SIEMENS

Data sheet

3RQ3018-2AM08-0AX0



output coupler relay coupler, 1 CO, 24 V DC working range 0.7 to 1.25 x US enclosure width 6.2 mm spring-loaded terminal (push-in) thermal current 6 A (see derating characteristic) (with painted PCB)

product brand name product category product designation design of the product product type designation SIRIUS
SIRIUS 3RQ3 coupling relays in slim design
Coupling relays with relay output (not plug-in)
Output coupling link
3RQ3

General technical data	
display version LED	Yes
product component	
 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	14.6 %
protection class IP	IP20
flammability class of enclosure material	UL94 V-0
shock resistance	
 for railway applications according to EN 61373 	Category 1, Class B
vibration resistance	
 for railway applications according to EN 61373 	Category 1, Class B
operating frequency maximum	72 000 1/h
switching behavior	monostable
mechanical service life (operating cycles) typical	10 000 000
thermal current	6 A; for derating see characteristics
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	03/25/2015
Control circuit/ Control	
control supply voltage at DC	
rated value	24 V
operating range factor control supply voltage rated value at DC	
initial value	0.7
full-scale value	1.25
ON-delay time	
 at DC maximum 	5 ms
OFF-delay time	10 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	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	
• 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	DC
Inputs/ Outputs	
property of the output short-circuit proof	No
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 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	150
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 wire length	spring-loaded terminals (push-in)
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)
finely stranded without core end processing	1x (0.25 2.5 mm²)
at AWG cables solid	1 x (20 14)
at AWG cables solidat AWG cables stranded	
 at AWG cables solid at AWG cables stranded connectable conductor cross-section 	1 x (20 14) 1x (20 14)
 at AWG cables solid at AWG cables stranded connectable conductor cross-section solid 	1 x (20 14) 1x (20 14) 0.25 2.5 mm ²
 at AWG cables solid at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing 	1 x (20 14) 1x (20 14) 0.25 2.5 mm ² 0.25 1.5 mm ²
 at AWG cables solid at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing finely stranded without core end processing 	1 x (20 14) 1x (20 14) 0.25 2.5 mm ²
 at AWG cables solid at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing 	1 x (20 14) 1x (20 14) 0.25 2.5 mm ² 0.25 1.5 mm ²
 at AWG cables solid at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing finely stranded without core end processing AWG number as coded connectable conductor cross	1 x (20 14) 1x (20 14) 0.25 2.5 mm ² 0.25 1.5 mm ²
 at AWG cables solid at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing finely stranded without core end processing AWG number as coded connectable conductor cross section 	1 x (20 14) 1x (20 14) 0.25 2.5 mm ² 0.25 1.5 mm ² 0.25 2.5 mm ²
 at AWG cables solid at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing finely stranded without core end processing AWG number as coded connectable conductor cross section solid 	1 x (20 14) 1x (20 14) 0.25 2.5 mm ² 0.25 1.5 mm ² 0.25 2.5 mm ²
 at AWG cables solid at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing finely stranded without core end processing AWG number as coded connectable conductor cross section solid stranded 	1 x (20 14) 1x (20 14) 0.25 2.5 mm ² 0.25 1.5 mm ² 0.25 2.5 mm ²
 at AWG cables solid at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing finely stranded without core end processing AWG number as coded connectable conductor cross section solid stranded Installation/ mounting/ dimensions	1 x (20 14) 1x (20 14) 0.25 2.5 mm ² 0.25 1.5 mm ² 0.25 2.5 mm ² 20 14 20 14
 at AWG cables solid at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing finely stranded without core end processing AWG number as coded connectable conductor cross section solid stranded Installation/ mounting/ dimensions mounting position 	1 x (20 14) 1x (20 14) 0.25 2.5 mm ² 0.25 1.5 mm ² 0.25 2.5 mm ² 20 14 20 14
 at AWG cables solid at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing finely stranded without core end processing AWG number as coded connectable conductor cross section solid stranded Installation/ mounting/ dimensions mounting position fastening method 	1 x (20 14) 1x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 0.25 2.5 mm² 20 14 20 14 any snap-on mounting
 at AWG cables solid at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing finely stranded without core end processing AWG number as coded connectable conductor cross section solid stranded Installation/ mounting/ dimensions mounting position fastening method height 	1 x (20 14) 1x (20 14) 0.25 2.5 mm ² 0.25 1.5 mm ² 0.25 2.5 mm ² 20 14 20 14

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	-40 +70 °C
during storage	-40 +85 °C
during transport	-40 +85 °C
relative humidity during operation	10 95 %
Certificates/ approvals	





Confirmation







EMC

Declaration of Conformity

General Product Approval

Marine / Shipping

other







Confirmation

Further information

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3018-2AM08-0AX0}$

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RQ3018-2AM08-0AX0}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AM08-0AX0

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3018-2AM08-0AX0&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AM08-0AX0/manual



