



Output coupler Relay coupler, 1 change-over contact hard gold-plated contacts 24 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	Yes
• relay output	Yes
• semi-conductor output	No
consumed active power	0.3 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	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	

<ul style="list-style-type: none"> initial value full-scale value 	0.8 1.25
operating range factor control supply voltage rated value at AC at 50 Hz	
<ul style="list-style-type: none"> initial value full-scale value 	0.8 1.25
operating range factor control supply voltage rated value at AC at 60 Hz	
<ul style="list-style-type: none"> initial value full-scale value 	0.8 1.25
switch ON delay time	
<ul style="list-style-type: none"> at AC maximum at DC maximum 	12 ms 12 ms
OFF delay time	14 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	AgSnO ₂ -HTV
number of CO contacts for auxiliary contacts	1
operational current of auxiliary contacts at AC-15	
<ul style="list-style-type: none"> at 24 V at 250 V 	3 A 3 A
operational current of auxiliary contacts at DC-13	
<ul style="list-style-type: none"> at 24 V at 125 V at 250 V 	1 A 0.2 A 0.1 A
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (5 V, 1 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	
<ul style="list-style-type: none"> at 24 V at 125 V at 250 V 	1 A 0.2 A 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	
<ul style="list-style-type: none"> 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 	2 kV 2 kV 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	

<ul style="list-style-type: none"> • at AC maximum • at DC maximum 	500 m 1 000 m
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • solid • finely stranded with core end processing • at AWG cables solid 	1x (0.25 ... 2.5 mm ²) 1x (0.25 ... 1.5 mm ²) 1 x (20 ... 14)
<ul style="list-style-type: none"> • connectable conductor cross-section solid • connectable conductor cross-section finely stranded with core end processing 	0.25 ... 2.5 mm ² 0.25 ... 1.5 mm ²
<ul style="list-style-type: none"> • AWG number as coded connectable conductor cross section solid 	20 ... 14
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at the side 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm

Ambient conditions

installation altitude at height above sea level maximum	2 000 m
<ul style="list-style-type: none"> • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport 	-25 ... +60 °C -40 ... +85 °C -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=3RQ3018-1AB01>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-1AB01>

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

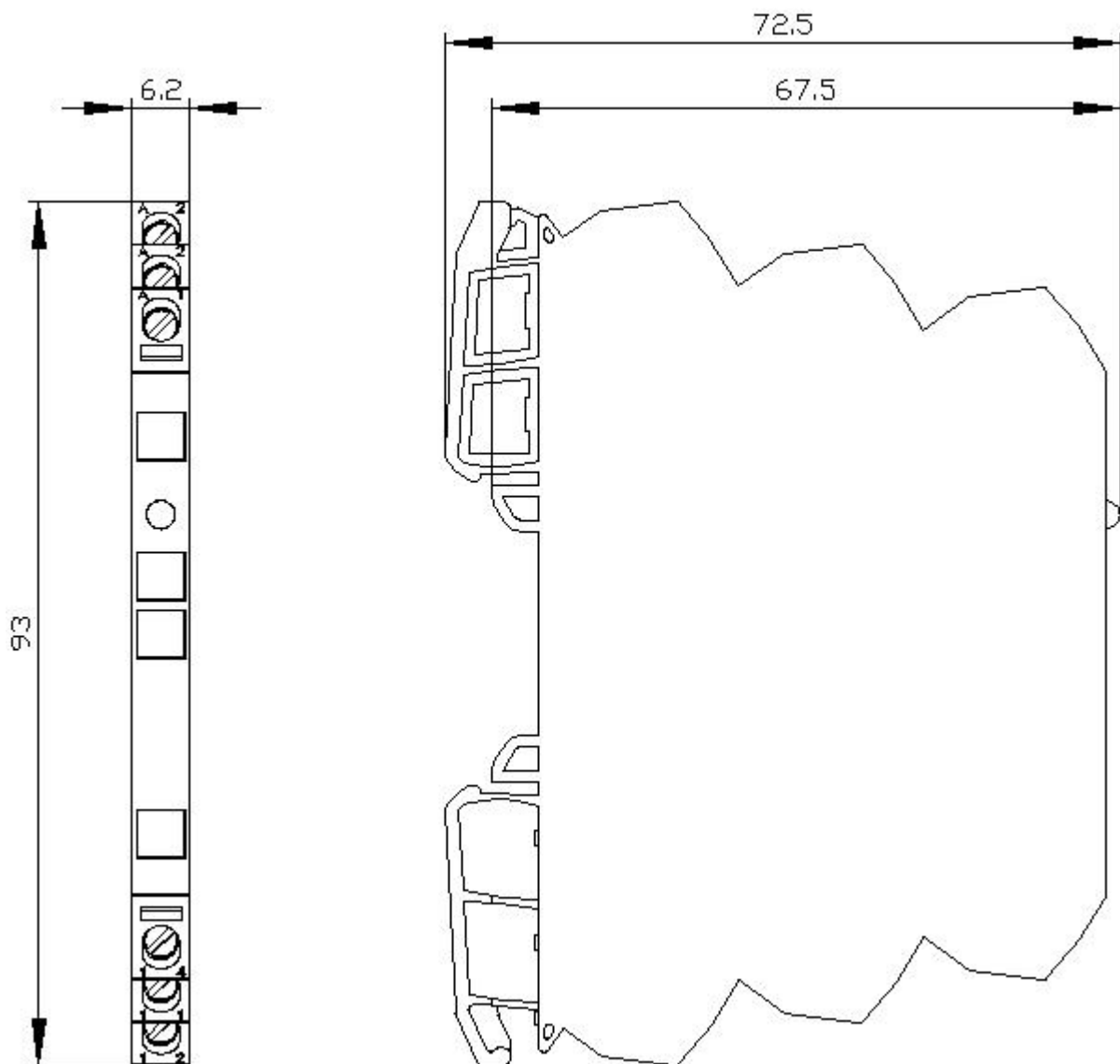
<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AB01>

