








load monitoring basis current range 20 A / 40 °C control voltage 24 V DC output NO for semiconductor relay / contactor

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| product brand name | SIRIUS |
| product designation | load monitoring, basis |
| product type designation | 3RF29 |
| manufacturer's article number | |
| • _1 of the accessories that can be ordered | 3RF2900-0RA88 |
| product designation | |
| • _1 of the accessories that can be ordered | sealable end cover |
| General technical data | |
| power loss [W] for rated value of the current | |
| • without load current share typical | 0.6 W |
| insulation voltage rated value | 600 V |
| degree of pollution | 3 |
| protection class IP | IP20 |
| protection class IP on the front according to IEC 60529 | IP20 |
| shock resistance according to IEC 60068-2-27 | 15g / 11 ms |
| vibration resistance according to IEC 60068-2-6 | 2g |
| reference code according to IEC 81346-2 | B |
| Substance Prohibitance (Date) | 05/01/2012 |
| SVHC substance name | Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 |
| Weight | 70 g |
| Switching Function | |
| design of the switching function | transistor |
| Main circuit | |
| number of poles for main current circuit | 0 |
| number of NO contacts for main contacts | 0 |
| number of NC contacts for main contacts | 0 |
| type of voltage | DC |
| operating frequency rated value | 50 ... 60 Hz |
| relative symmetrical tolerance of the operating frequency | 10 % |
| operational current | |
| • at AC-51 rated value | 20 A |
| derating temperature | 40 °C |
| Control circuit/ Control | |
| type of voltage | DC |
| control supply voltage at DC rated value | 18 ... 30 V |
| control supply voltage 1 at DC rated value | 24 V |
| control supply voltage 1 at DC final rated value | 24 V |
| control supply voltage at DC full-scale value for signal<0> recognition | 5 V |

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| control current at minimum control supply voltage | | |
| • at DC | 2 mA | |
| control current at DC rated value | 25 mA | |
| Auxiliary circuit | | |
| number of NC contacts for auxiliary contacts | 0 | |
| number of NO contacts for auxiliary contacts | 0 | |
| number of CO contacts for auxiliary contacts | 0 | |
| Installation/ mounting/ dimensions | | |
| fastening method side-by-side mounting | Yes | |
| fastening method | clip-on | |
| height | 101.5 mm | |
| width | 22.5 mm | |
| depth | 67 mm | |
| Connections/ Terminals | | |
| type of electrical connection | | |
| • for auxiliary and control circuit | screw-type terminals | |
| type of connectable conductor cross-sections | | |
| • for auxiliary and control contacts | | |
| — solid | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1 mm ²) | |
| — finely stranded with core end processing | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1 mm ²) | |
| — finely stranded without core end processing | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1 mm ²) | |
| • for AWG cables for auxiliary and control contacts | 1x (20 ... 12) | |
| tightening torque for auxiliary and control contacts with screw-type terminals | 0.5 ... 0.6 N·m | |
| tightening torque [lbf·in] for auxiliary and control contacts with screw-type terminals | 4.5 ... 5.3 lbf·in | |
| design of the thread of the connection screw of the auxiliary and control contacts | M3 | |
| stripped length of the cable for auxiliary and control contacts | 7 mm | |
| Electrical Safety | | |
| protection class IP on the front according to IEC 60529 | IP20 | |
| touch protection on the front according to IEC 60529 | finger-safe, for vertical contact from the front | |
| Ambient conditions | | |
| installation altitude at height above sea level maximum | 1 000 m | |
| ambient temperature | | |
| • during operation | -25 ... +60 °C | |
| • during storage | -55 ... +80 °C | |
| Electromagnetic compatibility | | |
| conducted interference | | |
| • due to burst according to IEC 61000-4-4 | 2 kV / 5 kHz behavior criterion 2 | |
| • due to conductor-earth surge according to IEC 61000-4-5 | 2 kV behavior criterion 2 | |
| • due to conductor-conductor surge according to IEC 61000-4-5 | 1 kV behavior criterion 2 | |
| • due to high-frequency radiation according to IEC 61000-4-6 | 140 dBuV in the frequency range 0.15 ... 80 MHz, behavior criterion 1 | |
| electrostatic discharge according to IEC 61000-4-2 | 4 kV contact discharging / 8 kV air discharging, behavior criterion 2 | |
| conducted HF interference emissions according to CISPR11 | Class A for industrial environment | |
| field-bound HF interference emission according to CISPR11 | Class B for the domestic, business and commercial environments | |
| Approvals Certificates | | |
| General Product Approval | EMV | Test Certificates |
|  EG-Konf. |  |  UL |
|  |  | Type Test Certificates/Test Report |
| other | Environment | |



[Confirmation](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3RF2920-0FA08>

