



Contactor, AC-1, 500 A/400 V/40 °C, S12, 4-pole, 48-130 V AC/DC, 2 NO+2 NC, Connection rail/ screw terminal

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
power loss [W] for rated value of the current	
• at AC in hot operating state	200 W
• at AC in hot operating state per pole	50 W
• without load current share typical	2.5 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
• of main circuit with degree of pollution 3 rated value	1 000 V
• of the auxiliary and control circuit with degree of pollution 3 rated value	690 V
surge voltage resistance	
• of main circuit rated value	8 kV
• of auxiliary circuit rated value	6 kV
reference code according to IEC 81346-2	Q
Substance Prohibition (Date)	03/27/2017
Weight	6.8 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-40 ... +60 °C
• during storage	-40 ... +70 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Main circuit	
number of poles for main current circuit	4
number of NO contacts for main contacts	4
type of voltage for main current circuit	AC
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated value	500 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	500 A

— up to 690 V at ambient temperature 60 °C rated value	400 A
— up to 1000 V at ambient temperature 40 °C rated value	375 A
— up to 1000 V at ambient temperature 60 °C rated value	325 A
• at AC-3	
— at 400 V rated value	305 A
minimum cross-section in main circuit at maximum AC-1 rated value	300 mm²
operating power	
• at AC-3 at 400 V rated value	160 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	48 ... 130 V
• at 60 Hz rated value	48 ... 130 V
control supply voltage at DC rated value	48 ... 130 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
design of the surge suppressor	with varistor
apparent pick-up power of magnet coil at AC	
• at 50 Hz	340 VA
• at 60 Hz	340 VA
apparent holding power of magnet coil at AC	
• at 50 Hz	17 VA
• at 60 Hz	17 VA
closing power of magnet coil at DC	360 W
holding power of magnet coil at DC	2.5 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
operational 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
operational 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 • at 220 V rated value	0.55 A 0.3 A
UL/CSA ratings	
contact rating of auxiliary contacts according to UL	A600 / Q300
Short-circuit protection	
design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 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
fastening method side-by-side mounting	Yes
fastening method	screw fixing
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 circuit • at contactor for auxiliary contacts • of magnet coil	Connection bar, broadened > 450A required screw-type terminals Screw-type terminals Screw-type terminals
connectable conductor cross-section for auxiliary contacts • solid or 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 — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts	1x (1 ... 4mm²), 2x (1 ... 4mm²) 1x (1 ... 4mm²), 2x (1 ... 4mm²) 1x (0.75 ... 2.5 mm²), 2x (0.75 ... 2.5 mm²) 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 according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1	Yes No
Electrical Safety	
protection class IP on the front according to IEC 60529	IP00; IP20 with box terminal/cover
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with box terminal/cover
Communication/ Protocol	
product function bus communication	No
Approvals Certificates	



Test Certificates

other

Railway

Environment

[Special Test Certificate](#)



[Confirmation](#)

[Miscellaneous](#)

[Special Test Certificate](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3RT1374-6AF36>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1374-6AF36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1374-6AF36>

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

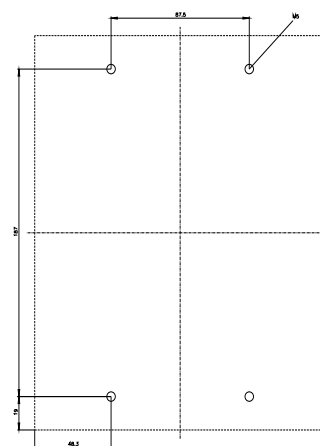
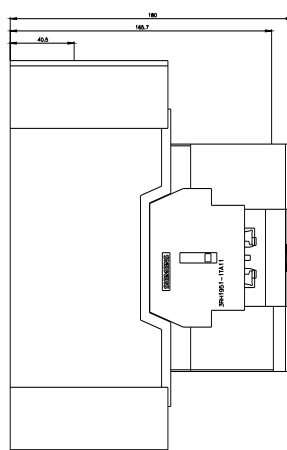
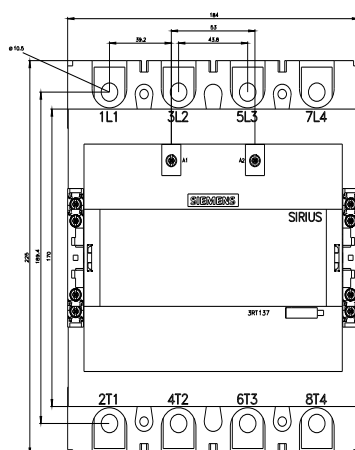
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1374-6AF36&lang=en

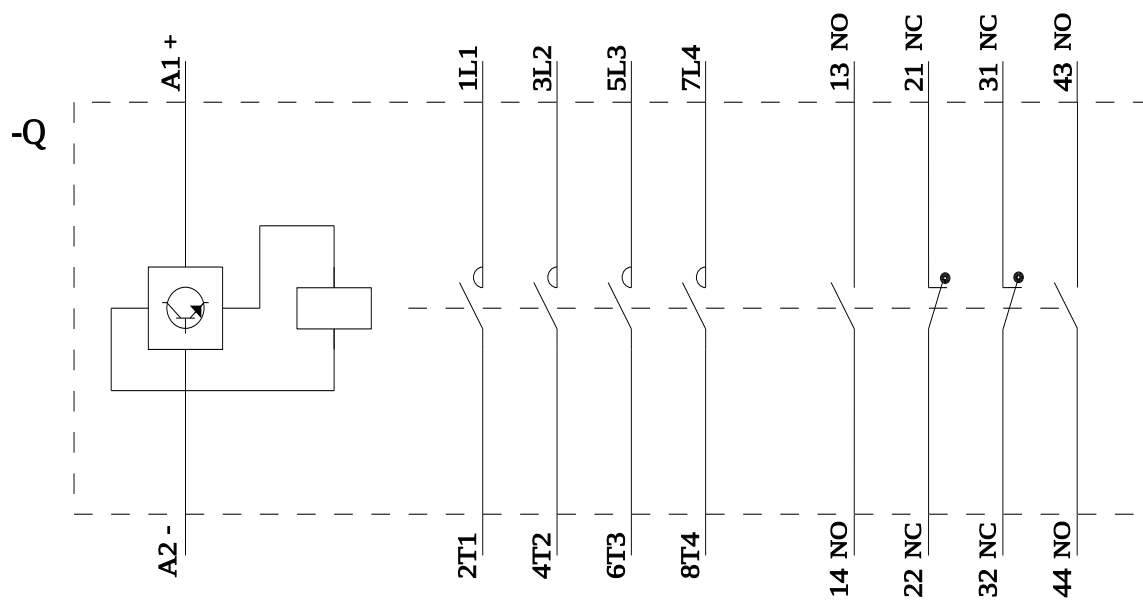
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1374-6AF36/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1374-6AF36&objecttype=14&gridview=view1>





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