SIEMENS

Data sheet 3RQ4118-2AE01

output coupler with plug-in relay, 115 V AC/DC, 1 change-over contact, spring-loaded terminal (push-in), width 6.2 mm, thermal current 6 A, hard gold-plated

product brand name	SIRIUS
product category	SIRIUS 3RQ4 coupling relay, narrow design
product designation	Coupling relay with plug-in relay
design of the product	output coupling link
product type designation	3RQ4
General technical data	
display version LED	Yes
product feature protective coating on printed-circuit board	No
product component	
● relay output	Yes
● semi-conductor output	No
power loss [W] maximum	0.8 W
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 protective separation	
● between control and auxiliary circuit	300 V
● between control and auxiliary circuit according to IEC 60947-1	300 V
percental drop-out voltage related to the input voltage	9.6 %
flammability class of enclosure material	UL94 V-0
shock resistance	
● **according to IEC 60068-2-27**	sinusoidal half-wave 15g / 11 ms
vibration resistance	
● **according to IEC 60068-2-6**	6 ... 150 Hz: 2 g
operating frequency maximum	72 000 1/h
switching behavior	monostable
mechanical service life (operating cycles) typical	10 000 000
electrical endurance (operating cycles)	
● at AC-15 at 250 V typical	100 000
thermal current	6 A
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	09/26/2024
SVHC substance name	Lead - 7439-92-1
Weight	34 g
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
ON-delay time	
● at AC maximum	10 ms
● at DC maximum	6 ms
OFF-delay time maximum	10 ms
Switching Function	
design of the switching function positively driven	No
Digital Outputs	
property of the output short-circuit proof	No
Mechanical data	
product component plug-in socket	Yes
design of the relay operating mechanism	poled
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 contact coating	hard gold-plated
material of switching contacts	AgSnO2 hard gold-plated
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 (5 V, 1 mA)
Main circuit	
type of voltage	AC/DC
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	
electromagnetic compatibility	acc. to EN 60947-5-1
EMC emitted interference according to IEC 60947-1	ambience A (industrial sector)
EMC immunity according to IEC 60947-1	corresponds to degree of severity 3
conducted interference	
● due to burst according to IEC 61000-4-4	2 kV
● due to conductor-earth surge according to IEC 61000-4-5	2 kV
● due to conductor-conductor surge according to IEC 61000-4-5	1 kV
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according 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	spring-loaded terminals (push-in)
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)
• finely stranded without core end processing	1x (0.25 ... 2.5 mm²)
• for AWG cables solid	1 x (20 ... 14)
• for AWG cables stranded	1x (20 ... 14)
connectable conductor cross-section	
• solid	0.25 ... 2.5 mm²
• finely stranded with core end processing	0.25 ... 1.5 mm²
• finely stranded without core end processing	0.25 ... 2.5 mm²
AWG number as coded connectable conductor cross section	
• solid	20 ... 14
• stranded	20 ... 14
size of the screwdriver tip	PZ1
stripped length	10 mm
Installation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on mounting
height	93 mm
width	6.2 mm
depth	88.5 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	
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 %

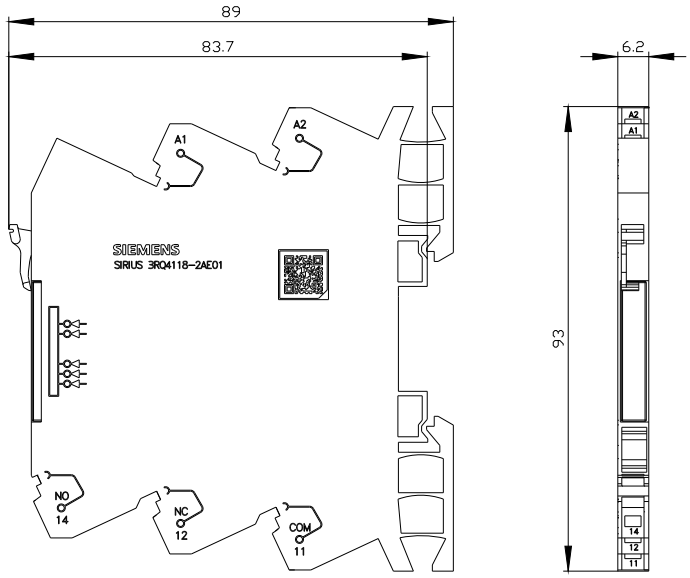
Approvals Certificates

General Product Approval	other	Environment

Confirmation

Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
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=3RQ4118-2AE01
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ4118-2AE01
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RQ4118-2AE01
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ4118-2AE01&lang=en
Characteristic: Derating
https://support.industry.siemens.com/cs/ww/en/ps/3RQ4118-2AE01/manual



last modified: 5/16/2025