SIEMENS

Data sheet 3RQ3118-2AF00



Output coupler with plug-in Relay, 1 change-over contact Spring-type terminal (push-in) 230 V AC/DC Enclosure width 6.2 mm Thermal current 6A

product brand name	SIRIUS
product category	SIRIUS 3RQ3 coupling relays in slim design
product designation	Coupling relays with plug-in relay
design of the product	Output coupling link
product type designation	3RQ3
General technical data	
display version LED	Yes
product component	
 relay output 	Yes
semi-conductor output	No
consumed active power	1 W
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
surge voltage resistance rated value	4 kV
maximum permissible voltage for safe isolation	
 between control and auxiliary circuit 	300 V
percental drop-out voltage related to the input voltage	10 %
protection class IP	IP20
shock resistance	
• acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
vibration resistance	
• acc. to IEC 60068-2-6	6 150 Hz: 2 g
operating frequency maximum	72 000 1/h
switching behavior	monostable
mechanical service life (switching cycles) typical	10 000 000
thermal current	6 A
reference code acc. to IEC 81346-2	K
Control circuit/ Control	
control supply voltage at AC	
 at 50 Hz rated value 	230 V
at 60 Hz rated value	230 V
control supply voltage frequency	
• 1 rated value	50 Hz
2 rated value	60 Hz
control supply voltage at DC	
rated value	230 V
operating range factor control supply voltage rated value at DC	

initial value	0.8
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.8
full-scale value	1.1
operating range factor control supply voltage rated	1.1
value at AC at 60 Hz	
initial value	0.8
full-scale value	1.1
switch ON delay time	
at AC maximum	9 ms
at DC maximum	8 ms
OFF delay time	19 ms
design of the relay operating mechanism	poled
product component plug-in socket	Yes
Short-circuit protection	
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gG: 4 A
Auxiliary circuit	
type of switching contact	Changeover contact
material of switching contacts	AgSnO2
number of CO contacts for auxiliary contacts	1
operational current of auxiliary contacts at AC-15	
• at 24 V	3 A
● at 250 V	3 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1 A
● at 125 V	0.2 A
● at 250 V	0.1 A
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (17
,	V, 5 mA)
Main circuit	
Main circuit	
	V, 5 mA)
Main circuit type of voltage Inputs/ Outputs	V, 5 mA)
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof	V, 5 mA) AC/DC
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs	V, 5 mA) AC/DC No
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz	V, 5 mA) AC/DC
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13	V, 5 mA) AC/DC No 3 A
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz	V, 5 mA) AC/DC No
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V	V, 5 mA) AC/DC No 3 A 1 A
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V	V, 5 mA) AC/DC No 3 A 1 A 0.2 A
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V	V, 5 mA) AC/DC No 3 A 1 A 0.2 A 0.1 A
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1	V, 5 mA) AC/DC No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector)
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V Electromagnetic compatibility	V, 5 mA) AC/DC No 3 A 1 A 0.2 A 0.1 A
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMC immunity acc. to IEC 60947-1	V, 5 mA) AC/DC No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector)
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMC immunity acc. to IEC 60947-1 conducted interference • due to burst acc. to IEC 61000-4-4	V, 5 mA) AC/DC No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3
type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMC immunity acc. to IEC 60947-1 conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5	V, 5 mA) AC/DC No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMC immunity acc. to IEC 60947-1 conducted interference • due to burst acc. to IEC 61000-4-4	V, 5 mA) AC/DC No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMC immunity acc. to IEC 60947-1 conducted interference • 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	V, 5 mA) AC/DC No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMC immunity acc. to IEC 60947-1 conducted interference • 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	V, 5 mA) AC/DC No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMC immunity acc. to IEC 60947-1 conducted interference • 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 field-based interference acc. to IEC 61000-4-3	V, 5 mA) AC/DC No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMC immunity acc. to IEC 60947-1 conducted interference • 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 field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2	No No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMC immunity acc. to IEC 60947-1 conducted interference • 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 field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Display	No No No AC/DC No 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMC immunity acc. to IEC 60947-1 conducted interference • 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 field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Display display version as status display by LED	No No No AC/DC No 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge
Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13	V, 5 mA) AC/DC No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge
Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13	No AC/DC No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge

