



CONTACTOR,AC3:30KW/400V, 1NO+1NC, 110V AC 50HZ, 3-POLE, SIZE S2, SCREW TERMINAL

Figure similar

product brand name	SIRIUS
Product designation	3RT2 contactor
General technical data:	
Product expansion function module for communication	No
Insulation voltage	
• Rated value	690 V
maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1	400 V
Degree of pollution	3
Shock resistance	
• at rectangular impulse	
— with AC	11.8g / 5 ms, 7.4g / 10 ms
• with sine pulse	
— with AC	18.5g / 5 ms, 11.6g / 10 ms
Surge voltage resistance Rated value	6 kV
Mechanical service life (switching cycles)	
• of the contactor typical	10 000 000
• of the contactor with added electronics-compatible auxiliary switch block typical	5 000 000
• of the contactor with added auxiliary switch block typical	10 000 000
Thermal short-time current restricted to 10 s	520 A
Protection class IP	
• on the front	IP00

• of the terminal	IP00
<b>Equipment marking</b>	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q
<b>Main circuit:</b>	
<b>Number of poles for main current circuit</b>	3
<b>Number of NC contacts for main contacts</b>	0
<b>Number of NO contacts for main contacts</b>	3
<b>Operating voltage</b>	
• at AC-3 Rated value maximum	690 V
<b>Operating current</b>	
• at AC-1	
— at 400 V at ambient temperature 40 °C Rated value	80 A
— up to 690 V at ambient temperature 40 °C Rated value	80 A
— up to 690 V at ambient temperature 60 °C Rated value	70 A
• at AC-2 at 400 V Rated value	65 A
• at AC-3	
— at 400 V Rated value	65 A
— at 500 V Rated value	65 A
— at 690 V Rated value	47 A
• at AC-4 at 400 V Rated value	55 A
<b>Operating current with 1 current path</b>	
• at DC-1	
— at 24 V Rated value	55 A
— at 110 V Rated value	4.5 A
— at 220 V Rated value	1 A
— at 440 V Rated value	0.4 A
— at 600 V Rated value	0.25 A
• at DC-3 at DC-5	
— at 24 V Rated value	35 A
— at 110 V Rated value	2.5 A
— at 220 V Rated value	1 A
— at 440 V Rated value	0.1 A
— at 600 V Rated value	0.06 A
<b>Operating current with 2 current paths in series</b>	
• at DC-1	
— at 24 V Rated value	55 A
— at 110 V Rated value	45 A
— at 220 V Rated value	5 A

— at 440 V Rated value	1 A
— at 600 V Rated value	0.8 A
• at DC-3 at DC-5	
— at 110 V Rated value	25 A
— at 220 V Rated value	5 A
— at 24 V Rated value	55 A
— at 440 V Rated value	0.27 A
— at 600 V Rated value	0.16 A
<b>Operating current with 3 current paths in series</b>	
• at DC-1	
— at 24 V Rated value	55 A
— at 110 V Rated value	55 A
— at 220 V Rated value	45 A
— at 440 V Rated value	2.9 A
— at 600 V Rated value	1.4 A
• at DC-3 at DC-5	
— at 110 V Rated value	55 A
— at 220 V Rated value	25 A
— at 24 V Rated value	55 A
— at 440 V Rated value	0.6 A
— at 600 V Rated value	0.6 A
<b>Operating power</b>	
• at AC-1	
— at 230 V at 60 °C Rated value	26 kW
— at 400 V at 60 °C Rated value	46 kW
— at 690 V at 60 °C Rated value	79 kW
<b>Operating power for ≥ 200000 operating cycles at AC-4</b>	
• at 400 V Rated value	14.7 kW
• at 690 V Rated value	20 kW
<b>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</b>	
	3.8 W
<b>Operating frequency</b>	
• at AC-1 maximum	800 1/h
• at AC-2 maximum	400 1/h
• at AC-3 maximum	700 1/h
• at AC-4 maximum	200 1/h
<b>No-load switching frequency</b>	
• with AC	5 000 1/h
<b>Control circuit/ Control:</b>	
<b>Type of voltage of the control supply voltage</b>	
	AC

<b>Control supply voltage with AC</b>	
• at 50 Hz Rated value	110 V
<b>Operating range factor control supply voltage rated value of the magnet coil with AC</b>	
• at 50 Hz	0.8 ... 1.1
<b>Apparent pick-up power of the magnet coil with AC</b>	
• at 50 Hz	190 V·A
<b>Apparent holding power of the magnet coil with AC</b>	
• at 50 Hz	16 V·A
<b>Closing delay</b>	
• with AC	10 ... 80 ms
<b>Opening delay</b>	
• with AC	10 ... 18 ms
<b>Arcing time</b>	10 ... 20 ms