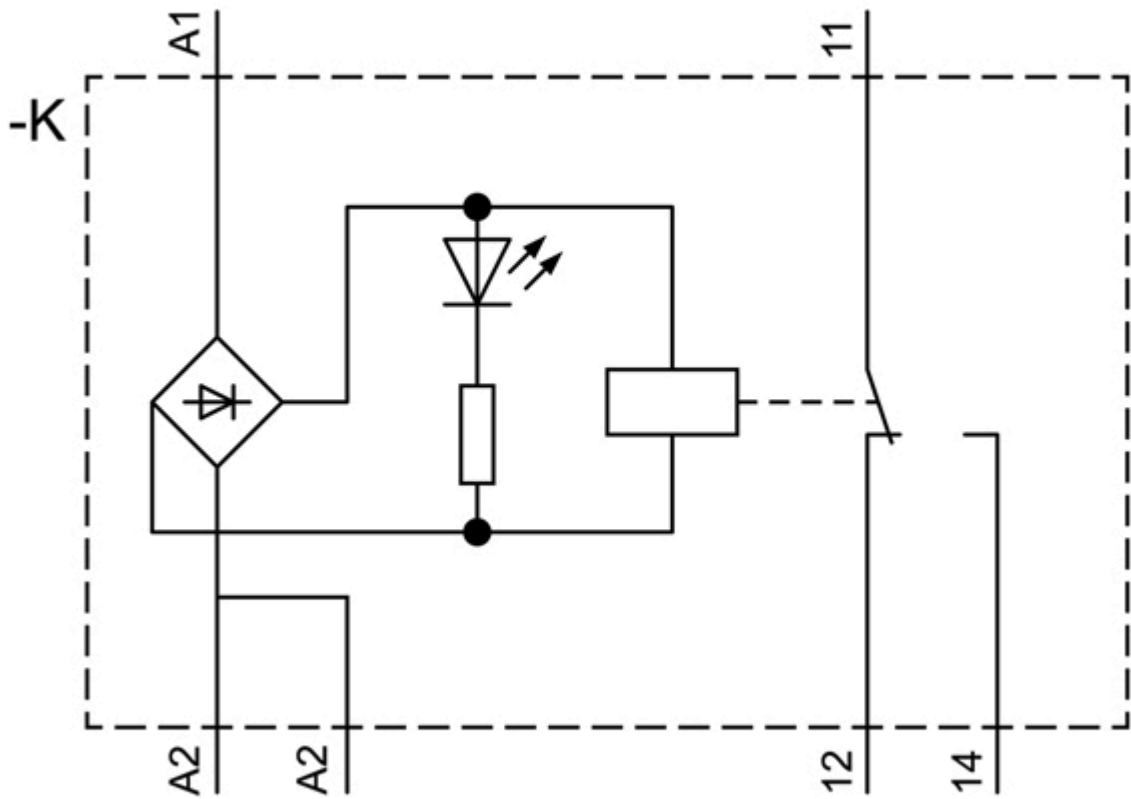
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3018-1AB01&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AB01/manual>





last modified:

10/21/2020 