# SIEMENS

#### Data sheet

### 3RQ3018-2AF00



Output coupler Relay coupler, 1 change-over contact 230 V AC/DC Overall width 6.2 mm Spring-type terminal (push-in) Thermal current  $6{\rm A}$ 

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 feature protective coating on printed-circuit board	No
product component	
<ul> <li>relay output</li> </ul>	Yes
semi-conductor output	No
consumed active power	1 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	
<ul> <li>between control and auxiliary circuit</li> </ul>	300 V
percental drop-out voltage related to the input voltage	10 %
protection class IP	IP20
flammability class of enclosure material	UL94 V-0
shock resistance	
<ul> <li>according to IEC 60068-2-27</li> </ul>	sinusoidal half-wave 15g / 11 ms
vibration resistance	
<ul> <li>according to IEC 60068-2-6</li> </ul>	6 150 Hz: 2 g
operating frequency maximum	72 000 1/h
switching behavior	monostable
mechanical service life (operating cycles) typical	10 000 000
thermal current	6 A
reference code according to IEC 81346-2	К
Substance Prohibitance (Date)	03/25/2015
Control circuit/ Control	
control supply voltage at AC	
• at 50 Hz rated value	230 V
<ul> <li>at 60 Hz rated value</li> </ul>	230 V
control supply voltage frequency	
• 1 rated value	50 Hz
2 rated value	60 Hz
control supply voltage at DC	
rated value	230 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	
<ul> <li>initial value</li> </ul>	0.8
full-scale value	1.1
ON-delay time	
● at AC maximum	9 ms
• at DC maximum	8 ms
OFF-delay time	19 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	
Main circuit type of voltage	AC/DC
	AC/DC
type of voltage	AC/DC
type of voltage Inputs/ Outputs property of the output short-circuit proof	
type of voltage Inputs/ Outputs	No
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz	No
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13	No 3 A
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V	No 3 A 1 A
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V	No 3 A 1 A 0.2 A
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V	No 3 A 1 A 0.2 A
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V	No 3 A 1 A 0.2 A 0.1 A
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector)
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector)
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         enducted interference         • due to burst according to IEC 61000-4-4	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • field-based interference according to IEC 61000-4-3	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 10 V/m
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • field-based interference according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 10 V/m
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 25 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • field-based interference according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         field-based interference according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display         display version as status display by LED	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to scharge according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display         display version as status display by LED         Connections/ Terminals         product function removable terminal	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge LED green No
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display         display version as status display by LED         Connections/ Terminals	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to scharge according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display         display version as status display by LED         Connections/ Terminals         product function removable terminal         type of electrical connection for auxiliary and control circuit	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge LED green No
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to scharge according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display         display version as status display by LED         Connections/ Terminals         product function removable terminal         type of electrical connection for auxiliary and control circuit         wire length	No         3 A         1 A         0.2 A         0.1 A         ambience A (industrial sector)         corresponds to degree of severity 3         2 kV         2 kV         2 kV         1 kV         10 V/m         6 kV contact discharge / 8 kV air discharge         LED green         No         spring-loaded terminals (push-in)
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         field-based interference according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display         display version as status display by LED         Connections/ Terminals         product function removable terminal         type of electrical connection for auxiliary and control circuit         wire length         • at AC maximum	No         3 A         1 A         0.2 A         0.1 A         ambience A (industrial sector)         corresponds to degree of severity 3         2 kV         2 kV         2 kV         10 V/m         6 kV contact discharge / 8 kV air discharge         LED green         No         spring-loaded terminals (push-in)         500 m
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 61000-4-4         • due to burst according to IEC 61000-4-4         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-2         Display         display version as status display by LED         Connections/ Terminals         product function removable terminal         type of electrical connection for auxiliary and control circuit         wire length         • at AC maximum         • at DC maximum	No         3 A         1 A         0.2 A         0.1 A         ambience A (industrial sector)         corresponds to degree of severity 3         2 kV         2 kV         2 kV         1 kV         10 V/m         6 kV contact discharge / 8 kV air discharge         LED green         No         spring-loaded terminals (push-in)         500 m         1 000 m
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 61000-4-4         • due to burst according to IEC 61000-4-4         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         field-based interference according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display         display version as status display by LED         Connections/ Terminals         product function removable terminal         type of electrical connection for auxiliary and control circuit         wire length         • at AC maximum         • at DC maximum         • at DC maximum	No         3 A         1 A         0.2 A         0.1 A         ambience A (industrial sector)         corresponds to degree of severity 3         2 kV         2 kV         2 kV         10 V/m         6 kV contact discharge / 8 kV air discharge         LED green         No         spring-loaded terminals (push-in)         500 m