#### Auxiliary circuit:

<b>Number of NC contacts</b>	
• for auxiliary contacts	
— instantaneous contact	1
<b>Number of NO contacts</b>	
• for auxiliary contacts	
— instantaneous contact	1
<b>Product expansion Auxiliary switch</b>	Yes
<b>Operating current at AC-12 maximum</b>	10 A
<b>Operating current at AC-15</b>	
• at 230 V Rated value	10 A
• at 400 V Rated value	3 A
• at 690 V Rated value	1 A
<b>Operating current at DC-12</b>	
• at 60 V Rated value	6 A
• at 110 V Rated value	3 A
• at 125 V Rated value	2 A
• at 220 V Rated value	1 A
• at 600 V Rated value	0.15 A
<b>Operating current at DC-13</b>	
• at 24 V Rated value	10 A
• at 60 V Rated value	2 A
• at 110 V Rated value	1 A
• at 125 V Rated value	0.9 A
• at 220 V Rated value	0.3 A
• at 600 V Rated value	0.1 A
<b>Contact reliability of the auxiliary contacts</b>	1 faulty switching per 100 million (17 V, 1 mA)

**UL/CSA ratings:**

<b>Full-load current (FLA) for three-phase AC motor</b>	
• at 480 V Rated value	65 A
• at 600 V Rated value	52 A
<b>yielded mechanical performance [hp]</b>	
• for single-phase AC motor	
— at 110/120 V Rated value	5 hp
— at 230 V Rated value	10 hp
• for three-phase AC motor	
— at 200/208 V Rated value	20 hp
— at 220/230 V Rated value	20 hp
— at 460/480 V Rated value	50 hp
— at 575/600 V Rated value	50 hp
<b>Contact rating of the auxiliary contacts acc. to UL</b>	A600 / P600

**Short-circuit:**

<b>Design of the fuse link</b>	
• for short-circuit protection of the main circuit	
— with type of assignment 1 required	gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A
— with type of assignment 2 required	gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 125 A
• for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A

**Installation/ mounting/ dimensions:**

<b>mounting position</b>	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
<b>Mounting type</b>	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
• Side-by-side mounting	Yes
<b>Height</b>	113.4 mm
<b>Width</b>	55 mm
<b>Depth</b>	130 mm
<b>Required spacing</b>	
• with side-by-side mounting	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm

— at the side	6 mm
— downwards	50 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	6 mm

#### Connections/ Terminals:

<b>Type of electrical connection</b>	
• for main current circuit	screw-type terminals
• for auxiliary and control current circuit	screw-type terminals
<b>Type of connectable conductor cross-section</b>	
• for main contacts	
— single or multi-stranded	2x (1 ... 35 mm <sup>2</sup> ), 1x (1 ... 50 mm <sup>2</sup> )
— finely stranded with core end processing	2x (1 ... 25 mm <sup>2</sup> ), 1x (1 ... 35 mm <sup>2</sup> )
• for AWG conductors for main contacts	2x (18 ... 2), 1x (18 ... 1)
• for auxiliary contacts	
— single or multi-stranded	2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> )
— finely stranded with core end processing	2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
• for AWG conductors for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14)

#### Safety related data:

<b>Proportion of dangerous failures</b>	
• with low demand rate acc. to SN 31920	40 %
• with high demand rate acc. to SN 31920	73 %
<b>Product function</b>	
• Mirror contact acc. to IEC 60947-4-1	Yes
• positively driven operation acc. to IEC 60947-5-1	No
<b>Protection against electrical shock</b>	finger-safe when touched vertically from front acc. to IEC 60529

#### Mechanical data:

<b>Size of contactor</b>	S2
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#### Ambient conditions:

<b>Installation altitude at height above sea level maximum</b>	2 000 m
<b>Ambient temperature</b>	
• during operation	-25 ... +60 °C
• during storage	-55 ... +80 °C

#### Certificates/ approvals:



## Confirmation

## Environmental Confirmations

## Further information

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

<http://www.siemens.com/industrial-controls/catalogs>

### Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

## Cax online generator

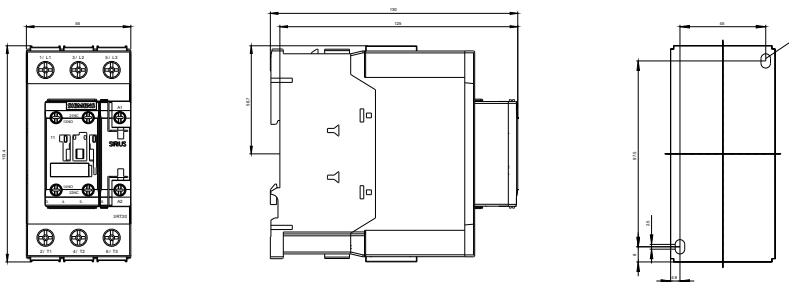
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT20371AF00>

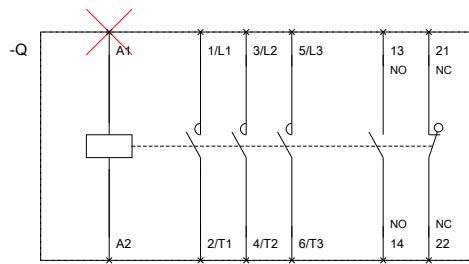
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RT20371AF00>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT20371AF00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT20371AF00&lang=en)





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