



4NO CONTACTOR, AC1: 50A DC 125V 4-POLE, 4NO, SZ: S0, SPRING-LOADED TERMINAL 1NO+1NC INTEGR.

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 		10 000 000
<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	260
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	50
— up to 690 V at ambient temperature 40 °C Rated value	A	50
— up to 690 V at ambient temperature 60 °C Rated value	A	42
• at AC-2 at 400 V Rated value	A	17
• at AC-3		
— at 400 V Rated value	A	15.5
• at AC-4 at 400 V Rated value	A	15.5
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	A	35
— at 110 V Rated value	A	4.5
— at 220 V Rated value	A	1
— at 440 V Rated value	A	0.4
• at DC-3 at DC-5		
— at 24 V Rated value	A	20
— at 110 V Rated value	A	2.5
— at 220 V Rated value	A	1
— at 440 V Rated value	A	0.09
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	A	35
— at 110 V Rated value	A	35
— at 220 V Rated value	A	1
— at 440 V Rated value	A	1
• at DC-3 at DC-5		
— at 110 V Rated value	A	15
— at 220 V Rated value	A	3
— at 24 V Rated value	A	35
— at 440 V Rated value	A	0.27
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	A	35
— at 110 V Rated value	A	35
— at 220 V Rated value	A	42
— at 440 V Rated value	A	2.9
• at DC-3 at DC-5		

— at 110 V Rated value	A	35
— at 220 V Rated value	A	10
— at 24 V Rated value	A	35
— at 440 V Rated value	A	0.6
Operating power		
• at AC-1 at 400 V Rated value	kW	28
• at AC-2 at 400 V Rated value	kW	9
• at AC-4 at 400 V Rated value	kW	7.5
Operating power		
• at AC-1		
— at 230 V at 60 °C Rated value	kW	16
— at 230 V Rated value	kW	28
— at 400 V at 60 °C Rated value	kW	28
• at AC-3		
— at 230 V Rated value	kW	4
— at 400 V Rated value	kW	7.5
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	125
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	5.9
Holding power of the magnet coil for DC	W	5.9

Auxiliary circuit:

Number of NC contacts		
• for auxiliary contacts		
— instantaneous contact		1
Number of NO contacts		
• for auxiliary contacts		
— instantaneous contact		1
Product expansion Auxiliary switch		Yes
Operating current at AC-15		
• at 230 V Rated value	A	10
• at 400 V Rated value	A	3
• at 690 V Rated value	A	1
Operating current		
• at DC-12 at 125 V Rated value	A	2
• at DC-12 at 220 V Rated value	A	1

• at DC-12 at 600 V Rated value	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
Operating current		
• 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
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	14
• at 600 V Rated value	A	17
yielded mechanical performance [hp]		
• for single-phase AC motor at 110/120 V Rated value	metric hp	1
• for single-phase AC motor at 230 V Rated value	metric hp	3
• for three-phase AC motor at 200/208 V Rated value	metric hp	3
• for three-phase AC motor at 220/230 V Rated value	metric hp	5
• for three-phase AC motor at 460/480 V Rated value	metric hp	10
• for three-phase AC motor at 575/600 V Rated value	metric hp	15
Contact rating of the auxiliary contacts acc. to UL		A600 / Q600

Short-circuit:

Design of the fuse link		
• for short-circuit protection of the main circuit		
— with type of assignment 1 required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A
— with type of assignment 2 required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
• for short-circuit protection of the auxiliary switch required		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	85
Width	mm	61
Depth	mm	107
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 — upwards — downwards — at the side 	mm	0 0 0 0 0 0 0 0 6 0 0 0 0 0 6

Connections/ Terminals:

Type of electrical connection		
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 		spring-loaded terminals spring-loaded terminals
Type of connectable conductor cross-section		
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing • for AWG conductors for main contacts • for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing 		2x (1 ... 10 mm ²) 2x (1 ... 6 mm ²) 2x (1 ... 6 mm ²) 2x (18 ... 8) 2x (0,5 ... 2,5 mm ²) 2x (0.5 ... 1.5 mm ²)

- finely stranded without core end processing
- for AWG conductors for auxiliary contacts

2x (0.5 ... 2.5 mm²)

2x (20 ... 14)

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
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		S0
--------------------------	--	----

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	EMC	Functional Safety/Safety of Machinery
--------------------------	-----	---------------------------------------



[Type Examination](#)

Declaration of Conformity	Test Certificates	Shipping Approval
---------------------------	-------------------	-------------------



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Shipping Approval	other
-------------------	-------



[Confirmation](#)

other

[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

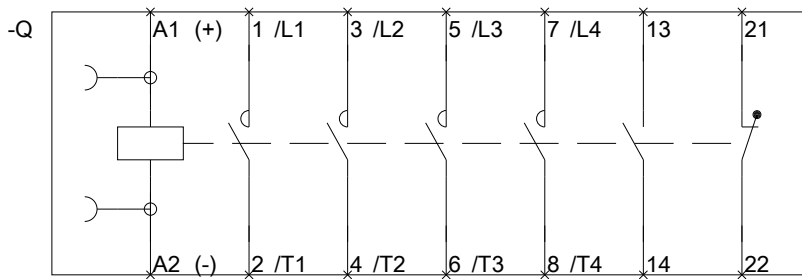
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT23272BG40>

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

<http://support.automation.siemens.com/WW/view/en/3RT23272BG40/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=3RT23272BG40&lang=en



last modified:

11.03.2015