



4NO CONTACTOR,AC1:110A 175-280V  
AC/DC,VARISTOR, 4-POLE, 4NO, SIZE S2, SCREW  
TERMINAL 1NO+1NC INTEGRATED

Figure similar

product brand name	SIRIUS
Product designation	3RT2 contactor

### General technical data:

<b>Insulation voltage</b>		
<ul style="list-style-type: none"> <li>Rated value</li> </ul>	V	690
<b>Degree of pollution</b>		3
<b>Surge voltage resistance Rated value</b>	kV	6
<b>Mechanical service life (switching cycles)</b>		
<ul style="list-style-type: none"> <li>of the contactor typical</li> </ul>		10 000 000
<ul style="list-style-type: none"> <li>of the contactor with added electronics-compatible auxiliary switch block typical</li> </ul>		5 000 000
<ul style="list-style-type: none"> <li>of the contactor with added auxiliary switch block typical</li> </ul>		10 000 000
<b>Protection class IP</b>		
<ul style="list-style-type: none"> <li>on the front</li> </ul>		IP20
<ul style="list-style-type: none"> <li>of the terminal</li> </ul>		IP00
<b>Equipment marking</b>		
<ul style="list-style-type: none"> <li>acc. to DIN EN 61346-2</li> </ul>		Q
<ul style="list-style-type: none"> <li>acc. to DIN EN 81346-2</li> </ul>		Q

### Main circuit:

<b>Number of poles for main current circuit</b>		4
<b>Number of NC contacts for main contacts</b>		0
<b>Number of NO contacts for main contacts</b>		4
<b>Operating voltage</b>		
<ul style="list-style-type: none"> <li>at AC-3 Rated value maximum</li> </ul>	V	690

<b>Operating current</b>		
<ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— at 400 V at ambient temperature 40 °C Rated value</li> <li>— up to 690 V at ambient temperature 40 °C Rated value</li> <li>— up to 690 V at ambient temperature 60 °C Rated value</li> </ul> </li> </ul>	A	110  110  95
<b>Operating current with 1 current path</b>		
<ul style="list-style-type: none"> <li>• at DC-1 <ul style="list-style-type: none"> <li>— at 24 V Rated value</li> <li>— at 110 V Rated value</li> <li>— at 220 V Rated value</li> <li>— at 440 V Rated value</li> </ul> </li> <li>• at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V Rated value</li> <li>— at 110 V Rated value</li> <li>— at 220 V Rated value</li> <li>— at 440 V Rated value</li> </ul> </li> </ul>	A  A  A  A  A  A  A	95  4.5  1  0.4    20  2.5  1  0.1
<b>Operating current with 2 current paths in series</b>		
<ul style="list-style-type: none"> <li>• at DC-1 <ul style="list-style-type: none"> <li>— at 24 V Rated value</li> <li>— at 110 V Rated value</li> <li>— at 220 V Rated value</li> <li>— at 440 V Rated value</li> </ul> </li> <li>• at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 110 V Rated value</li> <li>— at 220 V Rated value</li> <li>— at 24 V Rated value</li> <li>— at 440 V Rated value</li> </ul> </li> </ul>	A  A  A  A  A  A  A	55  45  5  1    25  5  55  0.27
<b>Operating current with 3 current paths in series</b>		
<ul style="list-style-type: none"> <li>• at DC-1 <ul style="list-style-type: none"> <li>— at 24 V Rated value</li> <li>— at 110 V Rated value</li> <li>— at 220 V Rated value</li> <li>— at 440 V Rated value</li> </ul> </li> <li>• at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 110 V Rated value</li> <li>— at 220 V Rated value</li> <li>— at 24 V Rated value</li> <li>— at 440 V Rated value</li> </ul> </li> </ul>	A  A  A  A  A  A  A	55  45  45  2.9    45  25  55  0.6
<b>Operating power</b>		

<ul style="list-style-type: none"> <li>• at AC-1 at 400 V Rated value</li> </ul>	kW	72
<b>Operating power</b>		
<ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— at 230 V at 60 °C Rated value</li> <li>— at 230 V Rated value</li> <li>— at 400 V at 60 °C Rated value</li> <li>— at 690 V at 60 °C Rated value</li> <li>— at 690 V Rated value</li> </ul> </li> </ul>	kW	36
	kW	42
	kW	63
	kW	108
	kW	125
<b>Operating frequency</b>		
<ul style="list-style-type: none"> <li>• at AC-3 maximum</li> </ul>	1/h	500

Control circuit/ Control:		
<b>Type of voltage of the control supply voltage</b>		AC/DC
<b>Control supply voltage with AC</b>		
<ul style="list-style-type: none"> <li>• at 50 Hz Rated value</li> </ul>	V	175 ... 280
<ul style="list-style-type: none"> <li>• at 60 Hz Rated value</li> </ul>	V	175 ... 280
<b>Control supply voltage for DC</b>		
<ul style="list-style-type: none"> <li>• Rated value</li> </ul>	V	175 ... 280
<b>Operating range factor control supply voltage rated value of the magnet coil with AC</b>		
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>		0.8 ... 1.1
<ul style="list-style-type: none"> <li>• at 60 Hz</li> </ul>		0.8 ... 1.1
<b>Operating range factor control supply voltage rated value of the magnet coil for DC</b>		0.8 ... 1.1
<b>Design of the surge suppressor</b>		with varistor
<b>Closing power of the magnet coil for DC</b>	W	23
<b>Holding power of the magnet coil for DC</b>	W	1

