



Contactor, AC-1, 525 A/400 V/40 °C, S12, 4-pole, 24-60 V AC, 20-60 V 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	
<ul style="list-style-type: none"> function module for communication auxiliary switch 	<p>No</p> <p>Yes</p>
insulation voltage	
<ul style="list-style-type: none"> of main circuit with degree of pollution 3 rated value 	1 000 V
surge voltage resistance	
<ul style="list-style-type: none"> of main circuit rated value of auxiliary circuit rated value 	<p>8 kV</p> <p>6 kV</p>
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	27.03.2017 00:00:00
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul style="list-style-type: none"> during operation during storage 	<p>-40 ... +60 °C</p> <p>-40 ... +70 °C</p>
relative humidity minimum	10 %
relative humidity during operation	10 ... 95 %
relative humidity at 55 °C acc. 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
operational current	
<ul style="list-style-type: none"> at AC-1 at 400 V 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 	<p>525 A</p> <p>525 A</p> <p>425 A</p> <p>400 A</p> <p>350 A</p> <p>370 A</p>

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	24 ... 60 V
• at 60 Hz rated value	24 ... 60 V
control supply voltage at DC	
• rated value	20 ... 60 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	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
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	0.55 A
• at 220 V rated value	0.3 A
UL/CSA ratings	
contact rating of auxiliary contacts according to UL	A600 / Q300
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	
fastening method	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 — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — upwards — downwards — at the side 	20 mm	10 mm
	10 mm	0 mm
	20 mm	10 mm
	10 mm	10 mm
	10 mm	10 mm
	20 mm	10 mm
	10 mm	10 mm
	10 mm	10 mm
	10 mm	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 circuit 	Connection bar, broadened > 450A required screw-type terminals	
connectable conductor cross-section for auxiliary contacts		
<ul style="list-style-type: none"> • solid or stranded • finely stranded with core end processing 	1 ... 4 mm ²	0.75 ... 2.5 mm ²
type of connectable conductor cross-sections		
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts 	1x (1 ... 4mm ²), 2x (1 ... 4mm ²)	1x (1 ... 4mm ²), 2x (1 ... 4mm ²)
	1x (0,75 ... 2,5mm ²), 2x (0,75 ... 2,5mm ²)	1x (0,75 ... 2,5mm ²), 2x (0,75 ... 2,5mm ²)
	1x (AWG 18 ... 14), 2x (AWG 18 ... 14)	1x (AWG 18 ... 14), 2x (AWG 18 ... 14)
AWG number as coded connectable conductor cross section		
<ul style="list-style-type: none"> • for auxiliary contacts 	18 ... 14	
Safety related data		
protection class IP on the front acc. to IEC 60529	IP00; IP20 with box terminal/cover	
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front with box terminal/cover	
Communication/ Protocol		
product function bus communication	No	
Certificates/ approvals		
General Product Approval	EMC	Declaration of Conformity



[Confirmation](#)



Declaration of Conformity	Test Certificates	other		Railway
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[UK Declaration of Conformity](#)

[Special Test Certificate](#)

[Confirmation](#)

[Miscellaneous](#)

[Special Test Certificate](#)

Further information

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=3RT1375-6AE36>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1375-6AE36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1375-6AE36>

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

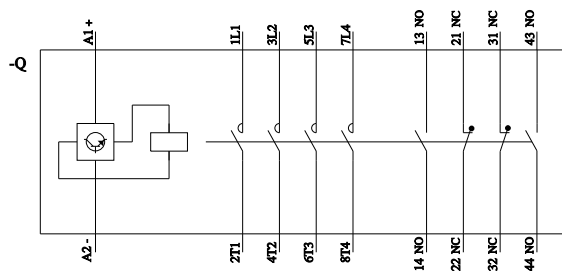
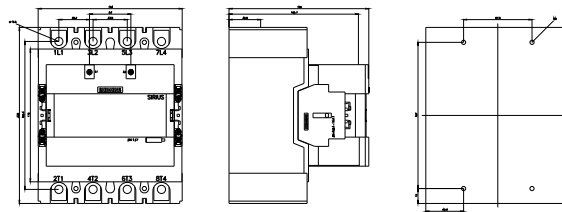
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1375-6AE36&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1375-6AE36/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1375-6AE36&objecttype=14&gridview=view1>



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