## **SIEMENS**

Data sheet 3RQ3053-2SG30



Output coupler Optocoupler 1 NO transistor, 110-230 V AC/DC Output max. 30 V DC, 3 A short circuit-proof Enclosure width 6.2 mm Spring-type terminal (push-in) Thermal current 3A

product brand name	SIRIUS
product category	SIRIUS 3RQ3 coupling relays in slim design
product designation	Coupling relays with semiconductor 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>	No
semi-conductor output	Yes
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
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	
• according to IEC 60068-2-6	6 150 Hz: 2 g
switching frequency	10 Hz
thermal current	3 A
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	03/25/2015
Control circuit/ Control	
control supply voltage at AC	
<ul> <li>at 50 Hz rated value</li> </ul>	110 230 V
at 60 Hz rated value	110 230 V
control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
control supply voltage at DC	
rated value	110 230 V
operating range factor control supply voltage rated value at DC	
initial value	0.7
full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.7

full-scale value	1.1
operating range factor control supply voltage rated value at	
AC at 60 Hz	
initial value	0.7
full-scale value	1.1
minimum switching voltage when switching on	74 V
maximum switching voltage when switching off	20 V
ON-delay time	
<ul> <li>at AC maximum</li> </ul>	3 ms
at DC maximum	2 ms
OFF-delay time	10 ms
product component plug-in socket	No
Auxiliary circuit	
type of switching contact	NO contact
number of NO contacts for auxiliary contacts	1
Main circuit	
type of voltage	AC/DC
Inputs/ Outputs	Noibe
property of the output short-circuit proof	Yes
	1.00
switching voltage of the semiconductor output at DC	10 30 V
ampacity of the semiconductor output at DC	1 mA 3 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	
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV
<ul> <li>due to conductor-conductor surge according to IEC</li> </ul>	1 kV
61000-4-5	
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 display version as status display by LED	LED green
	LED green
display version as status display by LED	LED green
display version as status display by LED Connections/ Terminals	
display version as status display by LED  Connections/ Terminals  product function removable terminal	No
display version as status display by LED  Connections/ Terminals  product function removable terminal  type of electrical connection for auxiliary and control circuit	No
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 spring-loaded terminals (push-in)
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 spring-loaded terminals (push-in) 500 m
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 spring-loaded terminals (push-in) 500 m
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  type of connectable conductor cross-sections	No spring-loaded terminals (push-in) 500 m 1 000 m
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  type of connectable conductor cross-sections  • solid	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²)
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²)
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (0.25 2.1 mm²)
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²)
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (0.25 2.4 mm²) 1x (0.25 2.5 mm²)
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)  0.25 2.5 mm² 0.25 1.5 mm²
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  • finely stranded with core end processing	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)  0.25 2.5 mm² 0.25 1.5 mm²
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  • finely stranded with core end processing	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)  0.25 2.5 mm² 0.25 1.5 mm²
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded without core end processing  AWG number as coded connectable conductor cross section	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (0.20 14) 1x (20 14) 0.25 2.5 mm² 0.25 2.5 mm² 0.25 2.5 mm²
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded without core end processing  • finely stranded without core end processing  AWG number as coded connectable conductor cross section  • solid  • stranded	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)  0.25 2.5 mm² 0.25 2.5 mm² 20 1.5 mm² 20 1.5 mm²
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  AWG number as coded connectable conductor cross section  • solid  • stranded  Installation/ mounting/ dimensions	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)  0.25 2.5 mm² 0.25 2.5 mm² 0.25 2.5 mm² 2 0.25 1.5 mm² 0.25 1.5 mm²
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  • finely stranded with core end processing  • 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	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)  0.25 2.5 mm² 0.25 2.5 mm² 0.25 2.5 mm² 2 0.25 2.5 mm² 2 0.20 14 20 14
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  • 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	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)  0.25 2.5 mm² 0.25 2.5 mm² 0.25 2.5 mm² 0.25 1.5 mm² 0.25 1.5 mm² 0.25 1.5 mm² 0.25 1.5 mm²
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  • 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	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)  0.25 2.5 mm² 0.25 2.5 mm² 0.25 2.5 mm² 0.25 1.5 mm² 0.25 1.5 mm² 0.25 2.5 mm²
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded without core end processing  • finely stranded without core end processing  • finely stranded without core end processing  mumber as coded connectable conductor cross section  • solid  • stranded  Installation/ mounting/ dimensions  mounting position  fastening method  height  width	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)  0.25 2.5 mm² 0.25 2.5 mm² 0.25 2.5 mm² 0.25 1.5 mm² 0.25 2.5 mm² 0.25 2.5 mm² 6.2 mm
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  type of connectable conductor cross-sections  solid  finely stranded with core end processing  finely stranded without core end processing  for AWG cables solid  for AWG cables stranded  connectable conductor cross-section  solid  finely stranded with core end processing  finely stranded with core end processing  finely stranded without core end processing  solid  finely stranded without core end processing  AWG number as coded connectable conductor cross section  solid  stranded  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)  0.25 2.5 mm² 0.25 2.5 mm² 0.25 2.5 mm² 0.25 1.5 mm² 0.25 2.5 mm²  20 14 20 14
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  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded without core end processing  • finely stranded without core end processing  • finely stranded without core end processing  mumber as coded connectable conductor cross section  • solid  • stranded  Installation/ mounting/ dimensions  mounting position  fastening method  height  width	No spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14)  0.25 2.5 mm² 0.25 1.5 mm² 0.25 2.5 mm² 0.25 1.5 mm² 0.25 1.5 mm² 0.25 2.5 mm²  20 14  any snap-on mounting 93 mm 6.2 mm

