

Heat current monitoring Current range 32 A / 40 °C 400-600 V / 24 V  
AC/DC for semiconductor relay / contactor Remote teach/without  
control connector



|                                               |                               |
|-----------------------------------------------|-------------------------------|
| Product brand name                            | SIRIUS                        |
| Product designation                           | heating current monitoring    |
| Manufacturer's article number                 |                               |
| • _1 / of the accessories that can be ordered | <a href="#">3RF2900-0RA88</a> |
| Product designation                           |                               |
| • _1 / of the accessories that can be ordered | sealable end cover            |

| General technical data                                                               |                                                |
|--------------------------------------------------------------------------------------|------------------------------------------------|
| Product function                                                                     | solid-state relay / solid-state contactor 3RF2 |
| Insulation voltage                                                                   |                                                |
| • rated value                                                                        | 600 V                                          |
| Degree of pollution                                                                  | 3                                              |
| Protection class IP                                                                  | IP20                                           |
| Shock resistance / acc. to IEC 60068-2-27                                            | 15g / 11 ms                                    |
| Vibration resistance / acc. to IEC 60068-2-6                                         | 2g                                             |
| Reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750 | A                                              |
| Reference code / acc. to DIN EN 81346-2                                              | B                                              |
| Reference code / acc. to DIN EN 61346-2                                              | B                                              |

Main circuit

|                                                                    |               |
|--------------------------------------------------------------------|---------------|
| <b>Number of poles / for main current circuit</b>                  | 0             |
| <b>Number of NO contacts / for main contacts</b>                   | 0             |
| <b>Number of NC contacts / for main contacts</b>                   | 0             |
| <b>Operating voltage / at AC</b>                                   |               |
| • at 50 Hz / rated value                                           | 400 ... 600 V |
| • at 60 Hz / rated value                                           | 400 ... 600 V |
| <b>Operating frequency / rated value</b>                           | 50 ... 60 Hz  |
| <b>Relative symmetrical tolerance / of the operating frequency</b> | 10 %          |
| <b>Operating range relative to the operating voltage / at AC</b>   |               |
| • at 50 Hz                                                         | 340 ... 660 V |
| • at 60 Hz                                                         | 340 ... 660 V |
| <b>Operating current</b>                                           |               |
| • at AC-1 / at 400 V / rated value                                 | 32 A          |
| • at AC-51 / rated value                                           | 32 A          |
| <b>Derating temperature</b>                                        | 40 °C         |

#### Control circuit/ Control

|                                                            |       |
|------------------------------------------------------------|-------|
| <b>Control supply voltage / 1</b>                          |       |
| • at DC                                                    | 24 V  |
| <b>Control supply voltage / at AC</b>                      |       |
| • at 50 Hz / Full-scale value for signal<0> recognition    | 5 V   |
| • at 60 Hz / Full-scale value for signal<0> recognition    | 5 V   |
| <b>Control supply voltage</b>                              |       |
| • at DC / Full-scale value for signal<0> recognition       | 5 V   |
| <b>Symmetrical line frequency tolerance</b>                | 5 Hz  |
| <b>Control current / at minimum control supply voltage</b> |       |
| • at AC                                                    | 2 mA  |
| • at DC                                                    | 2 mA  |
| Control current / at AC / rated value                      | 40 mA |
| Control current / at DC / rated value                      | 40 mA |
| <b>Number of NC contacts / for auxiliary contacts</b>      | 1     |
| <b>Number of NO contacts / for auxiliary contacts</b>      | 0     |
| Number of CO contacts / for auxiliary contacts             | 0     |

#### Installation/ mounting/ dimensions

|                         |          |
|-------------------------|----------|
| <b>Mounting type</b>    | clip-on  |
| • Side-by-side mounting | Yes      |
| <b>Height</b>           | 111.5 mm |
| <b>Width</b>            | 45 mm    |
| <b>Depth</b>            | 69.5 mm  |

|                                                                                           |                                                                       |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>Installation altitude / at height above sea level / maximum</b>                        | 1 000 m                                                               |
| <b>Connections/ Terminals</b>                                                             |                                                                       |
| <b>Type of electrical connection</b>                                                      |                                                                       |
| • for auxiliary and control current circuit                                               | screw-type terminals                                                  |
| <b>Type of connectable conductor cross-sections</b>                                       |                                                                       |
| • for auxiliary and control contacts                                                      |                                                                       |
| — solid                                                                                   | 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> )  |
| — finely stranded / with core end processing                                              | 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> )  |
| — finely stranded / without core end processing                                           | 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> )  |
| • at AWG conductors / for auxiliary and control contacts                                  | 1x (AWG 20 ... 12)                                                    |
| <b>Tightening torque / for auxiliary and control contacts / with screw-type terminals</b> | 0.5 ... 0.6 N·m                                                       |
| <b>Tightening torque [lbf·in]</b>                                                         |                                                                       |
| • for auxiliary and control contacts / with screw-type terminals                          | 4.5 ... 5.3 lbf·in                                                    |
| <b>Design of the thread / of the connection screw</b>                                     |                                                                       |
| • of the auxiliary and control contacts                                                   | M3                                                                    |
| <b>Wire stripping length / of the cable</b>                                               |                                                                       |
| • for auxiliary and control contacts                                                      | 7 mm                                                                  |
| <b>Ambient conditions</b>                                                                 |                                                                       |
| <b>Ambient temperature</b>                                                                |                                                                       |
| • during operation                                                                        | -25 ... +60 °C                                                        |
| • during storage                                                                          | -55 ... +80 °C                                                        |
| <b>Electromagnetic compatibility</b>                                                      |                                                                       |
| <b>Conducted interference</b>                                                             |                                                                       |
| • due to burst / acc. to IEC 61000-4-4                                                    | 2 kV / 5 kHz behavior criterion 2                                     |
| • due to conductor-earth surge / acc. to IEC 61000-4-5                                    | 2 kV behavior criterion 2                                             |
| • due to conductor-conductor surge / acc. to IEC 61000-4-5                                | 1 kV behavior criterion 2                                             |
| • due to high-frequency radiation / acc. to IEC 61000-4-6                                 | 140 dBuV in the frequency range 0.15 ... 80 MHz, behavior criterion 1 |
| <b>Electrostatic discharge / acc. to IEC 61000-4-2</b>                                    | 4 kV contact discharging / 8 kV air discharging, behavior criterion 2 |
| <b>Conducted HF-interference emissions / acc. to CISPR11</b>                              | Class A for industrial environment                                    |
| <b>Field-bound HF-interference emission / acc. to CISPR11</b>                             | Class B for the domestic, business and commercial environments        |
| <b>Further information</b>                                                                |                                                                       |

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

[www.siemens.com/sirius/catalogs](http://www.siemens.com/sirius/catalogs)

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RF2932-0JA16>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF2932-0JA16>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RF2932-0JA16>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RF2932-0JA16&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF2932-0JA16&lang=en)

**Short-circuit protection, design of the fuse link**

[https://www.automation.siemens.com/cd-static/material/info/3RF20\\_eng.pdf](https://www.automation.siemens.com/cd-static/material/info/3RF20_eng.pdf)

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