



4NO CONTACTOR, AC1: 18A DC 110V 4-POLE, 4NO,
SZ: S00, SCREW TERMINAL

product brand name	SIRIUS
Product designation	3RT2 contactor

General technical data:

Insulation voltage		
<ul style="list-style-type: none"> Rated value 	V	690
Degree of pollution		3
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
<ul style="list-style-type: none"> of the contactor typical 		30 000 000
<ul style="list-style-type: none"> of the contactor with added electronics-compatible auxiliary switch block typical 		5 000 000
<ul style="list-style-type: none"> of the contactor with added auxiliary switch block typical 		10 000 000
Thermal short-time current restricted to 10 s	A	72
Protection class IP		
<ul style="list-style-type: none"> on the front 		IP20
<ul style="list-style-type: none"> of the terminal 		IP20
Equipment marking		
<ul style="list-style-type: none"> acc. to DIN EN 61346-2 		Q
<ul style="list-style-type: none"> acc. to DIN EN 81346-2 		Q

Main circuit:

Number of poles for main current circuit		4
Number of NC contacts for main contacts		0
Number of NO contacts for main contacts		4
Operating voltage		

• at AC-3 Rated value maximum	V	690
Operating current		
• at AC-1		
— at 400 V at ambient temperature 40 °C Rated value	A	18
— up to 690 V at ambient temperature 40 °C Rated value	A	18
— up to 690 V at ambient temperature 60 °C Rated value	A	16
• at AC-2 at 400 V Rated value	A	9
• at AC-3		
— at 400 V Rated value	A	9
• at AC-4 at 400 V Rated value	A	8.5
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	A	20
— at 110 V Rated value	A	2.1
— at 220 V Rated value	A	0.8
— at 440 V Rated value	A	0.6
• at DC-3 at DC-5		
— at 24 V Rated value	A	20
— at 110 V Rated value	A	0.1
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	A	20
— at 110 V Rated value	A	12
— at 220 V Rated value	A	1.6
— at 440 V Rated value	A	0.8
• at DC-3 at DC-5		
— at 110 V Rated value	A	0.35
— at 24 V Rated value	A	20
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	A	20
— at 110 V Rated value	A	20
— at 220 V Rated value	A	16
— at 440 V Rated value	A	1.3
• at DC-3 at DC-5		
— at 110 V Rated value	A	20
— at 220 V Rated value	A	1.5
— at 24 V Rated value	A	20
— at 440 V Rated value	A	0.2

Operating power		
• at AC-1 at 400 V Rated value	kW	11
• at AC-2 at 400 V Rated value	kW	4
• at AC-4 at 400 V Rated value	kW	4
Operating power		
• at AC-1		
— at 230 V at 60 °C Rated value	kW	6
— at 230 V Rated value	kW	6.5
— at 400 V at 60 °C Rated value	kW	10.5
— at 690 V at 60 °C Rated value	kW	18
• at AC-3		
— at 230 V Rated value	kW	2.2
— at 400 V Rated value	kW	4
Operating frequency		
• at AC-3 maximum	1/h	750

Control circuit/ Control:

Type of voltage of the control supply voltage		DC
Control supply voltage for DC		
• Rated value	V	110
Operating range factor control supply voltage rated value of the magnet coil for DC		0.8 ... 1.1
Closing power of the magnet coil for DC	W	4
Holding power of the magnet coil for DC	W	4

Auxiliary circuit:

Number of NC contacts		
• for auxiliary contacts		
— instantaneous contact		0
Number of NO contacts		
• for auxiliary contacts		
— instantaneous contact		0
Product expansion Auxiliary switch		Yes
Contact reliability of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	A	7.6
• at 600 V Rated value	A	9
yielded mechanical performance [hp]		
• for single-phase AC motor at 110/120 V Rated value	metric hp	0.33
• for single-phase AC motor at 230 V Rated value	metric hp	1

- for three-phase AC motor at 200/208 V Rated value
- for three-phase AC motor at 220/230 V Rated value
- for three-phase AC motor at 460/480 V Rated value
- for three-phase AC motor at 575/600 V Rated value

metric hp	2
metric hp	3
metric hp	5
metric hp	7.5

Short-circuit:

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 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required 		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A fuse gL/gG: 10 A

Installation/ mounting/ dimensions:

mounting position		+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
<ul style="list-style-type: none"> • Side-by-side mounting 		Yes
Height	mm	57.5
Width	mm	45
Depth	mm	73
Required spacing		
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards 	mm	0 0 0 0 0 0 0 6 0 0 0

— upwards	mm	0
— downwards	mm	0
— at the side	mm	6

Connections/ Terminals:

Type of electrical connection		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
Type of connectable conductor cross-section		
• for main contacts		
— single or multi-stranded		2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), 2x 4 mm ²
— finely stranded with core end processing		2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG conductors for main contacts		2x (20 ... 16), 2x (18 ... 14), 2x 12
• for auxiliary contacts		
— single or multi-stranded		2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), 2x 4 mm ²
— finely stranded with core end processing		2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG conductors for auxiliary contacts		2x (20 ... 16), 2x (18 ... 14), 2x 12

