SIEMENS

Data sheet 3RF2950-0GA13

Load monitoring Current range 50 A / 40 °C 110-230 V / 24 V AC/DC for semiconductor relay / contactor

product brand name	SIRIUS
product designation	load monitoring
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	
product function	solid-state relay / solid-state contactor 3RF2
power loss [W] for rated value of the current without load current share typical	1 W
insulation voltage rated value	600 V
degree of pollution	3
shock resistance acc. to IEC 60068-2-27	15g / 11 ms
vibration resistance acc. to IEC 60068-2-6	2g
design of the switching function	CO contact
reference code acc. to IEC 81346-2	B
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	AC/DC
● operating voltage at AC	
— at 50 Hz rated value	110 ... 230 V
— at 60 Hz rated value	110 ... 230 V
operating frequency rated value	50 ... 60 Hz
relative symmetrical tolerance of the operating frequency	10 %
operating range relative to the operating voltage at AC	
● at 50 Hz	93.5 ... 253 V
● at 60 Hz	93.5 ... 253 V
operational current	
● at AC-1 at 400 V rated value	50 A
● at AC-51 rated value	50 A
derating temperature	40 °C
Control circuit/ Control	
type of voltage	AC/DC
● control supply voltage at AC at 50 Hz rated value	20.5 ... 26.5 V

Subject to change without notice
© Copyright Siemens

● control supply voltage at AC at 60 Hz rated value	20.5 ... 26.5 V
● control supply voltage at DC rated value	18 ... 30 V
control supply voltage 1	
● at DC	24 V
control supply voltage at AC	
● at 50 Hz full-scale value for signal<0> recognition	5 V
● at 60 Hz full-scale value for signal<0> recognition	5 V
control supply voltage at DC full-scale value for signal<0> recognition	5 V
supply voltage frequency for auxiliary and control circuit rated value	50 ... 60 Hz
symmetrical line frequency tolerance	5 Hz
control current at minimum control supply voltage	
● at AC	2 mA
● at DC	2 mA
control current at AC rated value	40 mA
control current at DC rated value	40 mA
Auxiliary circuit	
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
number of CO contacts for auxiliary contacts	1
Installation/ mounting/ dimensions	
fastening method	clip-on
● side-by-side mounting	Yes
height	111.5 mm
width	45 mm
depth	69.5 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 mm²), 2x (0.5 ... 1.0 mm²)
— finely stranded with core end processing	1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.0 mm²)
— finely stranded without core end processing	1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.0 mm²)
● at AWG cables for auxiliary and control contacts	1x (AWG 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
UL/CSA ratings	
Safety related data	
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. 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
● ambient temperature during storage	-55 ... +80 °C
Electromagnetic compatibility	
conducted interference	
● 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

Subject to change without notice
© Copyright Siemens

● due to high-frequency radiation acc. to IEC 61000-4-6	140 dBuV in the frequency range 0.15 ... 80 MHz, behavior criterion 1
electrostatic discharge acc. to IEC 61000-4-2	4 kV contact discharging / 8 kV air discharging, behavior criterion 2
conducted HF interference emissions acc. to CISPR11	Class A for industrial environment
field-bound HF interference emission acc. to CISPR11	Class B for the domestic, business and commercial environments

Short-circuit protection, design of the fuse link

Certificates/ approvals

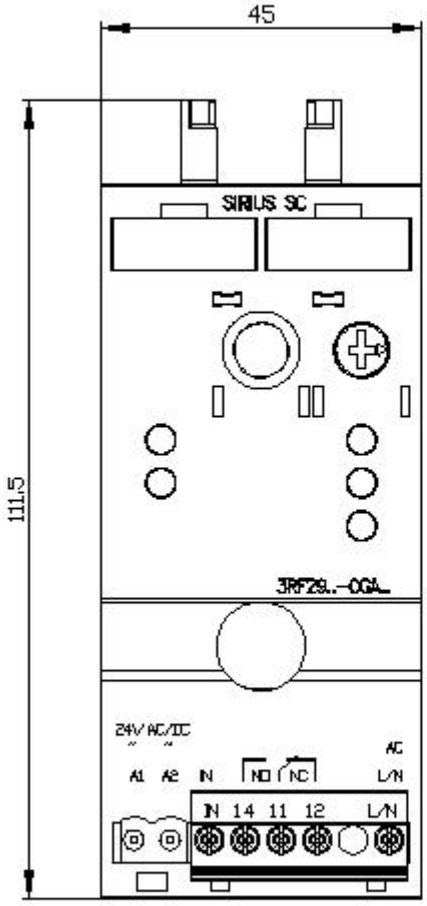
General Product Approval	EMC	Declaration of Conformity	
			Miscellaneous

