



Contactor, AC-1, 525 A/400 V/40 °C, S12, 4-pole, 100-250 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	
<ul style="list-style-type: none"> function module for communication auxiliary switch 	<p>No</p> <p>Yes</p>
power loss [W] for rated value of the current	
<ul style="list-style-type: none"> at AC in hot operating state at AC in hot operating state per pole without load current share typical 	<p>288 W</p> <p>72 W</p> <p>4.5 W</p>
insulation voltage	
<ul style="list-style-type: none"> of main circuit with degree of pollution 3 rated value of the auxiliary and control circuit with degree of pollution 3 rated value 	<p>1 000 V</p> <p>690 V</p>
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 according to IEC 81346-2	Q
Substance Prohibitive (Date)	03/27/2017
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 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
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 	<p>525 A</p> <p>525 A</p> <p>425 A</p>

— 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 ● 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 ● at 50 Hz rated value ● at 60 Hz rated value	100 ... 250 V 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 ● full-scale value	0.8 1.1
operating range factor control supply voltage rated value of magnet coil at AC ● at 50 Hz ● at 60 Hz	0.85 ... 1.1 0.85 ... 1.1
apparent pick-up power of magnet coil at AC ● at 50 Hz ● at 60 Hz	385 VA 385 VA
apparent holding power of magnet coil at AC ● at 50 Hz ● at 60 Hz	17.5 VA 17.5 VA
closing power of magnet coil at DC	410 W
holding power of magnet coil at DC	4.5 W
closing delay ● at AC ● at DC	30 ... 60 ms 30 ... 60 ms
opening delay ● at AC ● at DC	45 ... 80 ms 45 ... 80 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts ● attachable ● instantaneous contact	2 2 2
number of NO contacts for auxiliary contacts ● attachable ● instantaneous contact	2 2 2
operational current at AC-15 ● at 230 V rated value ● at 400 V rated value ● at 500 V rated value ● at 690 V rated value	4 A 3 A 2 A 2 A
operational current at DC-13 ● at 24 V rated value ● at 48 V rated value ● at 110 V rated value ● at 125 V rated value	3 A 1.5 A 0.55 A 0.55 A

<ul style="list-style-type: none"> 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 20 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 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	
<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 ... 2.5 mm ²), 2x (0.75 ... 2.5 mm ²) 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	
product function	
<ul style="list-style-type: none"> mirror contact according to IEC 60947-4-1 positively driven operation according to IEC 60947-5-1 	Yes No
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
------------------------------------	----

Certificates/ approvals

General Product Approval	EMC	Test Certificates
---------------------------------	------------	--------------------------



[Confirmation](#)



[Special Test Certificate](#)

other	Railway
--------------	----------------

[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=3RT1375-6AP36>

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, I²t, 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>



