

Contactor, AC-1, 525 A/400 V/40 °C, S12, 4-pole, 100-250 V AC/DC, 2 NO+2 NC, Connection bar/ screw terminal Connection main circuit: Busbar Auxiliary/control circuit: Screw



Product brand name	SIRIUS
Product designation	Contactor
Product type designation	3RT13
General technical data	
Size of contactor	S12
Product extension	
• function module for communication	No
• Auxiliary switch	Yes
Surge voltage resistance	
• of main circuit rated value	8 kV
• of auxiliary circuit rated value	6 kV
Protection class IP	
• on the front	IP00; IP20 at front with cover
• of the terminal	IP00
Reference code acc. to DIN EN 81346-2	Q
Ambient conditions	
Installation altitude at height above sea level	
• maximum	2 000 m

Relative humidity	
• during operation	95 %
Main circuit	
Number of poles for main current circuit	4
Number of NO contacts for main contacts	4
Operating voltage	
• at AC	
— at 50 Hz rated value	1 000 V
— at 60 Hz rated value	1 000 V
Operating current	
• at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	525 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	525 A
— up to 690 V at ambient temperature 60 °C rated value	425 A
— up to 1000 V at ambient temperature 40 °C rated value	400 A
— up to 1000 V at ambient temperature 60 °C rated value	350 A
• at AC-3	
— at 400 V rated value	370 A
Minimum cross-section in main circuit	
• at maximum AC-1 rated value	370 mm ²
Operating power	
• at AC-3	
— at 400 V rated value	200 kW
No-load switching frequency	
• at AC	300 1/h
• at DC	300 1/h
Control circuit/ Control	
Type of voltage	AC
Type of voltage of the control supply voltage	AC/DC
Control supply voltage at AC	
• at 50 Hz rated value	100 ... 250 V
• at 60 Hz rated value	100 ... 250 V
Control supply voltage	
• at DC rated value	100 ... 250 V
Operating range factor control supply voltage rated value of magnet coil at DC	
• initial value	0.8

• Full-scale value	1.1
Operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.85 ... 1.1
• at 60 Hz	0.85 ... 1.1
Apparent pick-up power of magnet coil at AC	
• at 50 Hz	385 V·A
• at 60 Hz	385 V·A
Apparent holding power of magnet coil at AC	
• at 50 Hz	17.5 V·A
• at 60 Hz	17.5 V·A
Closing power of magnet coil at DC	410 W
Holding power of magnet coil at DC	4.5 W
Closing delay	
• at AC	30 ... 60 ms
• at DC	30 ... 60 ms
Opening delay	
• at AC	45 ... 80 ms
• at DC	45 ... 80 ms
Control version of the switch operating mechanism	Standard A1 - A2

Auxiliary circuit

Number of NC contacts for auxiliary contacts	2
• attachable	2
• instantaneous contact	2
Number of NO contacts for auxiliary contacts	2
• attachable	2
• instantaneous contact	2
Operating current at AC-15	
• at 230 V rated value	4 A
• at 400 V rated value	3 A
• at 500 V rated value	2 A
• at 690 V rated value	2 A
Operating current at DC-13	
• at 24 V rated value	3 A
• at 48 V rated value	1.5 A
• at 110 V rated value	0.55 A
• at 125 V rated value	0.55 A
• at 220 V rated value	0.3 A

UL/CSA ratings

Contact rating of auxiliary contacts according to UL	A600 / Q300
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Short-circuit protection

Product function Short circuit protection	No
Design of the fuse link	
• for short-circuit protection of the main circuit — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required	gG: 630 A (500 V, 100 kA) gG: 10 A (690 V, 1 kA)

Installation/ mounting/ dimensions	
Mounting position	For vertical mounting surface can be rotated +/-180°, and with 0° rotation can be tilted forward or backward +/- 30°, or standing
Mounting type	screw fixing
• Side-by-side mounting	Yes
Height	225 mm
Width	184 mm
Depth	180 mm
Required spacing	
• with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — downwards — at the side	20 mm 10 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm 20 mm 10 mm 10 mm 10 mm
Net weight	6.5 kg

Connections/ Terminals	
Type of electrical connection	
• for main current circuit • for auxiliary and control current circuit	Connection bar, broadened > 450A required screw-type terminals
Connectable conductor cross-section for auxiliary contacts	
• single or multi-stranded • finely stranded with core end processing	1 ... 4 mm² 0.75 ... 2.5 mm²
Type of connectable conductor cross-sections	
• for auxiliary contacts — solid	1x (1 ... 4mm²), 2x (1 ... 4mm²)

- single or multi-stranded
- finely stranded with core end processing
- at AWG conductors for auxiliary contacts

1x (1 ... 4mm²), 2x (1 ... 4mm²)
 1x (0,75 ... 2,5mm²), 2x (0,75 ... 2,5mm²)
 1x (AWG 18 ... 14), 2x (AWG 18 ... 14)

AWG number as coded connectable conductor cross section

- for auxiliary contacts

18 ... 14

Safety related data

Product function

- Mirror contact acc. to IEC 60947-4-1
- positively driven operation acc. to IEC 60947-5-1

Yes
No

Communication/ Protocol

Product function Bus communication

No

Certificates/ approvals

General Product Approval

EMC

Functional Safety/Safety of Machinery

Declaration of Conformity



CCC



UL



RCM

[Type Examination Certificate](#)

[Miscellaneous](#)

Declaration of Conformity

Test Certificates

Marine / Shipping

other



EG-Konf.

