



Power regulator Current range 90 A / 40 °C 400-600 V / 24 V AC/DC for semiconductor relay / contactor

product brand name	SIRIUS
product designation	power regulator
manufacturer's article number	
• _1 of the accessories that can be ordered	3RF2900-0RA88
• _2 of the accessories that can be ordered	4EU2452-3UA00-0AA0
product designation	
• _1 of the accessories that can be ordered	sealable end cover
• _2 of the accessories that can be ordered	input reactor / 1AC
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	NC contact
reference code acc. to IEC 81346-2	K
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	400 ... 600 V
— at 60 Hz rated value	400 ... 600 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	340 ... 660 V
• at 60 Hz	340 ... 660 V
operational current	
• at AC-1 at 400 V rated value	90 A
• at AC-51 rated value	90 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
• 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	0
number of CO contacts for auxiliary contacts	0
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 mm ²), 2x (0.5 ... 1.0 mm ²)
— finely stranded with core end processing	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.0 mm ²)
— finely stranded without core end processing	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.0 mm ²)
• 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
- due to high-frequency radiation acc. to IEC 61000-4-6

1 kV behavior criterion 2

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=3RF2990-0HA16>

Cax online generator

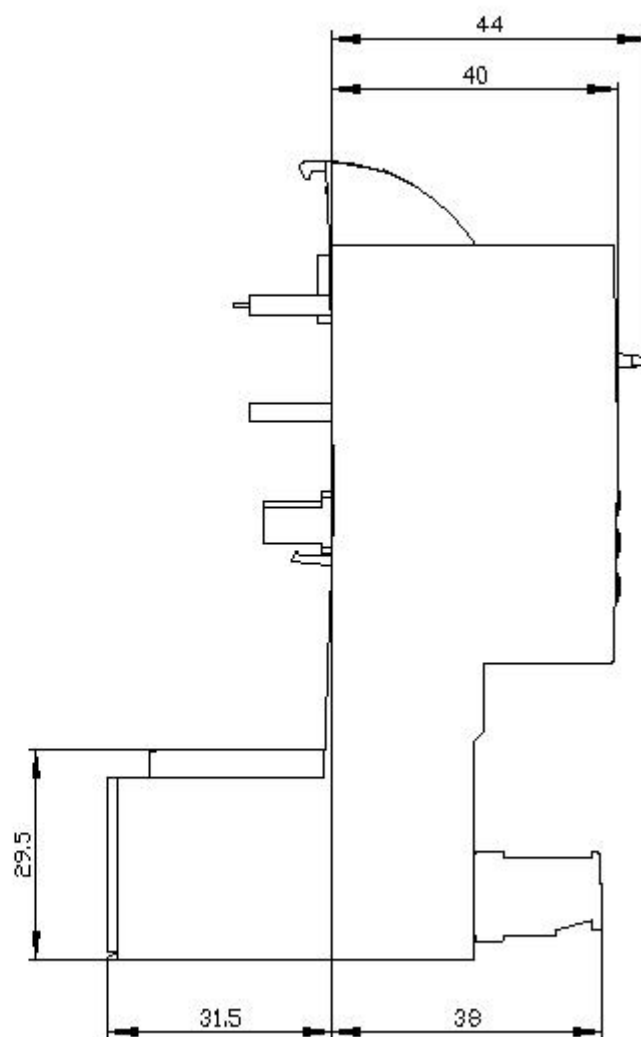
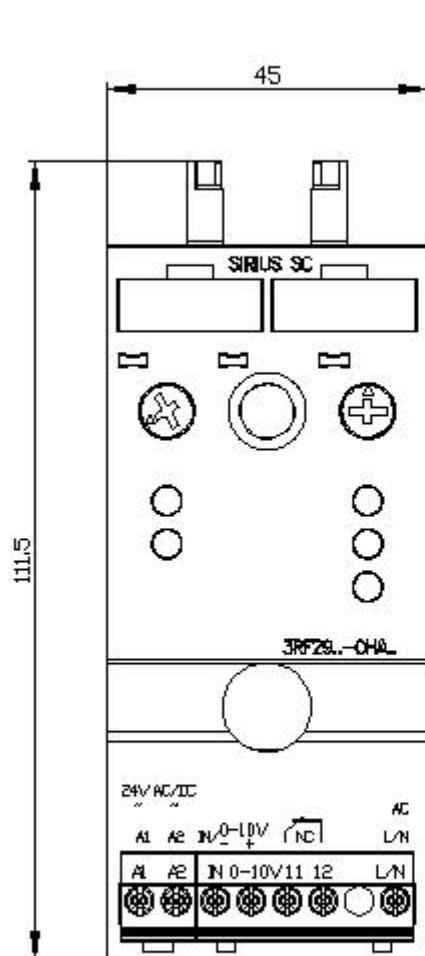
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF2990-0HA16>

