# **SIEMENS**

Data sheet 3RQ3118-2AF01



Output coupler with plug-in relay, 1 CO, hard gold-plated Spring-type terminal (push-in) 230 V AC/DC Enclosure width 6.2 mm Thermal current 6 A

## Figure similar

## Article number

Product brand name	SIRIUS
Product category	SIRIUS 3RQ3 coupling relays in slim design
Product designation	Coupling relays with plug-in relay
Design of the product	Output coupling links
Product type designation	3RQ3

General technical data		
Display version LED		Yes
Product component		
<ul> <li>Relay output</li> </ul>		Yes
<ul> <li>semi-conductor output</li> </ul>		No
Consumed active power	W	1
Insulation voltage		
<ul> <li>for overvoltage category III according to IEC 60664</li> </ul>		
— with degree of pollution 3 rated value	V	300
Surge voltage resistance rated value	kV	4
maximum permissible voltage for safe isolation		

• between control and availing circuit	V	300
between control and auxiliary circuit		
Percental drop-out voltage related to the input voltage	%	10
Protection class IP		IP20
Shock resistance		11 20
• acc. to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Vibration resistance		Sinusoidal Hall-wave 15g / 11 ms
		6 150 Hz: 2 a
• acc. to IEC 60068-2-6	4 /1-	6 150 Hz: 2 g
Operating frequency maximum	1/h	72 000
Switching behavior		monostable
Mechanical service life (switching cycles)		40,000,000
• typical		10 000 000
Electrical endurance (switching cycles)		
• at AC-15 at 230 V typical		100 000
Thermal current	Α	6
Equipment marking		
• acc. to DIN EN 61346-2		K
• acc. to DIN EN 81346-2		K
Control circuit/ Control		
Control supply voltage at AC		
● at 50 Hz rated value	V	230
● at 60 Hz rated value	V	230
Control supply voltage at DC		
• rated value	V	230
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
Off-delay time	ms	19
Closing delay		
• at AC	ms	12
• at DC	ms	8
Opening delay		
● at AC	ms	20

• at DC	ms	18
Design of the relay operating mechanism	_	poled
Product component Plug-in socket	_	Yes
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-HTV
Number of CO contacts		
<ul> <li>for auxiliary contacts</li> </ul>		1
Operating current of auxiliary contacts at AC-15		
● at 24 V	Α	3
● at 250 V	Α	3
Operating current of auxiliary contacts at DC-13		
● at 24 V	Α	1
● at 125 V	Α	0.2
● at 250 V	Α	0.1
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	Α	3
Ampacity of the output relay at DC-13	_	
● at 24 V	Α	1
● at 125 V	Α	0.2
● at 250 V	Α	0.1
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

<ul> <li>due to conductor-earth surge acc. to IEC 61000-4-5</li> </ul>	2 kV	
<ul> <li>due to conductor-conductor surge acc. to IEC 61000-4-5</li> </ul>	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 dischar	ge / 8 kV air discharge

Display	
Display version	
<ul> <li>as status display by LED</li> </ul>	LED green

Connections/Terminals			
Product function			
• removable terminal		No	
Type of electrical connection			
<ul> <li>for auxiliary and control current circuit</li> </ul>		PUSH-IN connection (spring-loaded connection)	
Wire length			
• at AC maximum	m	500	
• at DC maximum	m	1 000	
Type of connectable conductor cross-sections			
• solid		1x (0.25 2.5 mm²)	
<ul> <li>finely stranded with core end processing</li> </ul>		1x (0.25 1.5 mm²)	
<ul> <li>finely stranded without core end processing</li> </ul>		1x (0.25 2.5 mm²)	
<ul> <li>at AWG conductors solid</li> </ul>		1 x (20 14)	
<ul> <li>at AWG conductors stranded</li> </ul>		1x (20 14)	
Connectable conductor cross-section			
• solid	mm²	0.25 2.5	
<ul> <li>finely stranded with core end processing</li> </ul>	mm²	0.25 1.5	
<ul> <li>finely stranded without core end processing</li> </ul>	mm²	0.25 2.5	
AWG number as coded connectable conductor cross section			
• solid		20 14	
• stranded		20 14	

