



HEATING CURRENT MONITORING CURRENT RANGE 32 A 40 DEG. C 110-230 V / 24 V AC/DC FOR SOLID STATE RELAY/CONTACTOR REMOTE TEACH / W/O CONTROL CON. CUSTOMIZED VERSION

| General technical data:                                                   |    |                                                             |
|---------------------------------------------------------------------------|----|-------------------------------------------------------------|
| product brand name                                                        |    | SIRIUS                                                      |
| product designation                                                       |    | heating current monitoring                                  |
| Product function                                                          |    | solid-state relay / solid-state contactor 3RF2 with standby |
| Number of poles / for main current circuit                                |    | 0                                                           |
| Protection class IP                                                       |    | IP20                                                        |
| Product designation / _1 / of the accessories that can be ordered         |    | sealable end cover                                          |
| Manufacturer article number / _1 / of the accessories that can be ordered |    | <a href="#">3RF2900-0RA88</a>                               |
| Hole diameter / of the current transformer                                | mm | 17                                                          |
| Number of partial loads / for load monitoring                             |    | 6                                                           |
| Ambient temperature                                                       |    |                                                             |
| • during operating                                                        | °C | -25 ... +60                                                 |
| • during storage                                                          | °C | -55 ... +80                                                 |
| Installation altitude / at a height over sea level / maximum              | m  | 1,000                                                       |
| Resistance against vibration / according to IEC 60068-2-6                 |    | 2g                                                          |
| Resistance against shock / according to IEC 60068-2-27                    |    | 15g / 11 ms                                                 |
| Item designation                                                          |    |                                                             |

- according to DIN 40719 extendable after IEC 204-2 / according to IEC 750
- according to DIN EN 61346-2

|  |   |
|--|---|
|  | A |
|  | B |

#### Main circuit:

|                                                                    |    |              |
|--------------------------------------------------------------------|----|--------------|
| <b>Number of NO contacts / for main contacts</b>                   |    | 0            |
| <b>Number of NC contacts / for main contacts</b>                   |    | 0            |
| <b>Operating current</b>                                           |    |              |
| • at AC-1 / at 400 V / rated value                                 | A  | 32           |
| <b>Derating temperature</b>                                        | °C | 40           |
| <b>Operating voltage</b>                                           |    |              |
| • at 50 Hz / at AC / rated value                                   | V  | 110 ... 230  |
| • at 60 Hz / at AC / rated value                                   | V  | 110 ... 230  |
| <b>Working area related to the operating voltage</b>               |    |              |
| • at 50 Hz / for AC                                                | V  | 93.5 ... 253 |
| • at 60 Hz / for AC                                                | V  | 93.5 ... 253 |
| <b>Operating frequency</b>                                         |    |              |
| • rated value                                                      | Hz | 50 ... 60    |
| <b>Relative symmetrical tolerance / of the operation frequency</b> | %  | 10           |
| <b>Insulation voltage / rated value</b>                            | V  | 600          |
| <b>Kompensation of the mains voltage swing</b>                     | %  | 20           |
| <b>Partial load / for load monitoring</b>                          | A  | 0.8          |
| <b>Metering range current</b>                                      | A  | 0 ... 32     |

#### Control circuit:

|                                                                             |    |           |
|-----------------------------------------------------------------------------|----|-----------|
| <b>type of voltage</b>                                                      |    | AC/DC     |
| <b>Control supply voltage</b>                                               |    |           |
| • for DC / rated value                                                      | V  | 24 ... 24 |
| • at 50 Hz / at AC / rated value                                            | V  | 24 ... 24 |
| • at 60 Hz / at AC / rated value                                            | V  | 24 ... 24 |
| • at 50 Hz / for AC / final value for signal<0>-recognition                 | V  | 14        |
| • at 60 Hz / for AC / final value for signal<0>-recognition                 | V  | 14        |
| • for DC / final value for signal<0>-recognition                            | V  | 15        |
| <b>Supply voltage frequency / for auxiliary and control current circuit</b> |    |           |
| • rated value                                                               | Hz | 50 ... 60 |
| <b>Tolerance of the line frequency</b>                                      | Hz | 5         |
| <b>Relative symmetrical tolerance / of the supply voltage frequency</b>     | %  | 10        |
| <b>Control current / for AC / rated value</b>                               | mA | 40        |
| <b>Control current / for DC / rated value</b>                               | mA | 40        |

|                            |   |           |
|----------------------------|---|-----------|
| <b>Response delay time</b> | s | 0.1 ... 3 |
|----------------------------|---|-----------|

|                                                                |    |             |
|----------------------------------------------------------------|----|-------------|
| <b>Auxiliary circuit:</b>                                      |    |             |
| <b>Number of NC contacts / for auxiliary contacts</b>          |    | 1           |
| <b>Number of NO contacts / for auxiliary contacts</b>          |    | 0           |
| <b>Number of change-over switches / for auxiliary contacts</b> |    | 0           |
| <b>Operating voltage / of the auxiliary contacts</b>           |    |             |
| • for AC                                                       | V  | 15 ... 30   |
| • for DC                                                       | V  | 15 ... 30   |
| <b>Operating current / of the auxiliary contacts</b>           |    |             |
| • for AC                                                       | mA | 5 ... 1,000 |
| • for DC                                                       | mA | 5 ... 1,000 |