<ul> <li>finely stranded without core end processing</li> </ul>	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		
<ul> <li>finely stranded with core end processing</li> </ul>	0.25 1.5 mm <sup>2</sup>		
	0.25 1.5 mm <sup>2</sup>		
finely stranded without core end processing	0.25 2.5 11111-		
AWG number as coded connectable conductor cross section			
• solid	20 14		
stranded	20 14		
Installation/ mounting/ dimensions			
mounting position	any		
fastening method	snap-on mounting		
height	93 mm		
width	6.2 mm		
depth	72.5 mm		
•	72.5 11111		
required spacing			
with side-by-side mounting	0		
— forwards	0 mm		
— backwards	0 mm		
— upwards	0 mm		
— downwards	0 mm		
— at the side	0 mm		
<ul> <li>for grounded parts</li> </ul>			
— forwards	0 mm		
— backwards	0 mm		
— upwards	0 mm		
— at the side	0 mm		
— downwards	0 mm		
<ul> <li>for live parts</li> </ul>			
— 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	2 000 11		
	25 160 %		
during operation	-25 +60 °C		
during storage	-40 +85 °C		
during transport	-40 +85 °C		
relative humidity during operation	10 95 %		
		_	EMC
Certificates/ approvals General Product Approval			EMC
Certificates/ approvals		rn <b>r</b>	EMC
Certificates/ approvals General Product Approval		FAL	EMC
Certificates/ approvals General Product Approval		EAC	
Certificates/ approvals General Product Approval		EAC	EMC EMC RCM
Certificates/ approvals General Product Approval		EAC	EMC ECM
Certificates/ approvals General Product Approval Confirma Confirma Confirma	ation UL		EMC ECM
Certificates/ approvals General Product Approval	ation UL	ERC	EMC ECM
Certificates/ approvals         General Product Approval         Image: Confirmation of Conformity       Confirmation         Declaration of Conformity       Test Certification	ation UL sates Marine / Shipping		EMC ECM
Certificates/ approvals         General Product Approval         Image: Confirmation of Conformity       Confirmation         Declaration of Conformity       Test Certification	ation UL sates Marine / Shipping	other	EMC ECM
Certificates/ approvals         General Product Approval         Image: Confirmation of Conformity       Confirmation         Declaration of Conformity       Test Certification	ation Lettific- Report	other	EMC ECM
Certificates/ approvals         General Product Approval         Image: Confirmation of Conformity         Declaration of Conformity         Type Test Certification	ation UL sates Marine / Shipping	other	EMC ECM
Certificates/ approvals         General Product Approval         Image: Confirmation of Conformity       Confirmation         Declaration of Conformity       Test Certification	ation Lettific- Report	other	EMC RCM
Certificates/ approvals         General Product Approval         Image: Confirmation of Conformity       Confirmation         Declaration of Conformity       Test Certific         Image: Confirmation of Con	ation Lettific- Report	other	EMC
Certificates/ approvals         General Product Approval         Image: Confirmation of Conformity       Confirmation         Image: Confirmation of Conformity       Test Certification         Image: Confirmation of Conformity       Test Certification         Image: Confirmation of Conformity       Image: Confirmation	ation Lettific- Report	other	EMC RCM
Certificates/ approvals         General Product Approval         Confirmation         Confirmation         Declaration of Conformity         Test Certific         UK         Confirmation         Declaration of Conformity         Test Certific         UK         EG-Konf,	ation eates Marine / Shipping Certific- Report Certific- Report	other	EMC

#### Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). 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=3RQ3018-2AF00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-2AF00

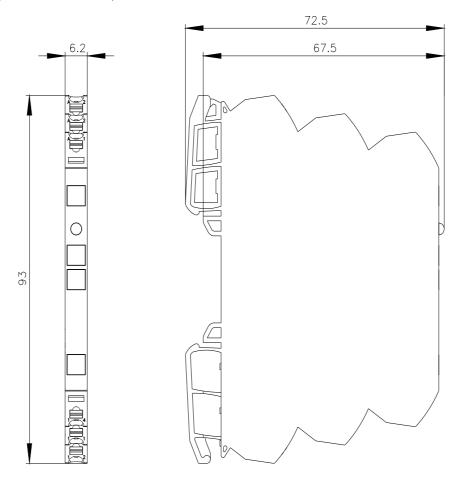
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

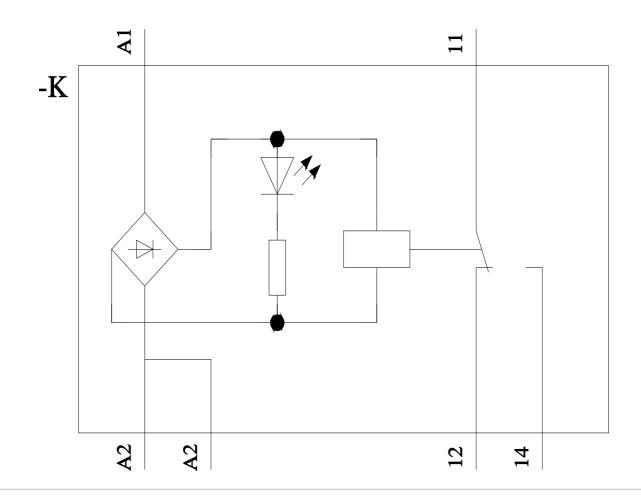
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AF00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3018-2AF00&lang=en

Characteristic: Derating

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