



2NO+2NC CONTACTOR, AC3: 4KW DC 24V 4-POLE,
2NO+2NC, 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
Protection class IP		
<ul style="list-style-type: none"> on the front 		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		2
Number of NO contacts for main contacts		2
Operating current		
<ul style="list-style-type: none"> at AC-1 		

— 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 AC-3 at 400 V		
— per NO contact Rated value	A	9
— per NC contact Rated value	A	9
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 per NC contact Rated value	A	16
— at 24 V per NO contact Rated value	A	16
— at 110 V per NC contact Rated value	A	0.075
— at 110 V per NO contact Rated value	A	0.15
— at 220 V per NC contact Rated value	A	0.375
— at 220 V per NO contact Rated value	A	0.75
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 per NC contact Rated value	A	0.175
— at 110 V per NO contact Rated value	A	0.35
— at 24 V per NC contact Rated value	A	16
— at 24 V per NO contact Rated value	A	16
Operating power		
• at AC-1 at 400 V Rated value	kW	11
Operating power		
• at AC-1		
— at 230 V Rated value	kW	6.5
• at AC-2 at AC-3		
— at 230 V per NC contact Rated value	kW	2.2
— at 230 V per NO contact Rated value	kW	2.2
— at 400 V per NC contact Rated value	kW	4
— at 400 V per NO contact Rated value	kW	4

Control circuit/ Control:		
Type of voltage of the control supply voltage		DC
Control supply voltage for DC		
• Rated value	V	24
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
Operating current at AC-15		
• at 230 V Rated value	A	10
• at 400 V Rated value	A	3
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 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:		
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
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
 - 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

- Side-by-side mounting

screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022

Yes

Height

mm 57.5

Width

mm 45

Depth

mm 73

Required spacing

- with side-by-side mounting
 - forwards
 - Backwards
 - upwards
 - downwards
 - at the side
- for grounded parts
 - forwards
 - Backwards
 - upwards
 - at the side
 - downwards
- for live parts
 - forwards
 - Backwards
 - upwards
 - downwards
 - at the side

mm	0
mm	0
mm	0
mm	0
mm	0
mm	0
mm	0
mm	0
mm	6
mm	0
mm	0
mm	0
mm	0
mm	0
mm	6

Connections/ Terminals:

Type of electrical connection

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals

screw-type terminals

Type of connectable conductor cross-section		
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — single or multi-stranded — finely stranded with core end processing • for AWG conductors for main contacts • for auxiliary contacts <ul style="list-style-type: none"> — solid — single or multi-stranded — finely stranded with core end processing • for AWG conductors for auxiliary contacts 		<p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²</p> <p>2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x 4 mm²</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14), 2x 12</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²</p> <p>2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x 4 mm²</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14), 2x 12</p>

Safety related data:

B10 value with high demand rate acc. to SN 31920		1 000 000
Proportion of dangerous failures		
<ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 	%	40 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
<ul style="list-style-type: none"> • 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
--------------------------	--	-----

Ambient conditions:

Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
<ul style="list-style-type: none"> • during operation • during storage 	°C	-25 ... +60 -55 ... +80

Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
--------------------------	---------------------------------------	---------------------------



[Type Examination](#)



Test Certificates	Shipping Approval
-------------------	-------------------

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



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



[Confirmation](#)

[Environmental Confirmations](#)

other



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

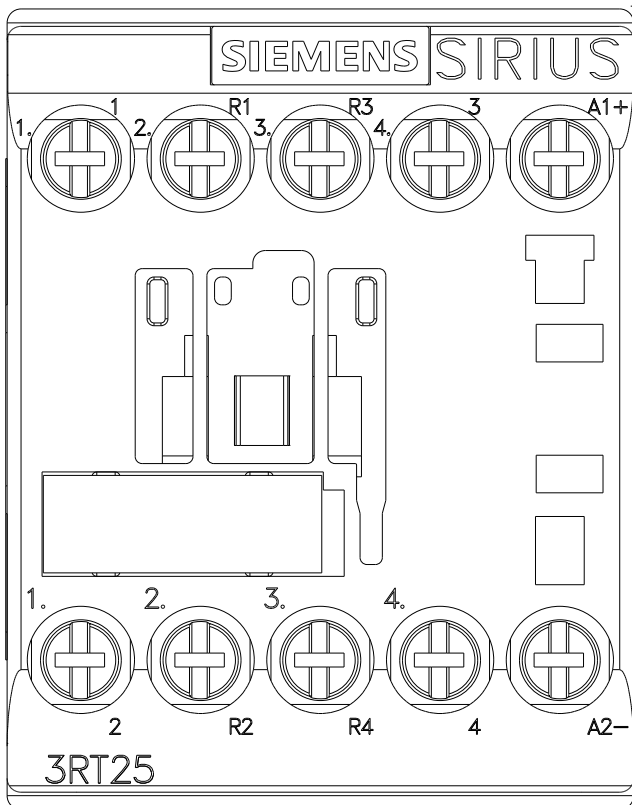
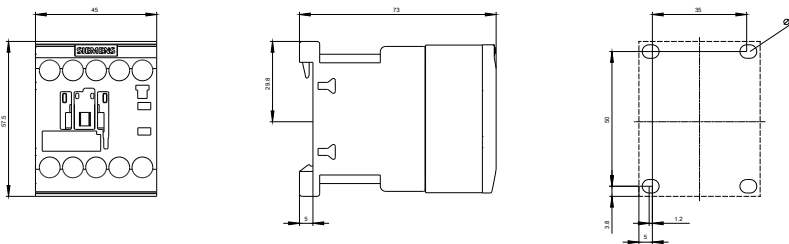
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RT25161BB40>

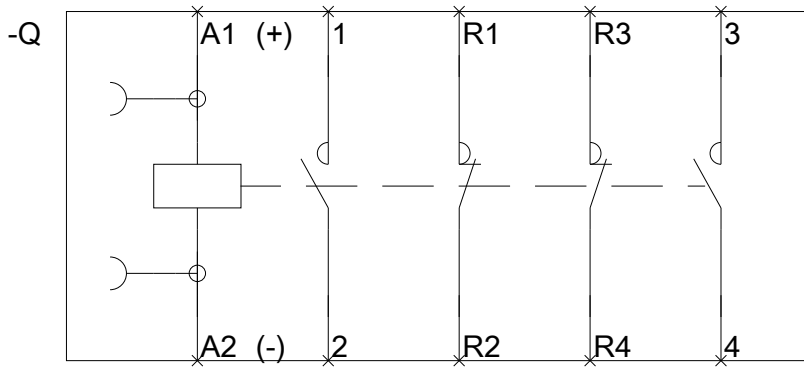
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RT25161BB40/all>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RT25161BB40&lang=en





last modified:

11.03.2015