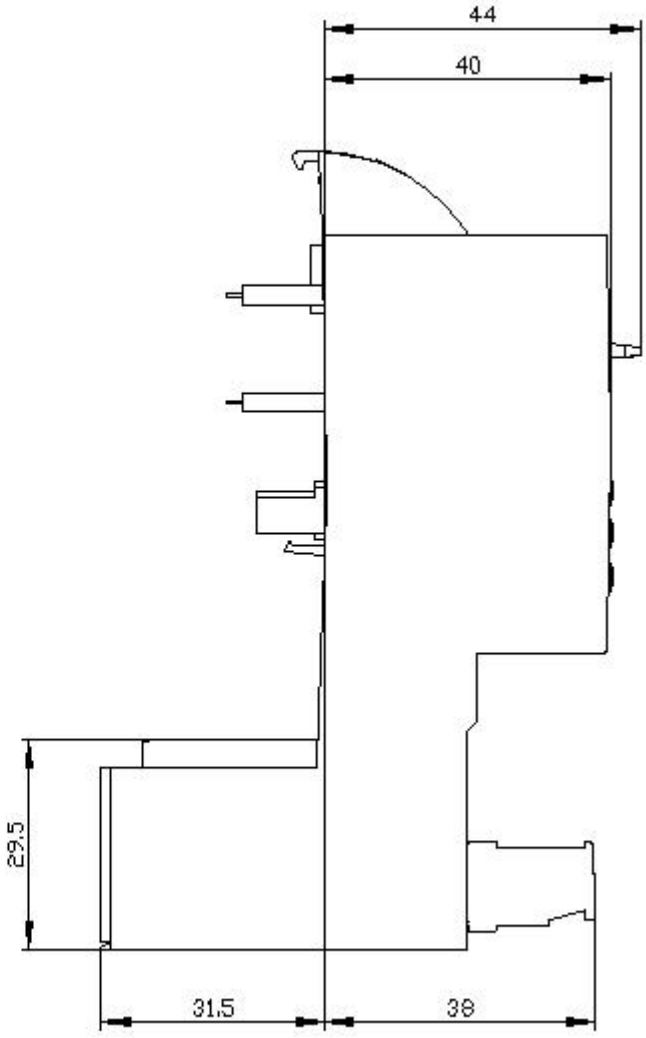
Test Certificates	other
Type Test Certificates/Test Report	Confirmation

Further information

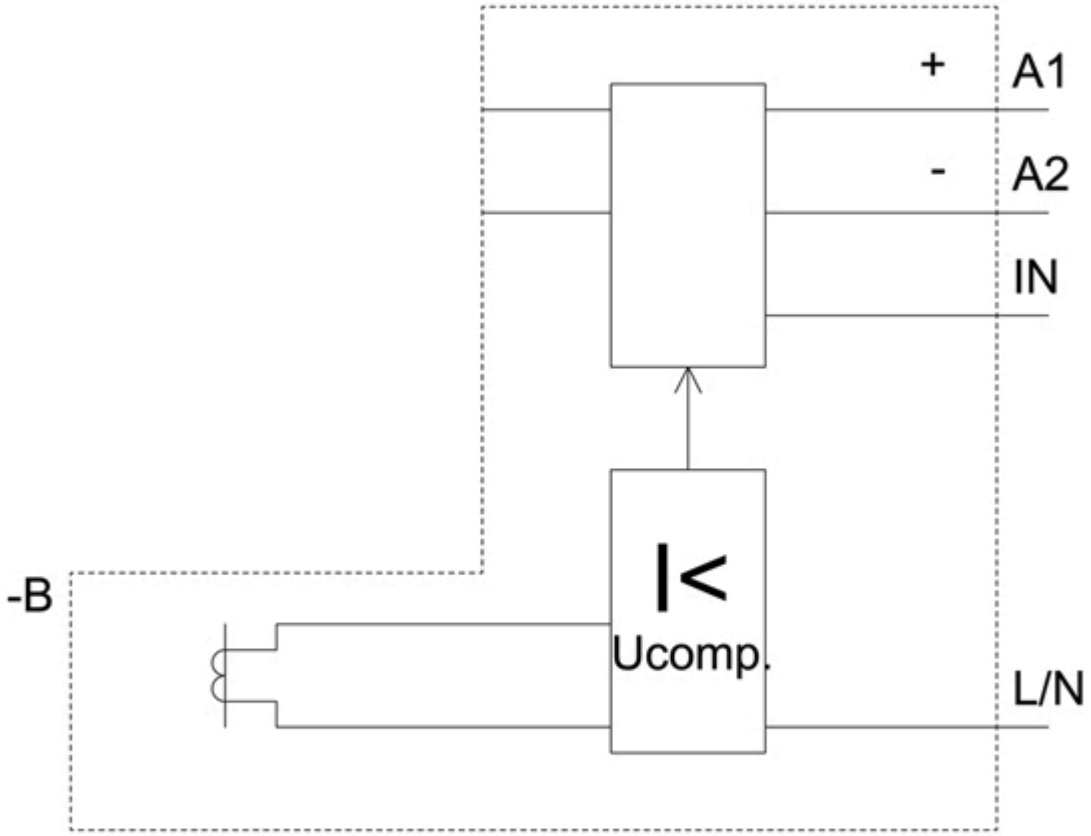
Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/ic10
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RF2950-0GA13
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF2950-0GA13
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RF2950-0GA13
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF2950-0GA13&lang=en

Subject to change without notice
© Copyright Siemens





Subject to change without notice
© Copyright Siemens



last modified: 12/15/2020

Subject to change without notice
© Copyright Siemens