



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 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

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	1 000 V/μs
maximum permissible 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

Safety related data

protection class IP on the front according to IEC	IP20
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60529

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
- due to conductor-earth surge according to IEC 61000-4-5
- due to conductor-conductor surge according to IEC 61000-4-5
- due to high-frequency radiation according to IEC 61000-4-6

2 kV / 5 kHz behavior criterion 2

2 kV behavior criterion 2

1 kV behavior criterion 2

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
- of full range R fuse link for semiconductor protection at cylindrical design usable
- of back-up R fuse link for semiconductor protection at NH design usable
- of back-up R fuse link for semiconductor protection at cylindrical design 10 x 38 mm usable
- of back-up R fuse link for semiconductor protection at cylindrical design 14 x 51 mm usable
- of back-up R fuse link for semiconductor protection at cylindrical design 22 x 58 mm usable

[3NE1813-0](#)[5SE1316](#)[3NE8015-1](#)[3NC1016](#)[3NC1420](#)[3NC2220](#)

manufacturer's article number of the gG fuse

- at NH design usable
- at cylindrical design 10 x 38 mm usable
- at cylindrical design 14 x 51 mm usable

[3NA6801](#)[3NW6001-1](#); These fuses have a smaller rated current than the semiconductor relays[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[Confirmation](#)Declaration of
Conformity

Test Certificates

other

Railway



EG-Konf.

[Type Test Certificates/Test Report](#)[Special Test Certificate](#)[Confirmation](#)

