SIEMENS

Data sheet 3RF2310-1AA04-0KN0

Sold-state contactor AC 51 / 10 A / 40 °C 48-460 V / 24 V DC screw terminal Low power consumption

product brand name	SIRIUS
product designation	solid-state contactor
design of the product	single-phase
product type designation	3RF23
General technical data	
degree of pollution	3
type of voltage	
● of the operating voltage	AC
● of the control supply voltage	DC
surge voltage resistance of main circuit rated value	6 kV
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	05/28/2009
Main circuit	
type of voltage of the operating voltage	AC
operational current	
● at AC-51 rated value	10.5 A
● at AC-51 according to IEC 60947-4-3	7.5 A
● according to UL 508 rated value	9.6 A
operational current minimum	101 mA
rate of voltage rise at the thyristor for main contacts maximum permissible	1 000 V/µs
I2t value maximum	200 A²·s
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage 1	
● at DC rated value	24 V
● at DC rated value	30 V
● at DC	15 ... 24 V
control supply voltage	
● at DC initial value for signal <1> detection	15 V
● at DC full-scale value for signal<0> recognition	5 V
control current at minimum control supply voltage	
● at DC	6.5 mA
control current at DC rated value	9 mA
ON-delay time	1 ms; additionally max. one half-wave
OFF-delay time	1 ms; additionally max. one half-wave
Installation/ mounting/ dimensions	
fastening method	screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715
height	95 mm
width	22.5 mm

depth	88 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
Safety related data	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Electromagnetic compatibility	
conducted interference	
● due to burst according to IEC 61000-4-4	2 kV / 5 kHz behavior criterion 2
● due to conductor-earth surge according to IEC 61000-4-5	2 kV behavior criterion 2
● due to conductor-conductor surge according to IEC 61000-4-5	1 kV behavior criterion 2
● due to high-frequency radiation according to IEC 61000-4-6	140 dBuV in the frequency range 0.15 ... 80 MHz, behavior criterion 1
field-based interference according to IEC 61000-4-3	80 MHz ... 1 GHz 10 V/m, behavior criterion 1
electrostatic discharge according to IEC 61000-4-2	4 kV contact discharging / 8 kV air discharging, behavior criterion 2
conducted HF interference emissions according to CISPR11	Class A for industrial environment
field-bound HF interference emission according to CISPR11	Class B for the domestic, business and commercial environments
Short-circuit protection, design of the fuse link	
manufacturer's article number	
● of gS fuse for semiconductor protection at NH design usable	3NE1813-0
● of full range R fuse link for semiconductor protection at cylindrical design usable	5SE1316
● of back-up R fuse link for semiconductor protection at NH design usable	3NE8015-1
● of back-up R fuse link for semiconductor protection at cylindrical design 10 x 38 mm usable	3NC1016
● of back-up R fuse link for semiconductor protection at cylindrical design 14 x 51 mm usable	3NC1420
● of back-up R fuse link for semiconductor protection at cylindrical design 22 x 58 mm usable	3NC2220
manufacturer's article number of the gG fuse	
● at NH design usable	3NA6801
● at cylindrical design 10 x 38 mm usable	3NW6001-1; These fuses have a smaller rated current than the semiconductor relays
● at cylindrical design 14 x 51 mm usable	3NW6101-1; These fuses have a smaller rated current than the semiconductor relays
manufacturer's article number	
● of NEOZED fuse usable	5SE2306; These fuses have a smaller rated current than the semiconductor relays

Certificates/ approvals

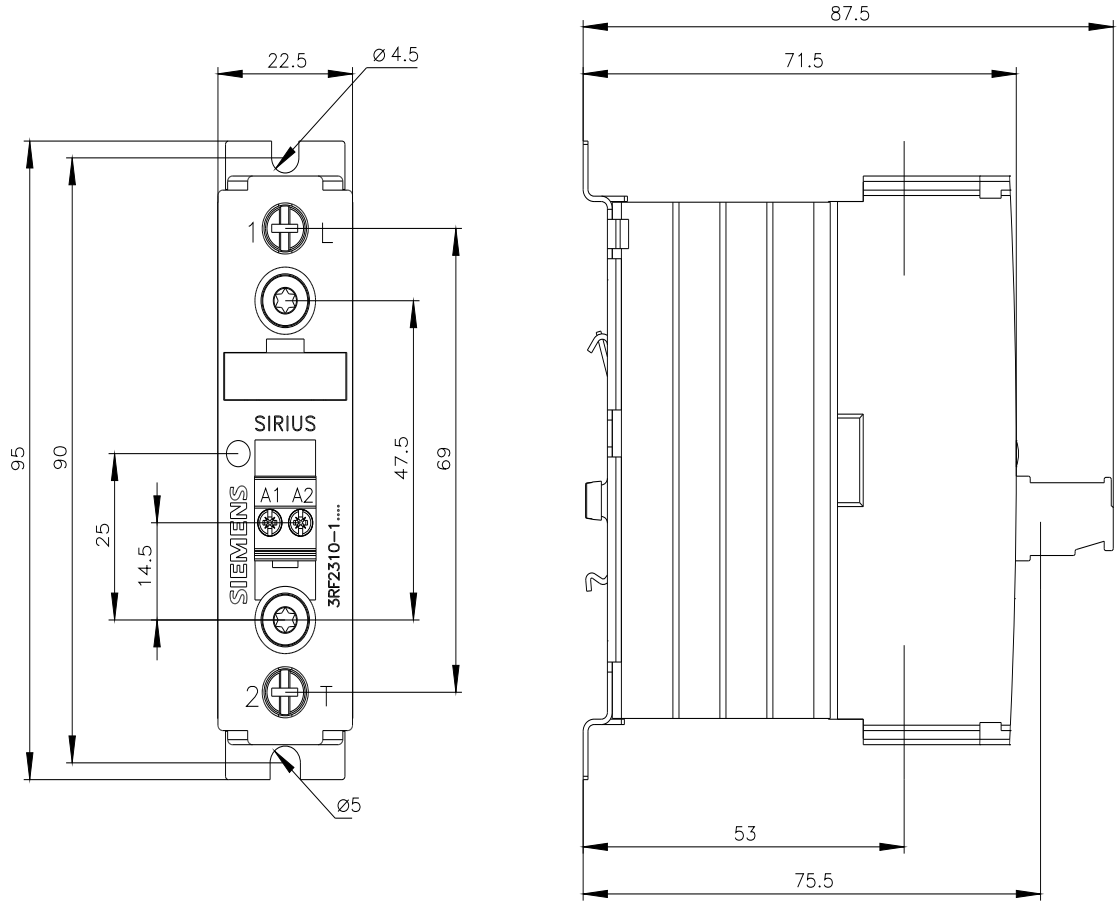
General Product Approval				EMC	Declaration of Conformity
CSA	Confirmation	UL	EAC	RCM	UKCA