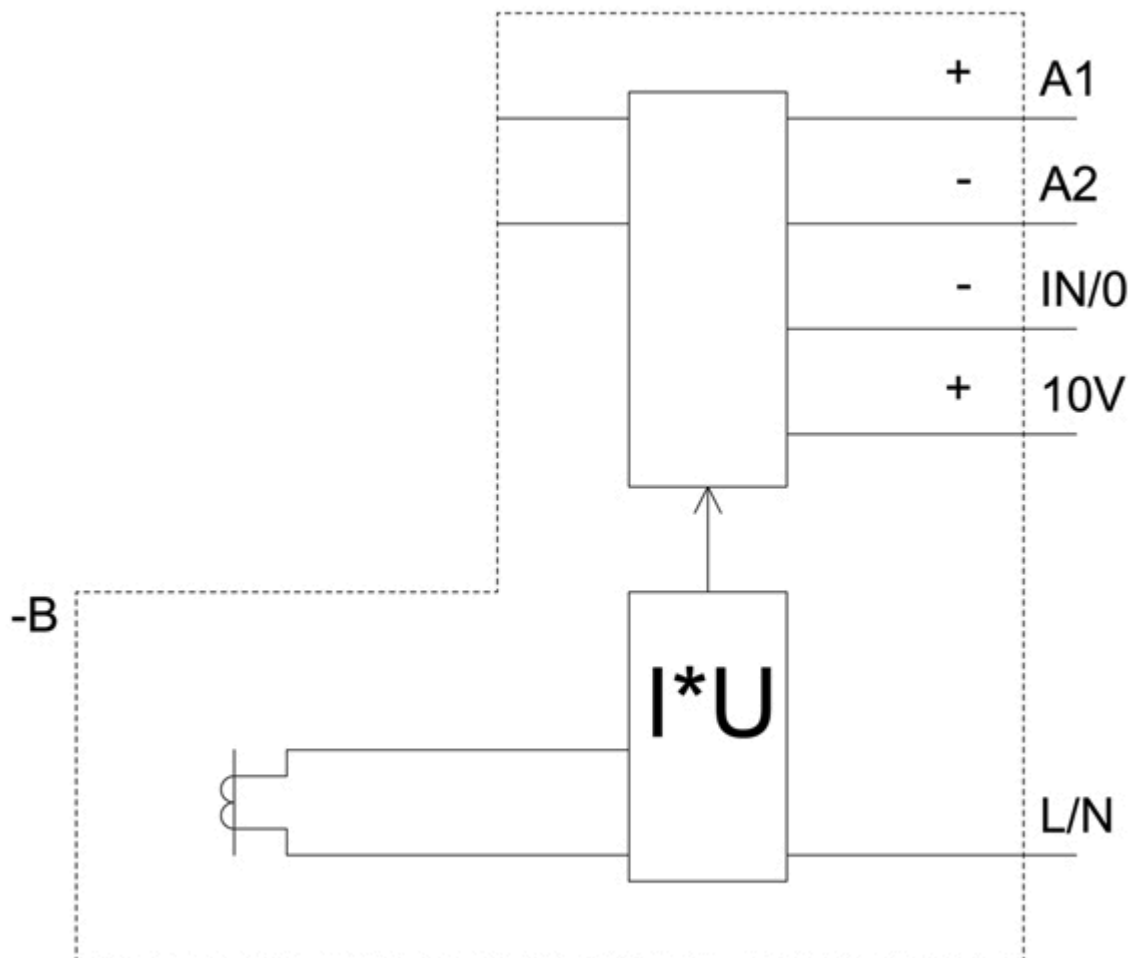
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RF2990-0HA16>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF2990-0HA16&lang=en





last modified:

12/15/2020 [🔗](#)