|                                                      |    |         |
|------------------------------------------------------|----|---------|
| <b>Installation/mounting/dimensions:</b>             |    |         |
| <b>Type of mounting</b>                              |    | clip-on |
| <b>Type of fixing/fixation / series installation</b> |    | Yes     |
| <b>Width</b>                                         | mm | 45      |
| <b>Height</b>                                        | mm | 111.5   |
| <b>Depth</b>                                         | mm | 69.5    |

|                                                                                           |                 |                                                                      |
|-------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------|
| <b>Connections:</b>                                                                       |                 |                                                                      |
| <b>Design of the electrical connection</b>                                                |                 |                                                                      |
| • for auxiliary and control current circuit                                               |                 | screw-type terminals                                                 |
| <b>Design of the thread / of the connection screw / of the auxiliary and control pins</b> |                 | M3                                                                   |
| <b>Type of the connectable conductor cross-section</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 conductor end processing                                                           |                 | 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> ) |
| • without conductor final cutting                                                         |                 | 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> ) |
| • for AWG conductors / for auxiliary and control contacts                                 |                 | 1x (AWG 20 ... 12)                                                   |
| <b>Conductor cross-section that can be connected / for auxiliary and control contacts</b> |                 |                                                                      |
| • solid                                                                                   | mm <sup>2</sup> | 0.5 ... 2.5                                                          |
| • stranded wire                                                                           |                 |                                                                      |
| • with conductor end processing /                                                         | mm <sup>2</sup> | 0.5 ... 2.5                                                          |
| • without conductor final cutting                                                         | mm <sup>2</sup> | 0.5 ... 2.5                                                          |
| <b>AWG number / as coded connectable conductor cross-section</b>                          |                 |                                                                      |
| • for auxiliary and control contacts                                                      |                 | 12 ... 20                                                            |
| <b>Skinning length / of the cable / for auxiliary and control contacts</b>                | mm              | 7                                                                    |

|                                                                                                       |        |             |
|-------------------------------------------------------------------------------------------------------|--------|-------------|
| <b>Tightening torque / for auxiliary and control contacts</b><br>• with screw-type terminals          | N·m    | 0.5 ... 0.6 |
| <b>Tightening torque (lbf·in) / for auxiliary and control contacts</b><br>• with screw-type terminals | lbf·in | 4.5 ... 5.3 |

#### Certificates/approvals:

| General Product Approval | EMC | Declaration of Conformity | Test Certificates |
|--------------------------|-----|---------------------------|-------------------|
|--------------------------|-----|---------------------------|-------------------|



[Type Test  
Certificates/Test  
Report](#)

other

[Environmental  
Confirmations](#)

#### Further information:

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

<http://www.siemens.com/industrial-controls/catalogs>

**Industry Mall (Online ordering system)**

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

**CAX-Online-Generator**

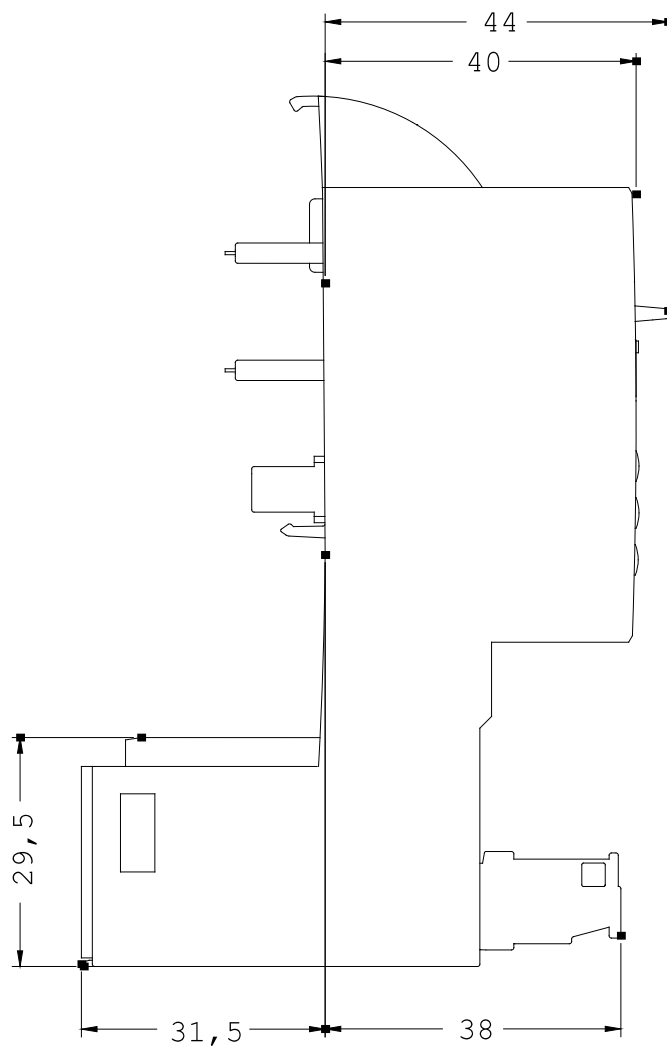
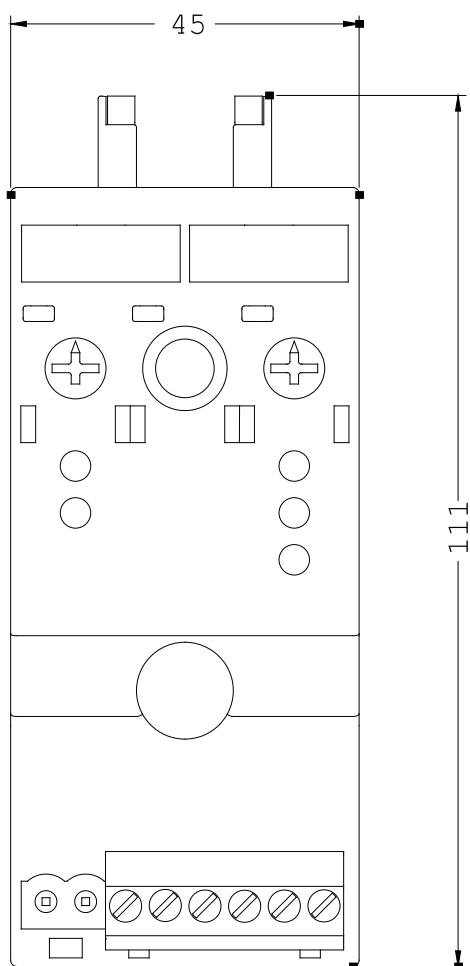
<http://www.siemens.com/cax>