Cax online generator

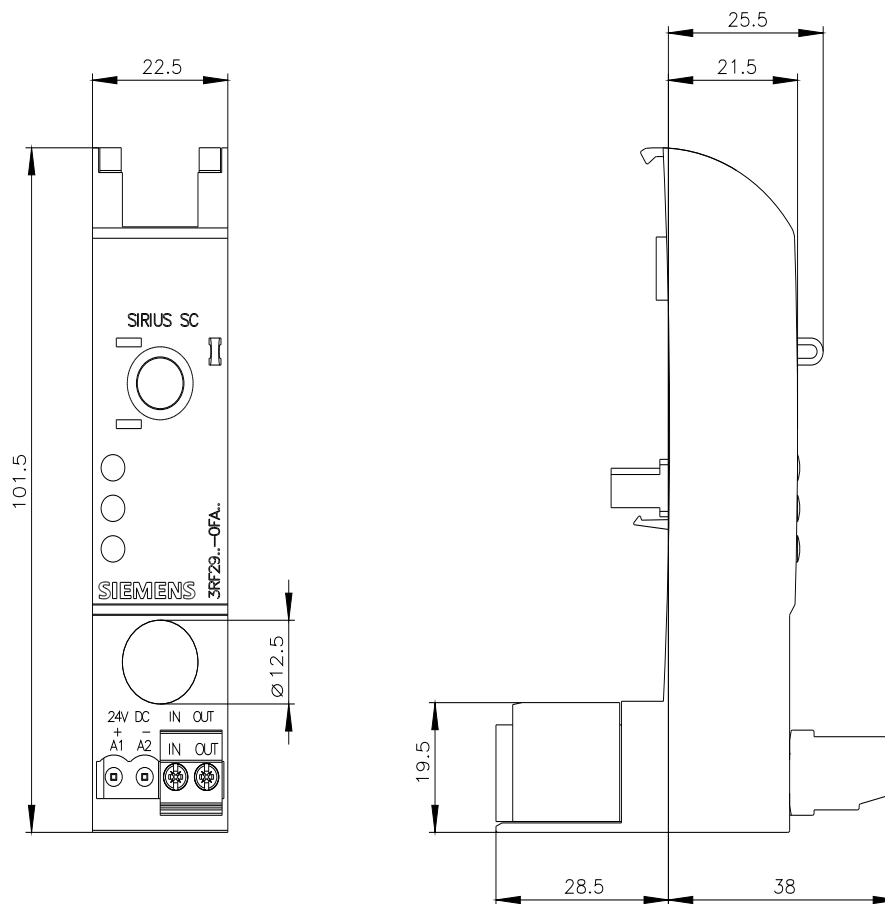
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF2920-0FA08>

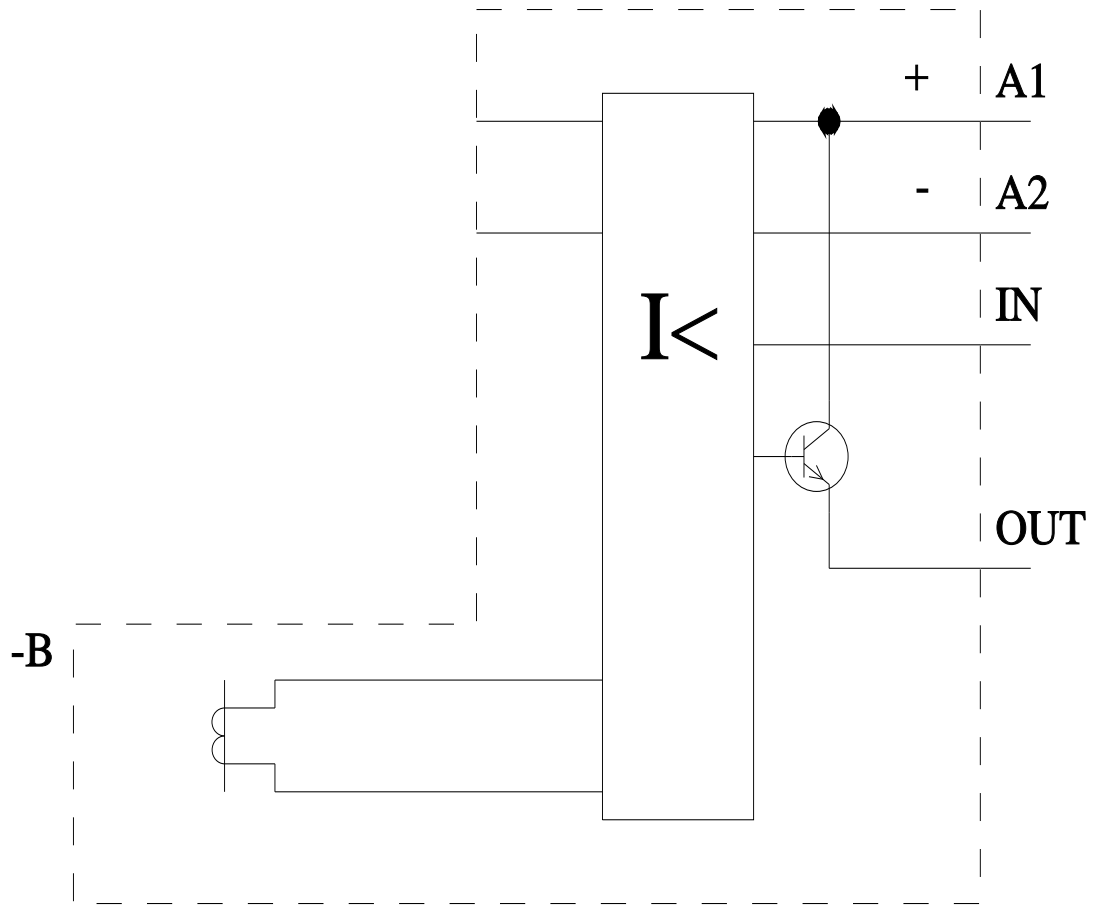
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RF2920-0FA08>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF2920-0FA08&lang=en





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8/4/2025 