Installation/ mounting/ dimensions		
Mounting position		any
Mounting type		snap-on mounting
Height	mm	93
Width	mm	6.2
Depth	mm	76
Required spacing		
<ul> <li>with side-by-side mounting</li> </ul>		
— forwards	mm	0
— Backwards	mm	0

— upwards	mm	0
	mm	0
— downwards	mm	O
— at the side	mm	0
• for grounded parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— at the side	mm	0
— downwards	mm	0
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0

Ambient conditions			
Installation altitude at height above sea level			
• maximum	m	2 000	
Ambient temperature			
<ul><li>during operation</li></ul>	°C	-25 <b>+</b> 60	
during storage	°C	-40 <b>+</b> 85	
during transport	°C	-40 <b>+</b> 85	
Relative humidity			
<ul> <li>during operation</li> </ul>	%	10 95	

### Certificates/approvals

General Product Approval	Declaration of	other
	Conformity	











Confirmation

### Further information

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

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3118-2AF01

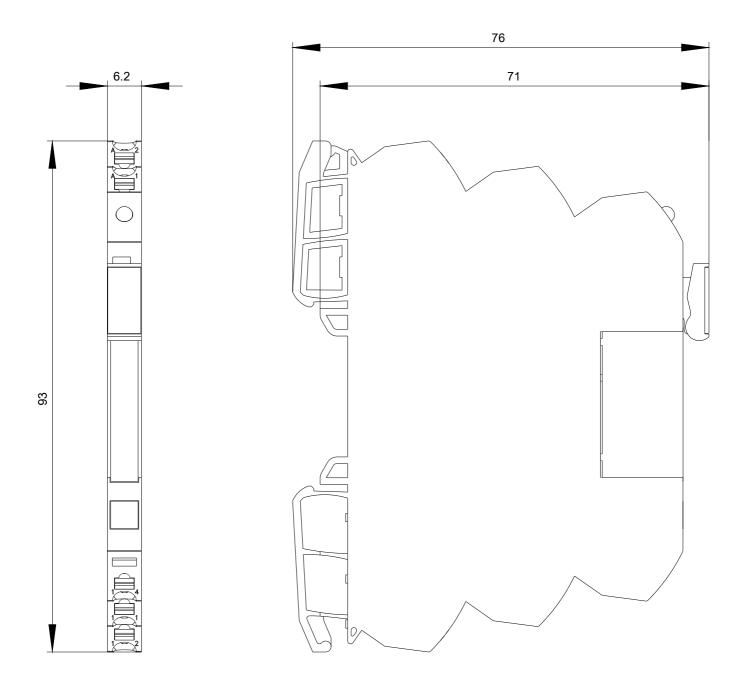
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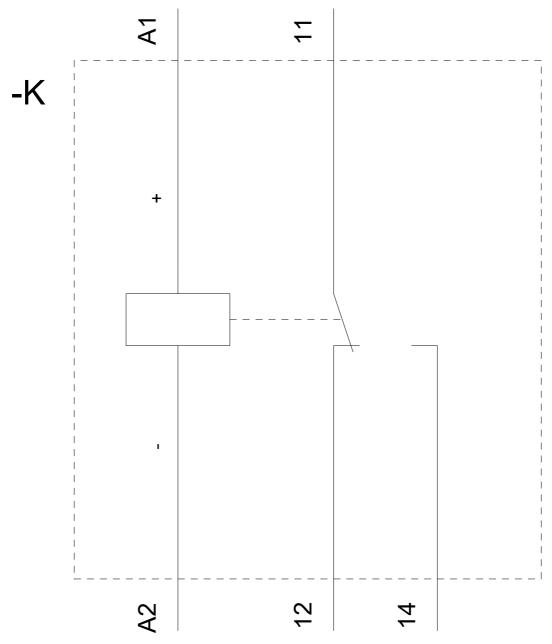
 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RQ3118-2AF01}\\$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-2AF01

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3118-2AF01&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3118-2AF01&lang=en</a>





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