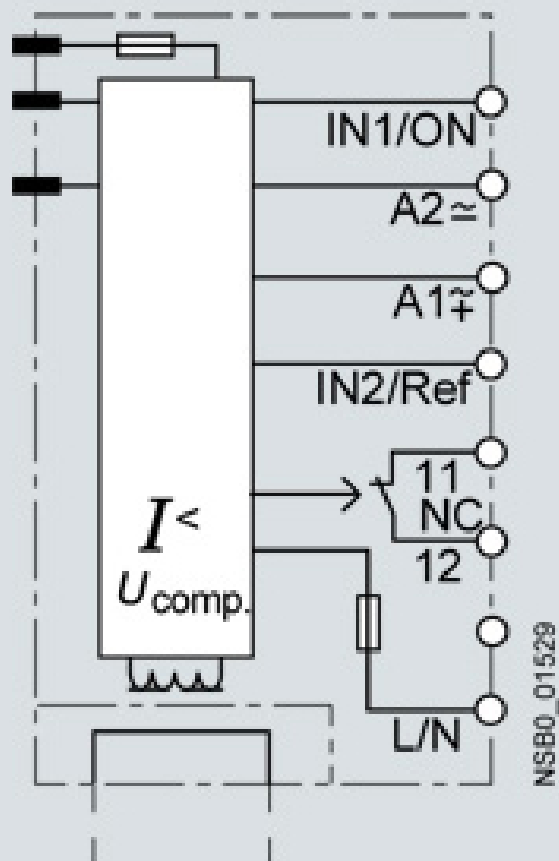
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<http://support.automation.siemens.com/WW/view/en/3RF2932-0JA13-1KK0/all>

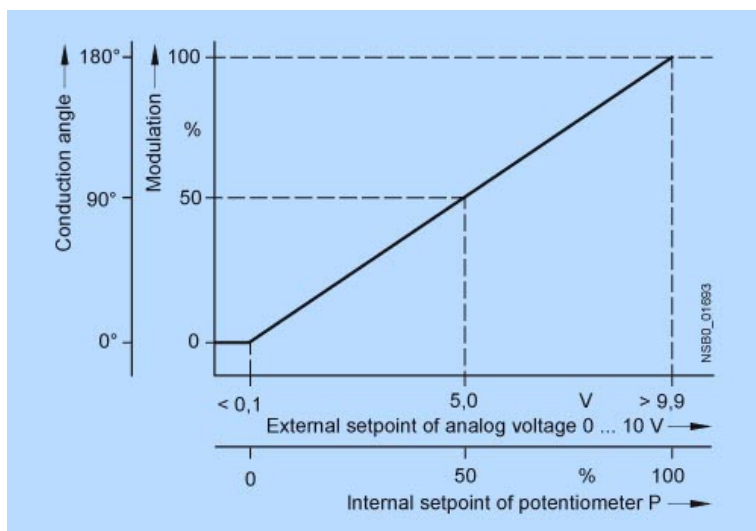
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RF2932-0JA13-1KK0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RF2932-0JA13-1KK0)





- ① Internal connection
- ② Straight-through transformer
- ③ Voltage detection not electrically isolated (3 M $\Omega$  per path)



last change:

Feb 18, 2013