SIEMENS

Data sheet

3RQ3118-2AB00



Output coupler with plug-in Relay, 1 change-over contact Spring-type terminal (push-in) 24 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	0.3 W
insulation voltage for overvoltage category III according to	300 V
IEC 60664 with degree of pollution 3 rated value	
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	К
Control circuit/ Control	
control supply voltage at AC	
 at 50 Hz rated value 	24 V
• at 60 Hz rated value	24 V
control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
control supply voltage at DC	
rated value	24 V
operating range factor control supply voltage rated value at DC	

 initial value 	0.8
full-scale value	1.25
operating range factor control supply voltage rated	
value at AC at 50 Hz	
• initial value	0.8
full-scale value	1.25
operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.8
• full-scale value	1.25
switch ON delay time	
at AC maximum	12 ms
 at DC maximum 	12 ms
OFF delay time	14 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	
type of voltage	AC/DC
	AC/DC
type of voltage	AC/DC No
type of voltage Inputs/ Outputs	
type of voltage Inputs/ Outputs property of the output short-circuit proof	
type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs	No
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	No
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	No 3 A 1 A 0.2 A
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	No 3 A 1 A
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	No 3 A 1 A 0.2 A
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	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector)
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	No 3 A 1 A 0.2 A 0.1 A
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	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	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV
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	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
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-carth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5	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
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 ant 24 V ant 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-conductor surge acc. to IEC 61000-4-5 field-based interference acc. to IEC 61000-4-3	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
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 25 V at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 Conducted interference due to burst acc. to IEC 61000-4-4 due to conductor-canductor surge acc. to IEC 61000-4-5 due to conductor-conductor surge acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 	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
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-canductor surge acc. to IEC 61000-4-5 field-based interference acc. to IEC 61000-4-2 Display	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
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 EMC immunity acc. to IEC 61000-4-4 • due to burst acc. to IEC 61000-4-4 • due to conductor-canductor surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Display display version as status display by LED	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
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 conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-conductor surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Display display version as status display by LED Connections/ Terminals	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 LED green
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 conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-canth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Display display version as status display by LED Connections/ Terminals product function removable terminal	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 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge LED green No
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 inmunity acc. to IEC 61000-4-4 due to burst acc. to IEC 61000-4-4 due to conductor-conductor surge acc. to IEC 61000-4-5 due to conductor-conductor surge acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Display display version as status display by LED 	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 AC maximum 	500 m
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	0.25 1.5 mm ²
with core end processing	0.20 1.0 mm
connectable conductor cross-section finely stranded	0.25 2.5 mm²
without core end processing	
 AWG number as coded connectable conductor 	20 14
cross section solid	
 AWG number as coded connectable conductor 	20 14
cross section stranded	
Installation/ 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
upwordo	0 mm
— upwards	
— at the side	0 mm
— at the side — downwards	0 mm 0 mm
 at the side downwards for live parts 	0 mm
 at the side downwards for live parts forwards 	0 mm 0 mm
 at the side downwards for live parts forwards backwards 	0 mm 0 mm 0 mm
 at the side downwards for live parts forwards backwards upwards 	0 mm 0 mm
 at the side downwards for live parts forwards backwards 	0 mm 0 mm 0 mm
 at the side downwards for live parts forwards backwards upwards downwards at the side 	0 mm 0 mm 0 mm 0 mm
 at the side downwards for live parts forwards backwards upwards downwards 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
 at the side downwards for live parts forwards backwards upwards downwards at the side 	0 mm 0 mm 0 mm 0 mm 0 mm
 at the side downwards for live parts forwards backwards upwards downwards at the side Ambient conditions	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
 at the side downwards for live parts forwards backwards backwards upwards downwards at the side Ambient conditions installation altitude at height above sea level maximum	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 2 000 m
 at the side downwards for live parts forwards backwards backwards upwards downwards at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 2 000 m -25 +60 °C
 at the side downwards for live parts forwards backwards backwards upwards downwards at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C
 at the side downwards for live parts forwards backwards backwards upwards downwards at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during transport 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C -40 +85 °C
 at the side downwards for live parts forwards backwards backwards upwards downwards at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during transport relative humidity during operation 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C -40 +85 °C
 at the side downwards for live parts forwards bockwards backwards upwards downwards at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during storage ambient temperature during transport 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C -40 +85 °C 10 95 %
 at the side downwards for live parts forwards bockwards backwards upwards downwards at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during storage ambient temperature during transport 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C -40 +85 °C 10 95 % EMC
 at the side downwards for live parts forwards bockwards backwards upwards downwards at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during storage ambient temperature during transport 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C -40 +85 °C 10 95 % EMC
 at the side downwards for live parts forwards bockwards backwards upwards downwards at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during storage ambient temperature during transport 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C -40 +85 °C 10 95 %
 at the side downwards for live parts forwards bockwards backwards upwards downwards at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during storage ambient temperature during transport 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C -40 +85 °C 10 95 % EMC
 at the side downwards for live parts forwards bockwards backwards upwards downwards at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during storage ambient temperature during transport 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C -40 +85 °C 10 95 % EMC
 at the side downwards for live parts forwards bockwards backwards upwards downwards at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during storage ambient temperature during transport 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C -40 +85 °C 10 95 % EMC EMC EMC





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=3RQ3118-2AB00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3118-2AB00

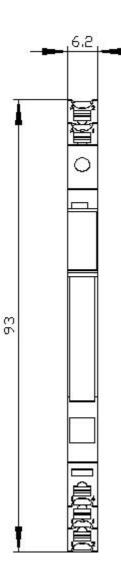
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

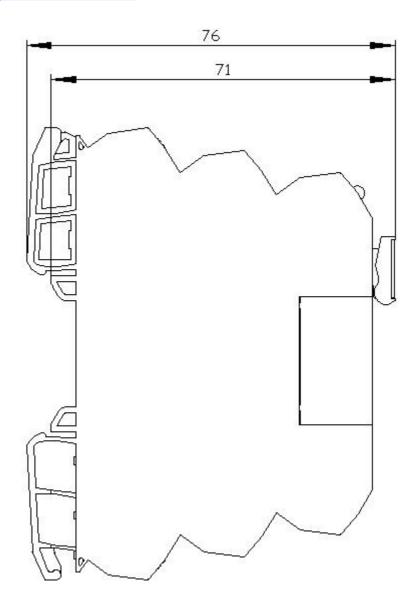
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-2AB00

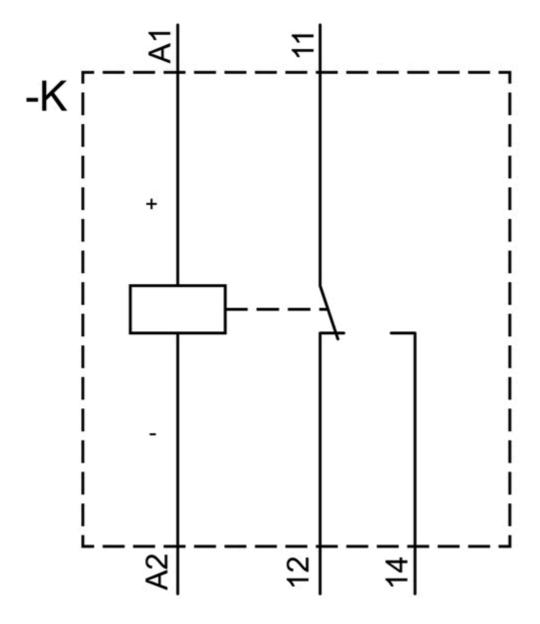
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3118-2AB00&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-2AB00/manual







last modified:

10/24/2020 🖸