SIEMENS

Data sheet 3RQ3018-1AF00



Output coupler Relay coupler, 1 change-over contact 230 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	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 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	No
Short-circuit protection	F
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	4.0
• at 24 V	1 A
at 125 Vat 250 V	0.2 A 0.1 A
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (17
contact rollability of auxiliary contacts	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 61000-4-5	1 kV
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	1 000 111		
solid	1x (0.25 2.5 mm²)		
finely stranded with core end processing	1x (0.25 1.5 mm²)		
at AWG cables solid	1 x (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		
AWG number as coded connectable conductor	20 14		
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		
 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	0.000		
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	













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=3RQ3018-1AF00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-1AF00

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

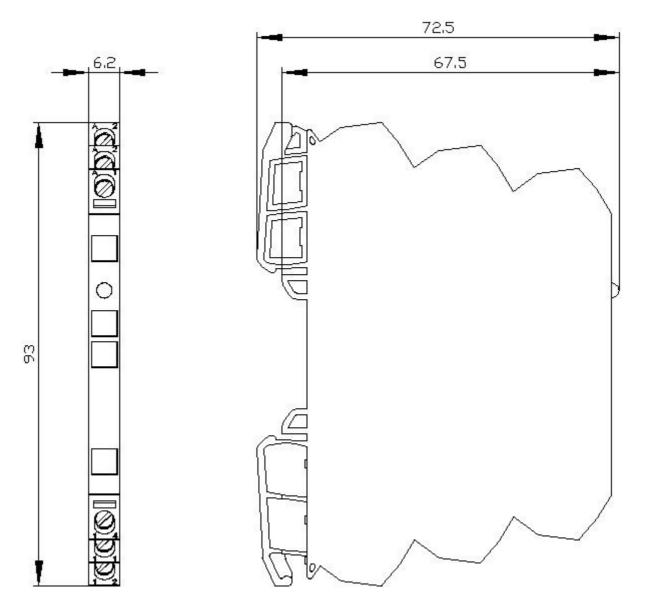
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AF00

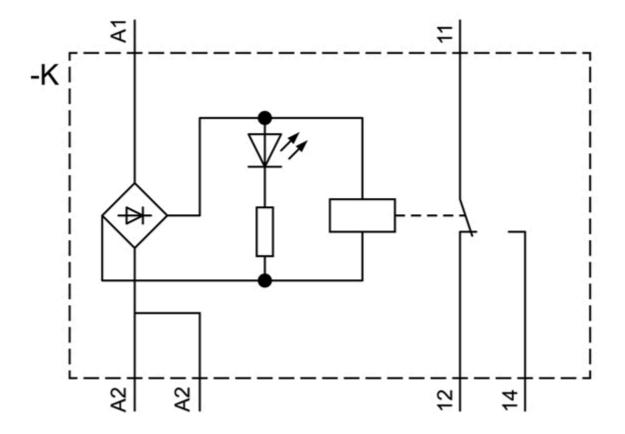
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3018-1AF00&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AF00/manual





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