

Contactor, AC-1, 500 A/400 V/40 °C, S12, 4-pole, 24-60 V AC, 20-60 V 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	
<ul style="list-style-type: none"> function module for communication 	No
<ul style="list-style-type: none"> Auxiliary switch 	Yes
Surge voltage resistance	
<ul style="list-style-type: none"> of main circuit rated value 	8 kV
<ul style="list-style-type: none"> of auxiliary circuit rated value 	6 kV
Protection class IP	
<ul style="list-style-type: none"> on the front 	IP00; IP20 at front with cover
<ul style="list-style-type: none"> of the terminal 	IP00
Reference code acc. to DIN EN 81346-2	Q

Ambient conditions

Installation altitude at height above sea level	
<ul style="list-style-type: none"> maximum 	2 000 m

Relative humidity	
<ul style="list-style-type: none"> during operation 	95 %
Main circuit	
Number of poles for main current circuit	4
Number of NO contacts for main contacts	4
Operating voltage	
<ul style="list-style-type: none"> at AC <ul style="list-style-type: none"> at 50 Hz rated value at 60 Hz rated value 	1 000 V 1 000 V
Operating current	
<ul style="list-style-type: none"> at AC-1 at 400 V <ul style="list-style-type: none"> at ambient temperature 40 °C rated value at AC-1 <ul style="list-style-type: none"> up to 690 V at ambient temperature 40 °C rated value up to 690 V at ambient temperature 60 °C rated value up to 1000 V at ambient temperature 40 °C rated value up to 1000 V at ambient temperature 60 °C rated value at AC-3 <ul style="list-style-type: none"> at 400 V rated value 	500 A 500 A 400 A 375 A 325 A 305 A
Minimum cross-section in main circuit	
<ul style="list-style-type: none"> at maximum AC-1 rated value 	300 mm ²
Operating power	
<ul style="list-style-type: none"> at AC-3 <ul style="list-style-type: none"> at 400 V rated value 	160 kW
No-load switching frequency	
<ul style="list-style-type: none"> at AC at DC 	300 1/h 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	
<ul style="list-style-type: none"> at 50 Hz rated value at 60 Hz rated value 	24 ... 60 V 24 ... 60 V
Control supply voltage	
<ul style="list-style-type: none"> at DC rated value 	20 ... 60 V
Operating range factor control supply voltage rated value of magnet coil at DC	
<ul style="list-style-type: none"> 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	475 V·A
• at 60 Hz	475 V·A
Apparent holding power of magnet coil at AC	
• at 50 Hz	8.5 V·A
• at 60 Hz	8.5 V·A
Closing power of magnet coil at DC	400 W
Holding power of magnet coil at DC	3.5 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	
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — 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
<ul style="list-style-type: none"> • Side-by-side mounting 	Yes
Height	225 mm
Width	184 mm
Depth	180 mm
Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards 20 mm — upwards 10 mm — downwards 10 mm — at the side 0 mm • for grounded parts <ul style="list-style-type: none"> — forwards 20 mm — upwards 10 mm — at the side 10 mm — downwards 10 mm • for live parts <ul style="list-style-type: none"> — forwards 20 mm — upwards 10 mm — downwards 10 mm — at the side 10 mm 	
Net weight	6.5 kg

Connections/ Terminals

Type of electrical connection	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • single or multi-stranded 1 ... 4 mm² • finely stranded with core end processing 0.75 ... 2.5 mm² 	
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — 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
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[Type Examination Certificate](#)

[Miscellaneous](#)

Declaration of Conformity	Test Certificates	Marine / Shipping	other
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[Special Test Certificate](#)



[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=3RT1374-6AE36>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1374-6AE36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1374-6AE36>