Safety related data:

B10 value with high demand rate acc. to SN 31920		1 000 000
Proportion of dangerous failures		
• with low demand rate acc. to SN 31920	%	40
• with high demand rate acc. to SN 31920	%	73
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	100
Product function Mirror contact acc. to IEC 60947-4-1		Yes
• Note		with 3RH29
T1 value for proof test interval or service life acc. to IEC 61508	y	20
Protection against electrical shock		finger-safe

Mechanical data:

Size of contactor		S00
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Ambient conditions:

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

Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
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[Type Examination](#)



Test Certificates	Shipping Approval
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[Special Test Certificate](#)



Shipping Approval	other
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[Environmental Confirmations](#)

[Confirmation](#)



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

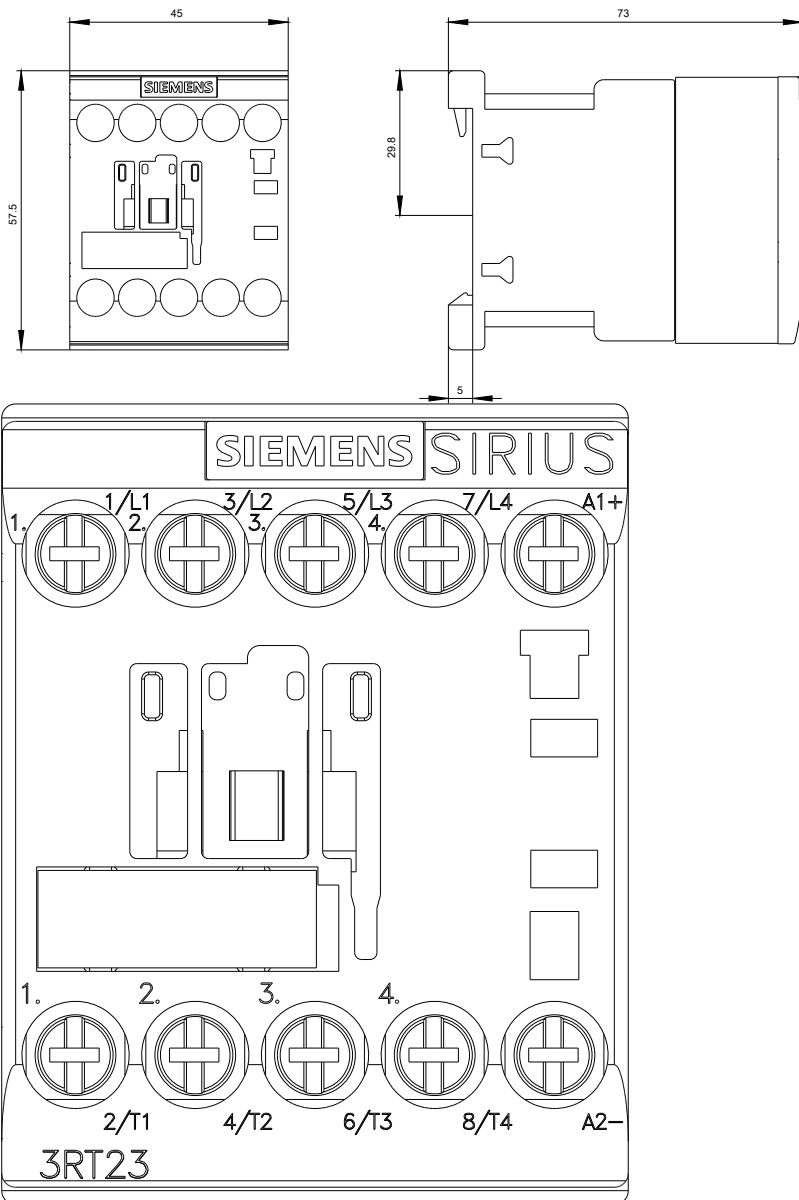
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT23161BF40>

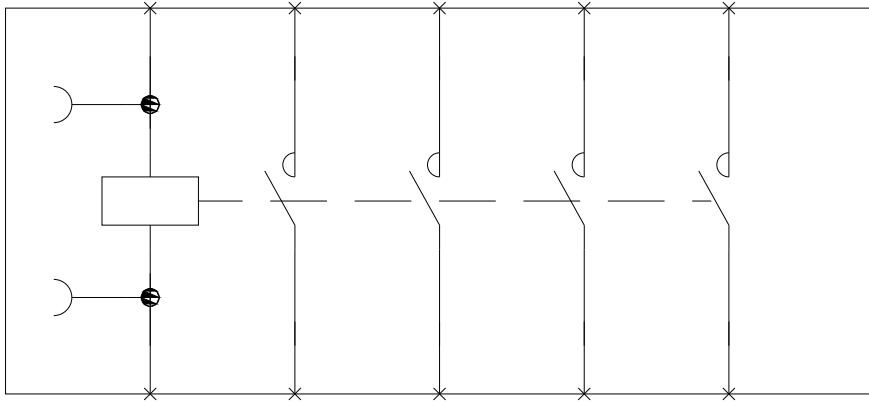
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RT23161BF40/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=3RT23161BF40&lang=en





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