## **SIEMENS**

Data sheet 3RQ3018-2AE00



Output coupler Relay coupler, 1 change-over contact 115 V AC/DC Overall width 6.2 mm Spring-type terminal (push-in) Thermal current 6A  $\,$ 

product brand name	SIRIUS
product category	SIRIUS 3RQ3 coupling relays in slim design
product designation	Coupling relays with relay output (not plug-in)
design of the product	Output coupling link
product type designation	3RQ3
General technical data	
display version LED	Yes
product component	
<ul> <li>relay output</li> </ul>	Yes
semi-conductor output	No
consumed active power	0.5 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	
<ul> <li>between control and auxiliary circuit</li> </ul>	300 V
percental drop-out voltage related to the input voltage	9.6 %
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	
<ul> <li>at 50 Hz rated value</li> </ul>	115 V
at 60 Hz rated value	115 V
control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
control supply voltage at DC	
rated value	115 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 value at AC at 60 Hz	
• initial value	0.8
full-scale value	1.1
switch ON delay time	
at AC maximum	8 ms
at DC maximum	6 ms
OFF delay time	17 ms
design of the relay operating mechanism	poled
product component plug-in socket	No
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 auxiliany contacts	
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
Contact reliability of auxiliary contacts  Main circuit	
Main circuit	V, 5 mA)
Main circuit type of voltage	V, 5 mA)
Main circuit type of voltage Inputs/ Outputs	V, 5 mA)  AC/DC
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  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	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  • at 250 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  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	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	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  conducted interference	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
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
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	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	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	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  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
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
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  Connections/ Terminals	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
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
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  Connections/ Terminals	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 the side	0 mm
— at the side	0 mm
— downwards	0 mm
— upwards	0 mm
— backwards	0 mm
— forwards	0 mm
	0 mm
	0
<ul> <li>with side-by-side mounting</li> </ul>	
required spacing	
with side-by-side mounting	
<ul> <li>with side-by-side mounting</li> </ul>	
	0.000
	0 mm
— forwards	0 mm
— backwards	0 mm
— backwards	U mm
unwarde	0 mm
— upwards	0 mm
— downwards	0 mm
— downwards	0 mm
at the side	0 mm
— at the side	0 mm
	•
<ul> <li>for grounded parts</li> </ul>	
-	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— at the side	0 mm
<ul><li>downwards</li></ul>	0 mm
• for live parts	
<ul> <li>for live parts</li> </ul>	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
·	
— downwards	0 mm
— at the side	0 mm
	U IIIIII
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
<ul> <li>ambient temperature during operation</li> </ul>	-25 +60 °C
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<ul> <li>ambient temperature during storage</li> </ul>	-40 +85 °C
	-40 +85 °C
ambient temperature during transport	
relative humidity during operation	10 95 %
Certificates/ approvals	













**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=3RQ3018-2AE00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-2AE00

 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$ 

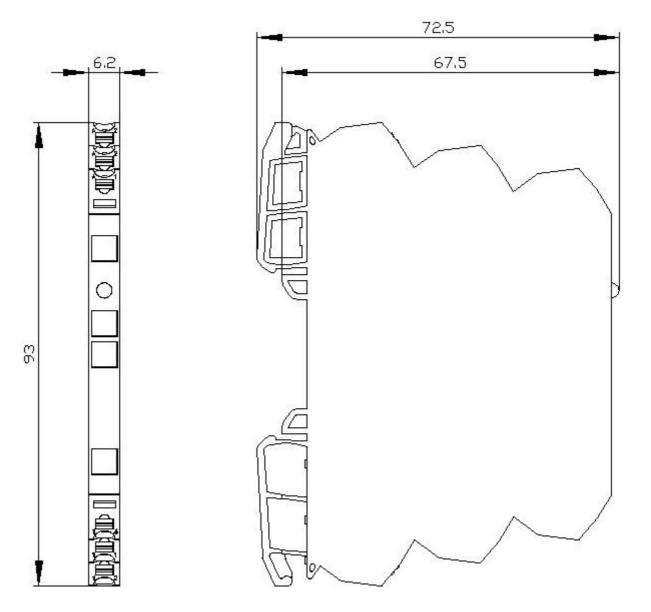
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AE00

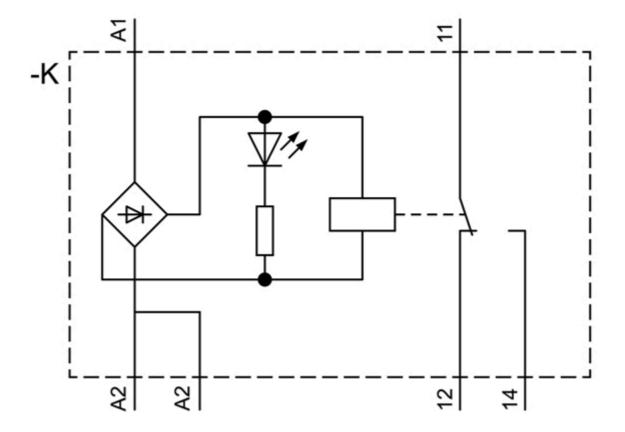
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http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3018-2AE00&lang=en

**Characteristic: Derating** 

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