— 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
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 %
Certificates/ approvals	



**General Product Approval** 



Confirmation







**EMC** 

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping

other





Type Test Certificates/Test Report



Confirmation

## **Further information**

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

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=3RQ3053-2SG30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3053-2SG30

 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$ 

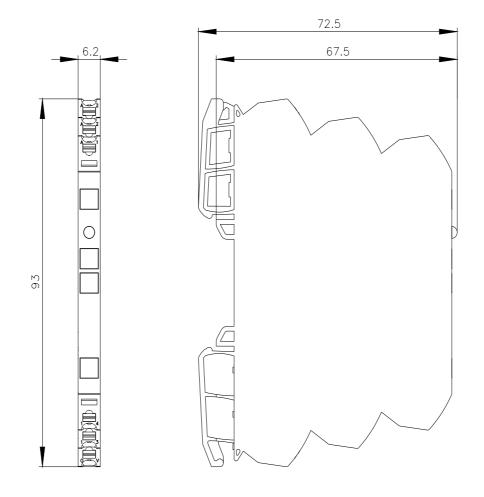
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3053-2SG30

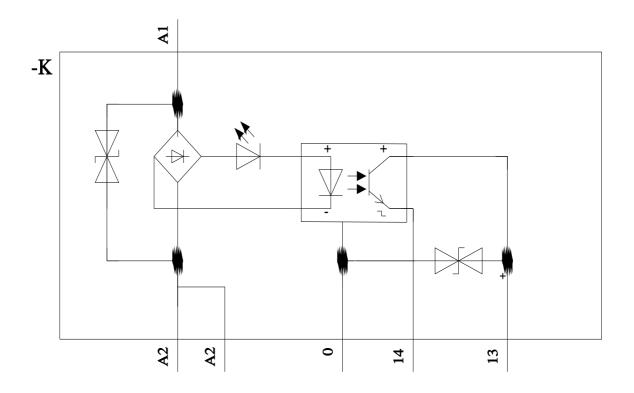
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3053-2SG30&lang=en

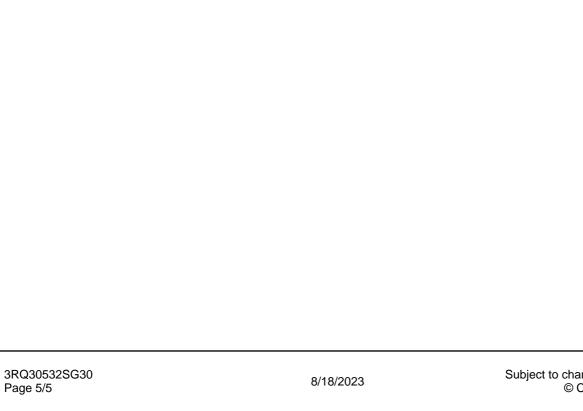
**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3053-2SG30/manual





last modified: 6/30/2023 🖸



## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens:

3RQ30532SG30