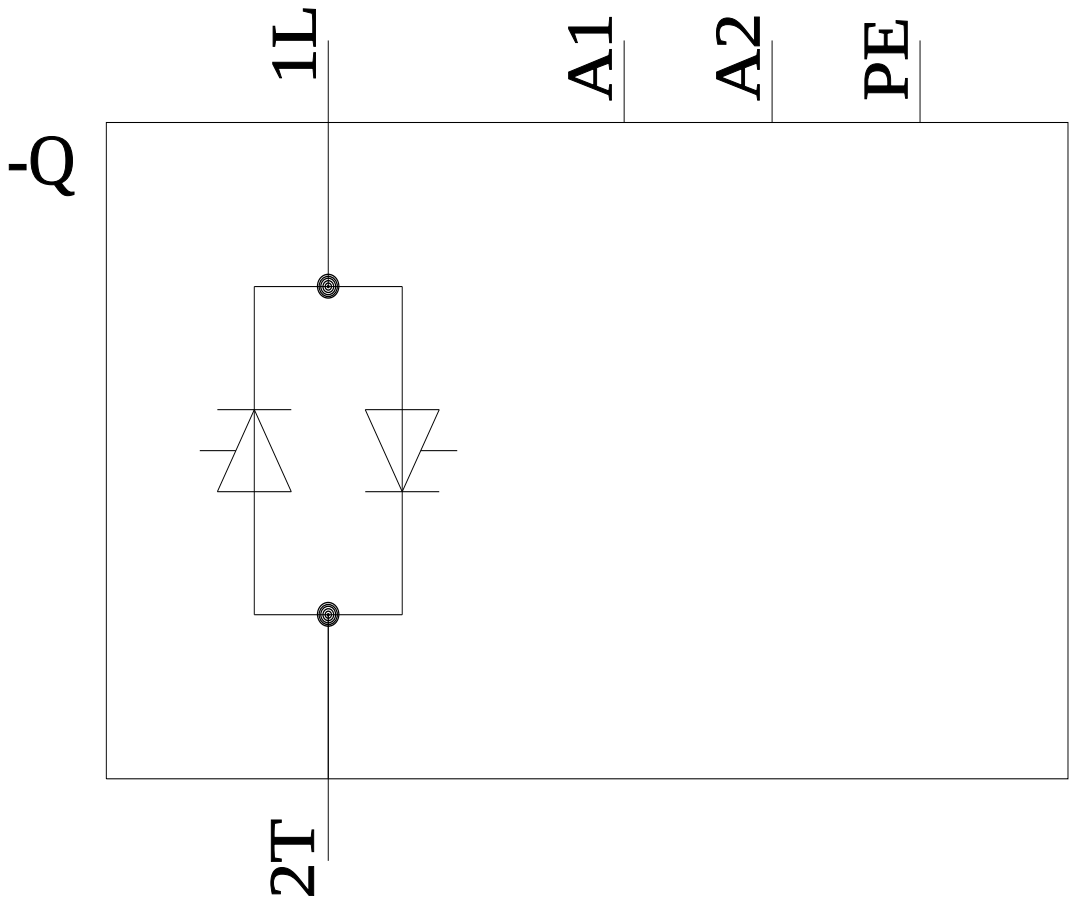
Declaration of Conformity	Test Certificates		other		Railway
CE EG-Konf.	Type Test Certificates/Test Report	Special Test Certificate	Confirmation	VDE	Vibration and Shock

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=3RF2310-1AA04-0KN0
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF2310-1AA04-0KN0
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RF2310-1AA04-0KN0
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF2310-1AA04-0KN0&lang=en





last modified: 10/6/2023