[Special Test Certificate](#)



ABS



RMRS

[Confirmation](#)

[Miscellaneous](#)

Railway

[Special Test Certificate](#)

Further information

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

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1375-6AP36>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1375-6AP36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1375-6AP36>

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

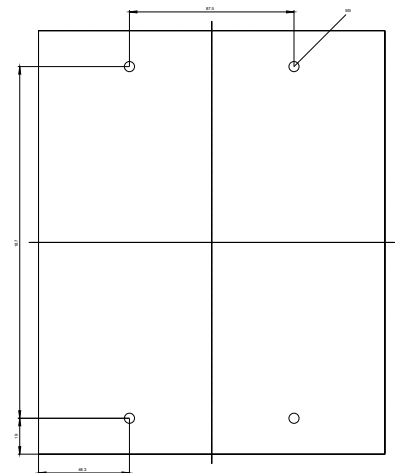
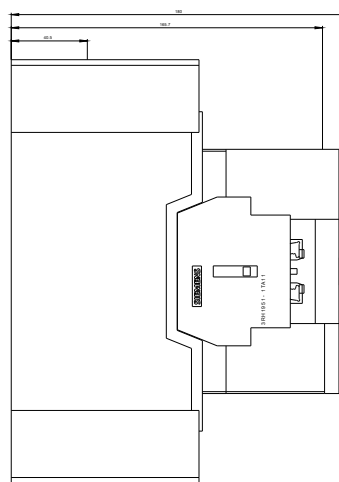
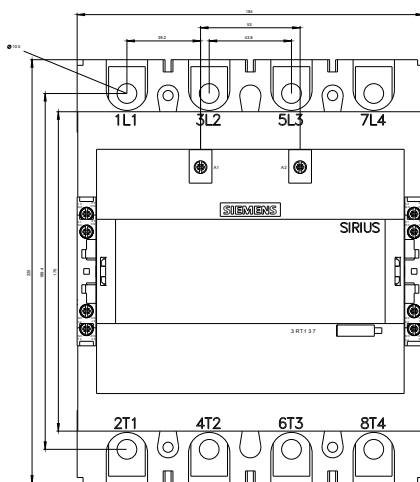
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1375-6AP36&lang=en

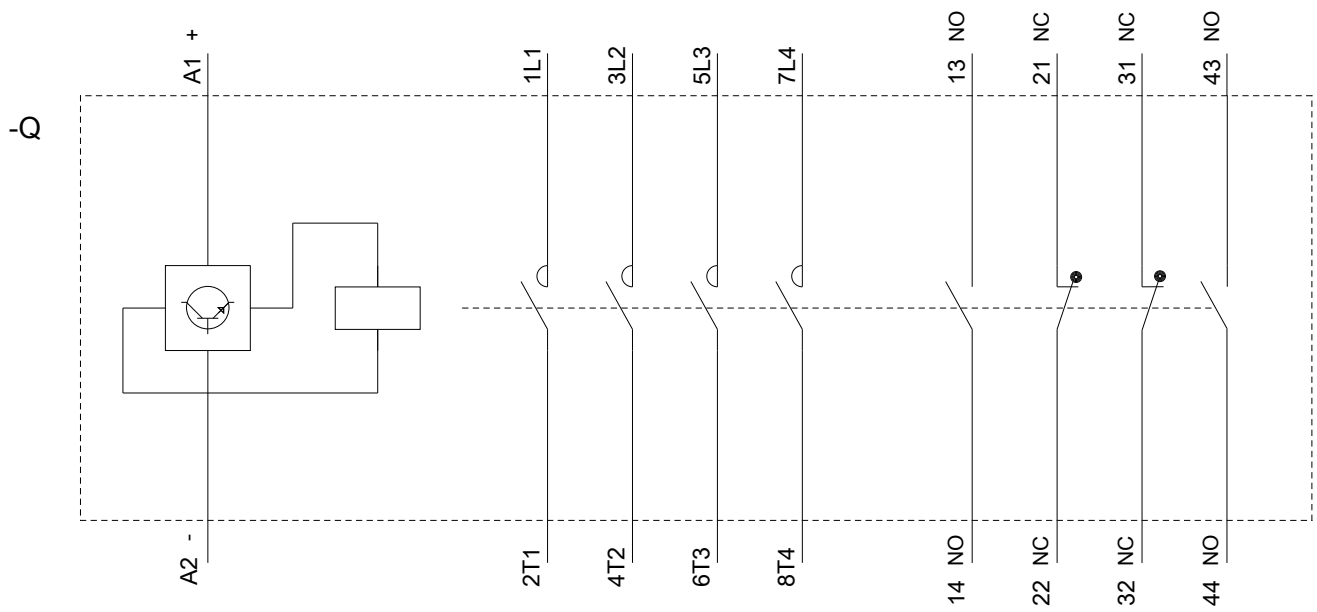
Characteristic: Tripping characteristics, I^2t , Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1375-6AP36/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1375-6AP36&objecttype=14&gridview=view1>





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