SIEMENS

Data sheet

3RQ3018-1AE00



Output coupler Relay coupler, 1 change-over contact 115 V AC/DC Overall width 6.2 mm screw terminal 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	
 relay output 	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	
 between control and auxiliary circuit 	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	К
Control circuit/ Control	
control supply voltage at AC	
• at 50 Hz rated value	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 auxiliary contacts	one incorrect switching operation of 100 million switching operations (17 V, 5 mA) $$
Main circuit	
type of voltage	AC/DC
Inputs/ Outputs	
property of the output short-circuit proof	No
Outputs	
ampacity of the output relay at AC-15 at 250 V at 50/60 Hz	3 A
ampacity of the output relay at DC-13	
• at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A
Electromagnetic compatibility	
EMC emitted interference acc. to IEC 60947-1	ambience A (industrial sector)
EMC immunity acc. to IEC 60947-1	corresponds to degree of severity 3
conducted interference	
• due to burst acc. to IEC 61000-4-4	2 kV
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
• due to conductor-conductor surge acc. to IEC	1 kV
61000-4-5	
field-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
Display	
display version as status display by LED	LED green
Connections/ Terminals	
product function removable terminal	No
type of electrical connection for auxiliary and control circuit	screw-type terminals
wire length	

• 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 mm ²)
at AWG cables solid	1 x (20 14)
connectable conductor cross-section solid	0.25 2.5 mm² 0.25 1.5 mm²
connectable conductor cross-section finely stranded with core end processing	0.25 1.5 mm ⁻
AWG number as coded connectable conductor cross section solid	20 14
 tightening torque with screw-type terminals 	0.5 0.6 N·m
Installation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on mounting
height	93 mm
width	6.2 mm
depth	72.5 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
	0 mm
 for grounded parts forwards 	0 mm
— lorwards — 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
— upwards — downwards	0 mm 0 mm
upwardsdownwardsat the side	0 mm
 upwards downwards at the side Ambient conditions 	0 mm 0 mm
upwardsdownwardsat the side	0 mm 0 mm
 upwards downwards at the side Ambient conditions 	0 mm 0 mm 0 mm
 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 2 000 m
 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 2 000 m -25 +60 °C
 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 2 000 m -25 +60 °C -40 +85 °C
 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 2 000 m -25 +60 °C -40 +85 °C -40 +85 °C
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 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 Certificates/ approvals 	0 mm 0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C -40 +85 °C 10 95 % EMC
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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=3RQ3018-1AE00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-1AE00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AE00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3018-1AE00&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AE00/manual







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