Auxiliary circuit:		
<b>Number of NC contacts</b>		
<ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— instantaneous contact</li> </ul> </li> </ul>		1
<b>Number of NO contacts</b>		
<ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— instantaneous contact</li> </ul> </li> </ul>		1
<b>Product expansion Auxiliary switch</b>		Yes
<b>Operating current at AC-15</b>		
<ul style="list-style-type: none"> <li>• at 230 V Rated value</li> </ul>	A	10
<ul style="list-style-type: none"> <li>• at 400 V Rated value</li> </ul>	A	3
<ul style="list-style-type: none"> <li>• at 690 V Rated value</li> </ul>	A	1
<b>Operating current</b>		
<ul style="list-style-type: none"> <li>• at DC-12 at 125 V Rated value</li> </ul>	A	2
<ul style="list-style-type: none"> <li>• at DC-12 at 220 V Rated value</li> </ul>	A	1
<ul style="list-style-type: none"> <li>• at DC-12 at 600 V Rated value</li> </ul>	A	0.15

• at DC-13 at 125 V Rated value	A	0.9
• at DC-13 at 220 V Rated value	A	0.3
• at DC-13 at 600 V Rated value	A	0.1
<b>Operating current</b>		
• at DC-12		
— at 60 V Rated value	A	6
— at 110 V Rated value	A	3
• at DC-13		
— at 24 V Rated value	A	10
— at 60 V Rated value	A	2
— at 110 V Rated value	A	1
<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	A	27
• at 600 V Rated value	A	27
<b>yielded mechanical performance [hp]</b>		
• for three-phase AC motor at 200/208 V Rated value	metric hp	7.5
• for three-phase AC motor at 220/230 V Rated value	metric hp	10
• for three-phase AC motor at 460/480 V Rated value	metric hp	20
• for three-phase AC motor at 575/600 V Rated value	metric hp	25
<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: 160 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>	mm	113.4
<b>Width</b>	mm	75

<b>Depth</b>	mm	130
<b>Required spacing</b>		
<ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul>	mm	0 0 0 0 0  0 0 50 6 50  0 0 50 50 6

**Connections/ Terminals:**

<b>Type of electrical connection</b>		
<ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control current circuit</li> </ul>		screw-type terminals screw-type terminals
<b>Type of connectable conductor cross-section</b>		
<ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG conductors for main contacts</li> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG conductors for auxiliary contacts</li> </ul>		2x (1 ... 35 mm <sup>2</sup> ), 1x (1 ... 50 mm <sup>2</sup> ) 2x (1 ... 25 mm <sup>2</sup> ), 1x (1 ... 35 mm <sup>2</sup> ) 2x (18 ... 2), 1x (18 ... 1)  2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> ) 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) 2x (20 ... 16), 2x (18 ... 14)
<b>Apparent pick-up power of the magnet coil with AC</b>		
<ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>	V·A V·A	40 40

**Safety related data:**

<b>Proportion of dangerous failures</b>		
<ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> <li>• with high demand rate acc. to SN 31920</li> </ul>	% %	40 73
<b>Product function Mirror contact acc. to IEC 60947-4-1</b>		Yes

Protection against electrical shock		finger-safe when touched vertically from front acc. to IEC 60529
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#### Mechanical data:

Size of contactor		S2
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#### Ambient conditions:

Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
• during operation	°C	-40 ... +70
• during storage	°C	-55 ... +80

#### Certificates/ approvals:

General Product Approval	other
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[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

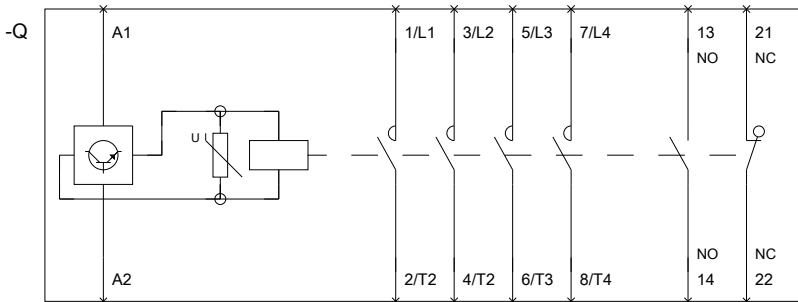
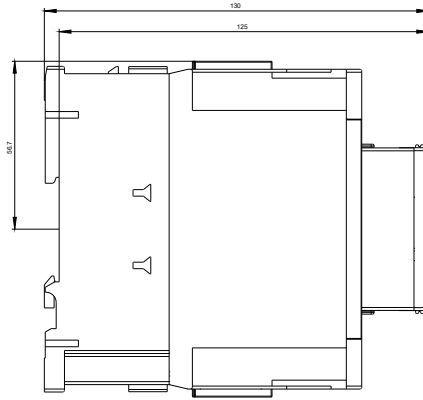
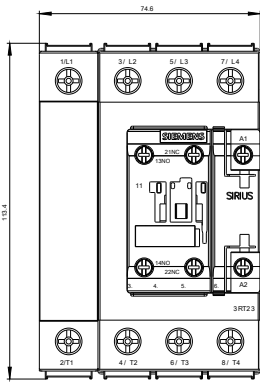
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT23371NP30>

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

<http://support.automation.siemens.com/WW/view/en/3RT23371NP30/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT23371NP30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT23371NP30&lang=en)



last modified:

11.03.2015