

Power controller Current range 50 A / 40 °C 110-230 V / 24 V AC/DC for semiconductor relay / contactor with partial load monitoring



product brand name	SIRIUS
product designation	power controller
manufacturer's article number	
<ul style="list-style-type: none"> • _1 / of the accessories that can be ordered • _2 / of the accessories that can be ordered 	3RF2900-0RA88 4EM5001-1CB00
product designation	
<ul style="list-style-type: none"> • _1 / of the accessories that can be ordered • _2 / of the accessories that can be ordered 	sealable end cover input reactor / 1AC

General technical data	
product function	solid-state relay / solid-state contactor 3RF2
insulation voltage	
<ul style="list-style-type: none"> • 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 EN 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
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
operating current	
• at AC-51 / rated value	50 A
derating temperature	40 °C

Control circuit/ Control

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
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
number of NC contacts / for auxiliary contacts	1
number of NO contacts / for auxiliary contacts	1
number of CO contacts / for auxiliary contacts	0

Installation/ mounting/ dimensions

mounting type	clip-on
• side-by-side mounting	Yes
height	111.5 mm
width	45 mm
depth	69.5 mm

Connections/ Terminals	
type of electrical connection <ul style="list-style-type: none"> • for auxiliary and control current circuit 	screw-type terminals
type of connectable conductor cross-sections <ul style="list-style-type: none"> • for auxiliary and control contacts <ul style="list-style-type: none"> — solid — finely stranded / with core end processing — finely stranded / without core end processing • at AWG conductors / for auxiliary and control contacts 	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.0 mm ²) 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.0 mm ²) 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.0 mm ²) 1x (AWG 20 ... 12)
tightening torque <ul style="list-style-type: none"> • for auxiliary and control contacts / with screw-type terminals 	0.5 ... 0.6 N·m
tightening torque [lbf-in] <ul style="list-style-type: none"> • for auxiliary and control contacts / with screw-type terminals 	4.5 ... 5.3 lbf-in
design of the thread / of the connection screw <ul style="list-style-type: none"> • of the auxiliary and control contacts 	M3
wire stripping length / of the cable <ul style="list-style-type: none"> • for auxiliary and control contacts 	7 mm
Ambient conditions	
installation altitude / at height above sea level / maximum	1 000 m
ambient temperature <ul style="list-style-type: none"> • during operation • during storage 	-25 ... +60 °C -55 ... +80 °C
Electromagnetic compatibility	
conducted interference <ul style="list-style-type: none"> • due to burst / acc. to IEC 61000-4-4 • due to conductor-earth surge / acc. to IEC 61000-4-5 • due to conductor-conductor surge / acc. to IEC 61000-4-5 • due to high-frequency radiation / acc. to IEC 61000-4-6 	2 kV / 5 kHz behavior criterion 2 2 kV behavior criterion 2 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
Certificates/ approvals	

General Product Approval	EMC	Declaration of Conformity
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[Miscellaneous](#)

Test Certificates	other
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[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=3RF2950-0KA13>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF2950-0KA13>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RF2950-0KA13>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF2950-0KA13&lang=en



