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 DIN EN 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	fuse gG: 4 A	

required

Auxiliary circuit	
type of switching contact	Changeover contact
material of switching contacts	AgSnO2
number of CO contacts	
for auxiliary contacts	1
operating current of auxiliary contacts at AC-15	
● at 24 V	3 A
● at 250 V	3 A
operating 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	3 A
• at 250 V at 50/60 Hz	34
ampacity of the output relay at DC-13	1 A
• at 24 V	
• 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)
EMI 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-bound parasitic coupling 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 current 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 mm²)	
• at AWG conductors solid	1 x (20 14)	
connectable conductor cross-section		
• solid	0.25 2.5 mm²	
• finely stranded with core end processing	0.25 1.5 mm²	
AWG number as coded connectable conductor cross		
section		
• solid	20 14	
tightening torque		
with screw-type terminals	0.5 0.6 N·m	
natallation/ mounting/ dimensions		
nstallation/ mounting/ dimensions		
mounting position	any	
<u> </u>	any snap-on mounting	
mounting position		
mounting position mounting type height width	snap-on mounting 93 mm 6.2 mm	
mounting position mounting type height width depth	snap-on mounting 93 mm	
mounting position mounting type height width depth required spacing	snap-on mounting 93 mm 6.2 mm	
mounting position mounting type height width depth required spacing • with side-by-side mounting	snap-on mounting 93 mm 6.2 mm 72.5 mm	
mounting position mounting type height width depth required spacing • with side-by-side mounting — forwards	snap-on mounting 93 mm 6.2 mm 72.5 mm	
mounting position mounting type height width depth required spacing • with side-by-side mounting — forwards — backwards	snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm	
mounting position mounting type height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards	snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm	
mounting position mounting type height width depth required spacing • with side-by-side mounting — forwards — backwards	snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm	
mounting position mounting type height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side	snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm	
mounting position mounting type height width depth required spacing • with side-by-side mounting — forwards — backwards — backwards — upwards — downwards — at the side • for grounded parts	snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm	
mounting position mounting type height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side	snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm	
mounting position mounting type height width depth required spacing • with side-by-side mounting — forwards — backwards — backwards — upwards — downwards — at the side • for grounded parts	snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm	
mounting position mounting type height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — upwards — at the side • for grounded parts — forwards	snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm	
mounting position mounting type height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — forwards — backwards — backwards	snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm	
mounting position mounting type height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — forwards — backwards — upwards — at the side	snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm	
mounting type height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — backwards — upwards — at the side • to grounded parts — at the side — backwards — at the side — backwards — at the side	snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 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
during storage	-40 +85 °C
 during transport 	-40 +85 °C
relative humidity	
during operation	10 95 %

Certificates/ approvals

General Product Approval EMC Declaration of Conformity













Declaration of	Marine / Ship-	other
Conformity	ping	

Miscellaneous



Confirmation

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

 $\underline{\text{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3018-1AE00}\\$

Cax online generator

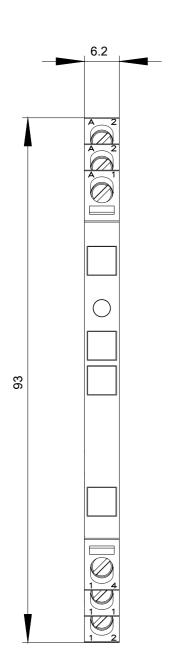
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

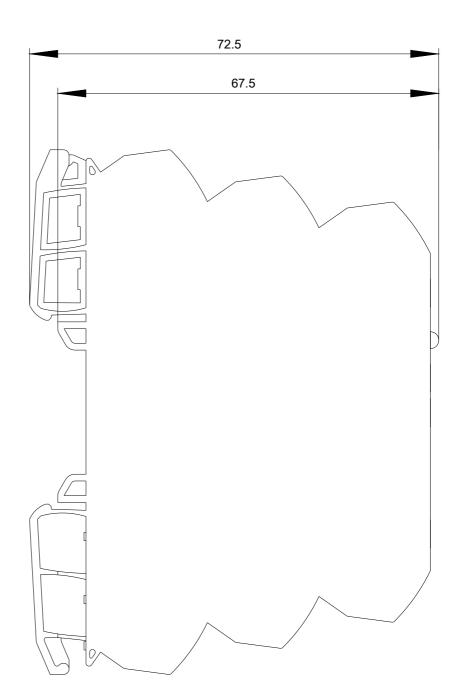
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AE00

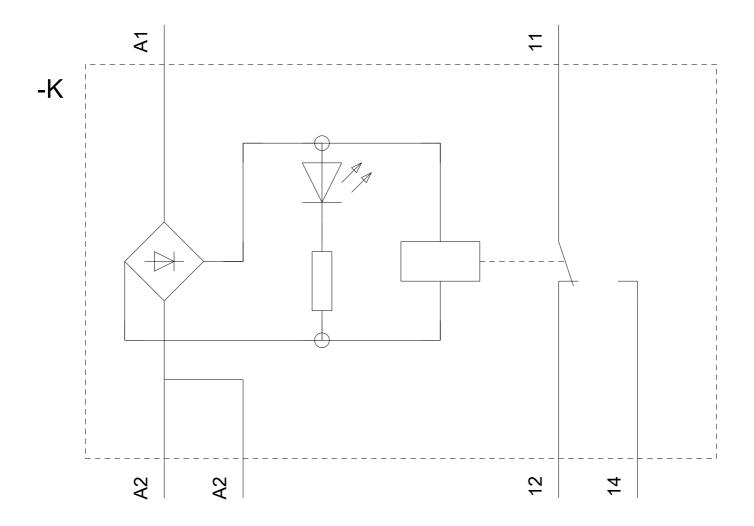
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3018-1AE00&lang=en

Characteristic: Derating

 $\underline{\text{https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AE00/manual}}$







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