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

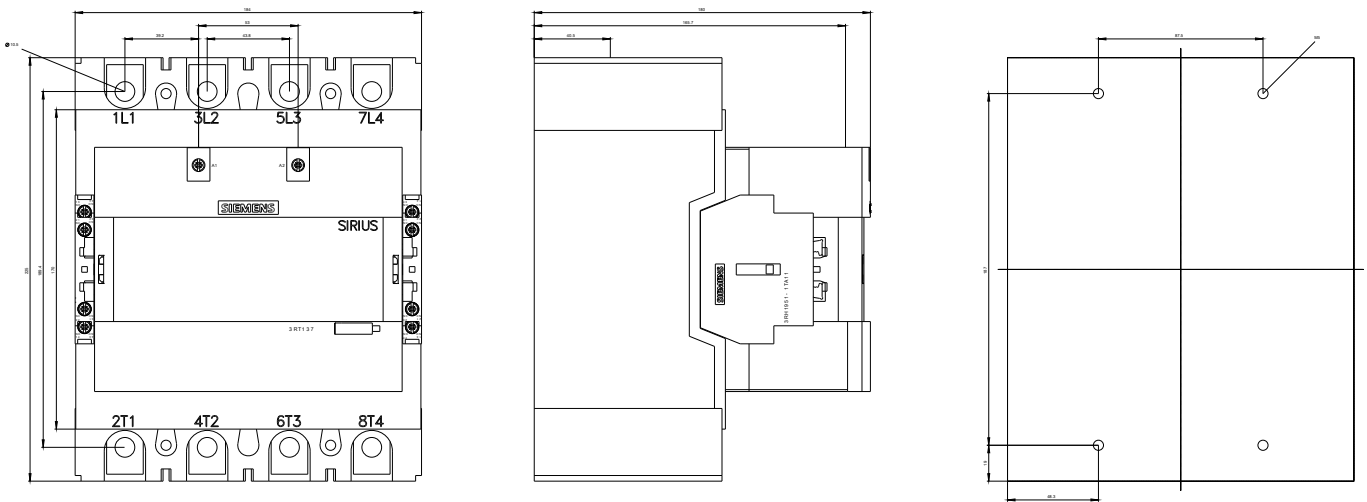
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1374-6AE36&lang=en

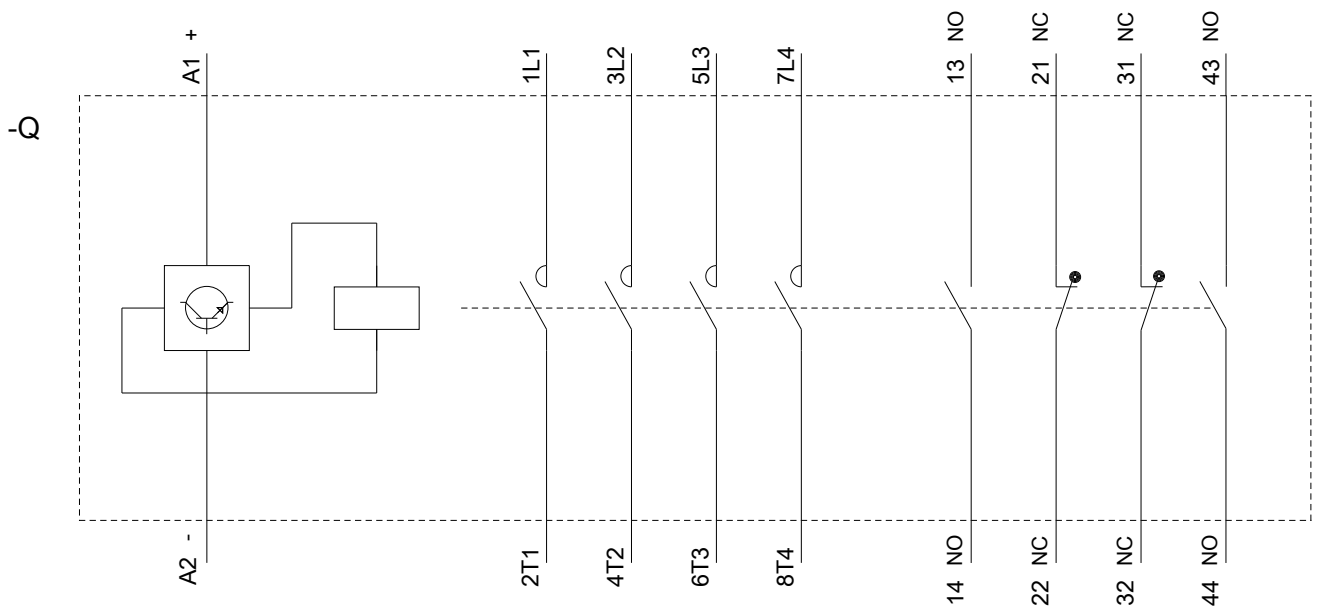
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1374-6AE36/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1374-6AE36&objecttype=14&gridview=view1>





last modified:

09/21/2019