at DC maximum	1 000 m	
type of connectable conductor cross-sections		
• solid	1x (0.25 2.5 mm²)	
 finely stranded with core end processing 	1x (0.25 1.5 mm²)	
 finely stranded without core end processing 	1x (0.25 2.5 mm²)	
 at AWG cables solid 	1 x (20 14)	
at AWG cables stranded	1x (20 14)	
• connectable conductor cross-section solid	0.25 2.5 mm²	
 connectable conductor cross-section finely stranded with core end processing 	0.25 1.5 mm²	
 connectable conductor cross-section finely stranded without core end processing 	0.25 2.5 mm ²	
 AWG number as coded connectable conductor cross section solid 	20 14	
 AWG number as coded connectable conductor cross section stranded 	20 14	
nstallation/ mounting/ dimensions		
mounting position	any	
fastening method	snap-on mounting	
height	93 mm	
width	6.2 mm	
depth	76 mm	
required spacing		
 with side-by-side mounting 		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
— downwards	0 mm	
— at the side	0 mm	
 for grounded parts 		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
— at the side	0 mm	
— downwards	0 mm	
for live parts		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
— downwards	0 mm	
— at the side	0 mm	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature during operation	-25 +60 °C	
ambient temperature during storage	-40 +85 °C	
ambient temperature during transport	-40 +85 °C	
relative humidity during operation	10 95 %	
Certificates/ approvals		
General Product Approval	EMC	







EAC





Declaration of Conformity

Marine / Shipping

other





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=3RQ3118-2AF00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3118-2AF00

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

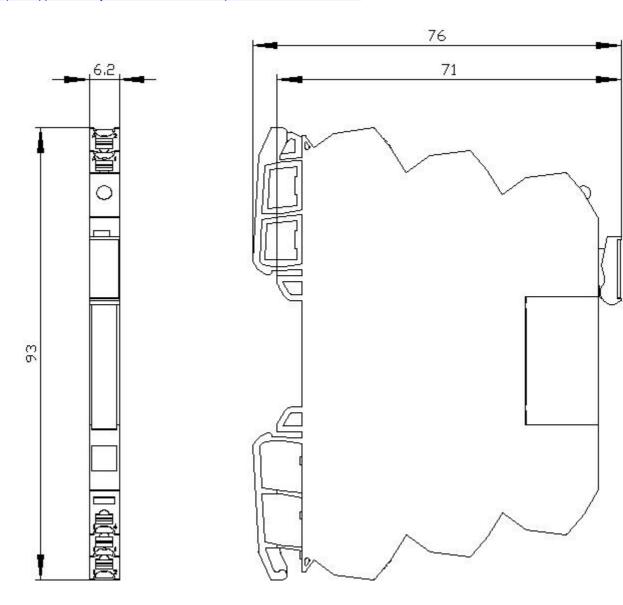
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-2AF00

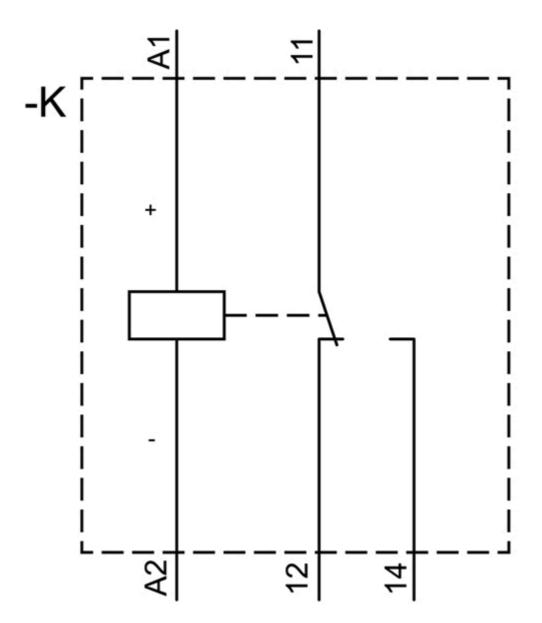
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3118-2AF00&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-2AF00/manual





last modified: 8/11/2020 🖸