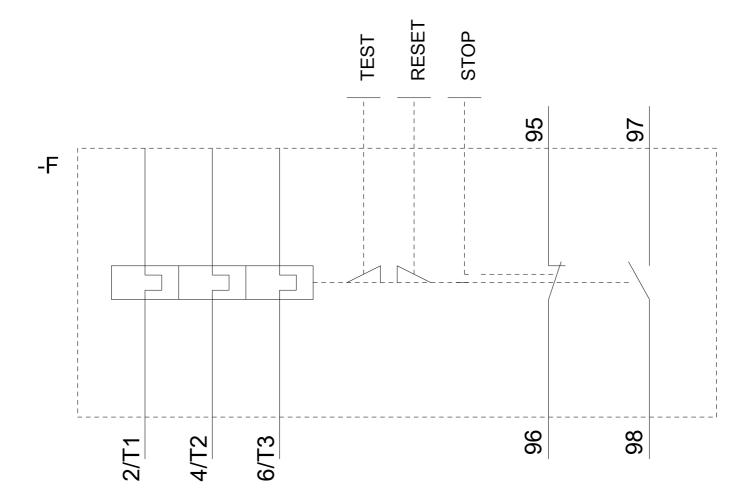
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1GC0/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-1GC0&objecttype=14&gridview=view1









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