VDE

[Vibration and Shock](#)**Further information**

Information on the packaging

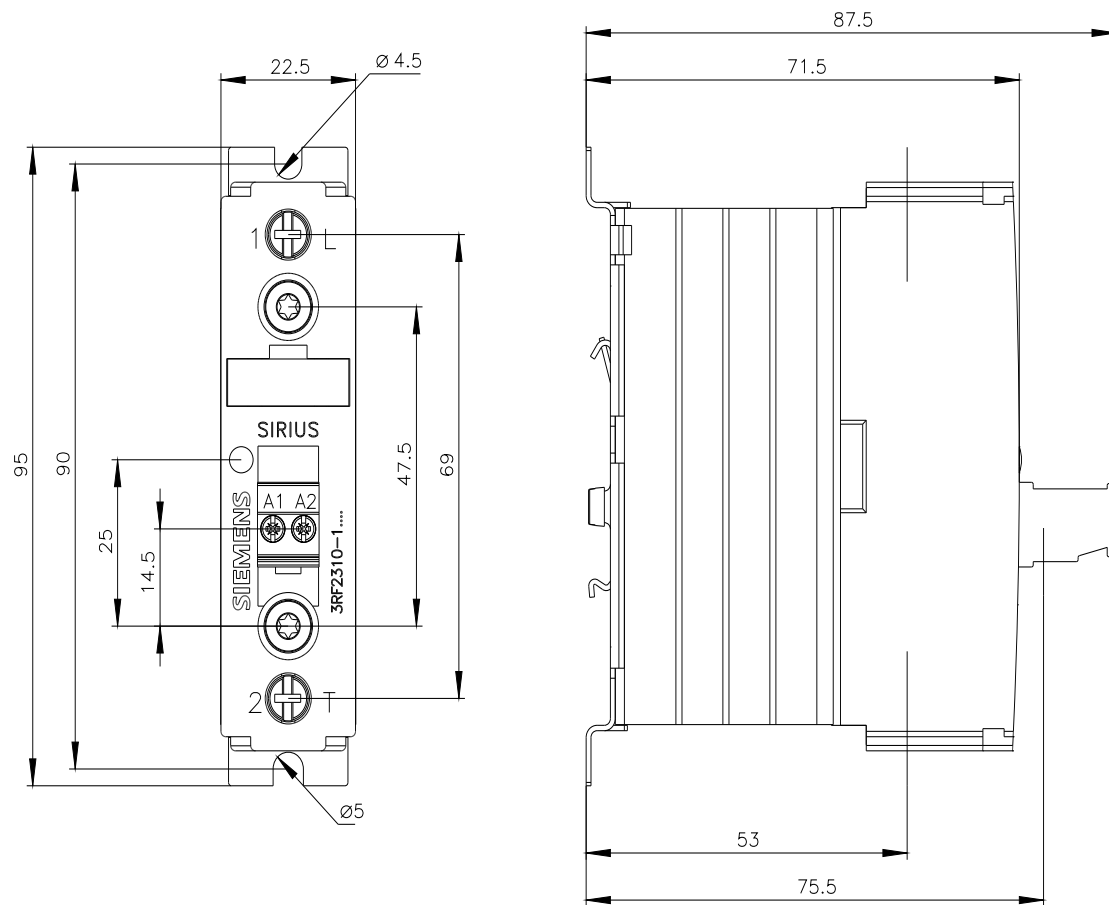
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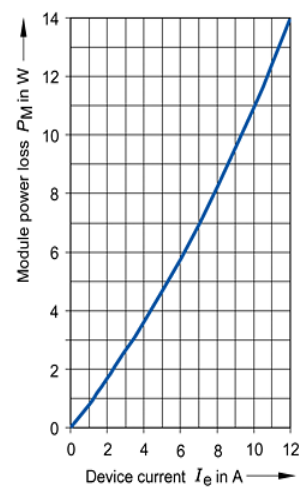
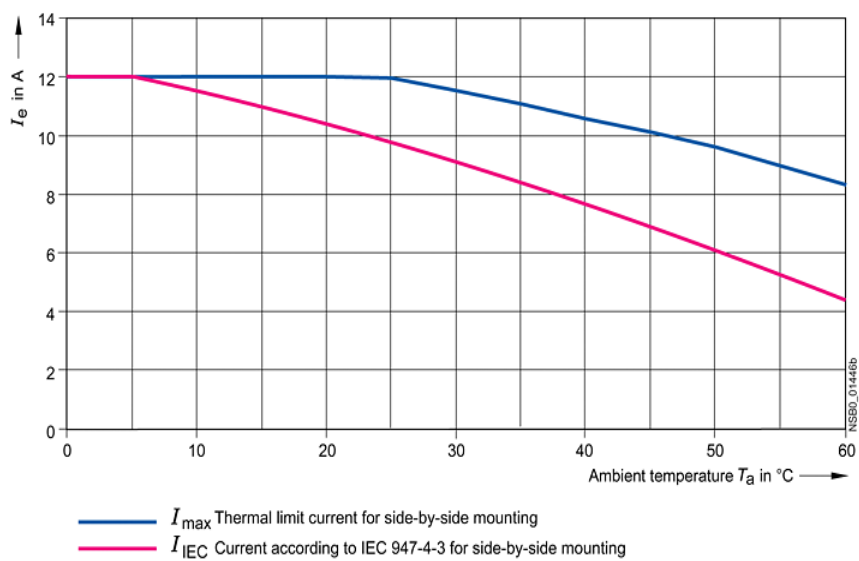
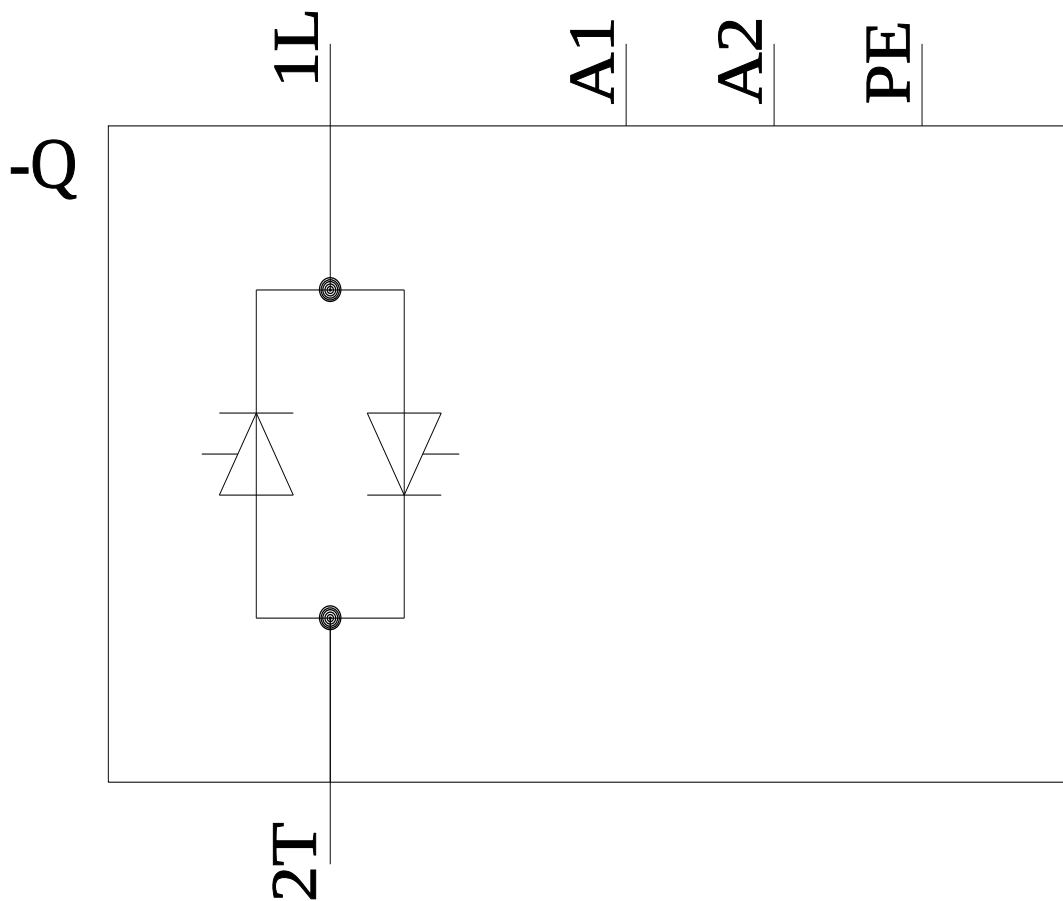
Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RF2310-1AA04-0KN0>





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1/26/2022