# SIEMENS

## Data sheet

## 3RT2517-2BB40



2NO+2NC CONTACTOR, AC3: 5.5KW DC 24V 4-POLE, 2NO+2NC, SZ: S00, SPRING-LOADED TERMINAL

34 2 Par		
product brand name		SIRIUS
Product designation		3RT2 contactor
General technical data:		
Insulation voltage		
Rated value	V	690
Degree of pollution		3
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
<ul> <li>of the contactor typical</li> </ul>		30 000 000
<ul> <li>of the contactor with added electronics-</li> </ul>		5 000 000
compatible auxiliary switch block typical		
<ul> <li>of the contactor with added auxiliary switch</li> </ul>		10 000 000
block typical		
Protection class IP		
• on the front		IP20
Equipment marking		
• acc. to DIN EN 61346-2		Q
• 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		
• at AC-1		

— up to 690 V at ambient temperature 40 °C Rated value	А	22
— up to 690 V at ambient temperature 60 °C Rated value	А	20
• at AC-2 at AC-3 at 400 V		
— per NO contact Rated value	А	12
— per NC contact Rated value	A	9
Operating current with 1 current path	,,	С
• at DC-1		
— at 24 V Rated value	А	20
— at 110 V Rated value	А	2.1
— at 220 V Rated value	А	0.8
— at 440 V Rated value	А	0.6
• at DC-3 at DC-5		
— at 24 V per NC contact Rated value	А	20
— at 24 V per NO contact Rated value	А	20
— at 110 V per NC contact Rated value	А	0.075
— at 110 V per NO contact Rated value	А	0.15
— at 220 V per NC contact Rated value	А	0.375
— at 220 V per NO contact Rated value	А	0.75
Operating current with 2 current paths in series	-	
● at DC-1		
— at 24 V Rated value	А	20
— at 110 V Rated value	А	12
— at 220 V Rated value	А	1.6
— at 440 V Rated value	А	0.8
● at DC-3 at DC-5		
— at 110 V per NC contact Rated value	А	0.175
— at 110 V per NO contact Rated value	А	0.35
— at 24 V per NC contact Rated value	А	20
— at 24 V per NO contact Rated value	А	20
Operating power	-	
• at AC-1 at 400 V Rated value	kW	13
Operating power		
● at AC-1		
— at 230 V Rated value	kW	7.5
• 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	3
— at 400 V per NC contact Rated value	kW	4
— at 400 V per NO contact Rated value	kW	5.5

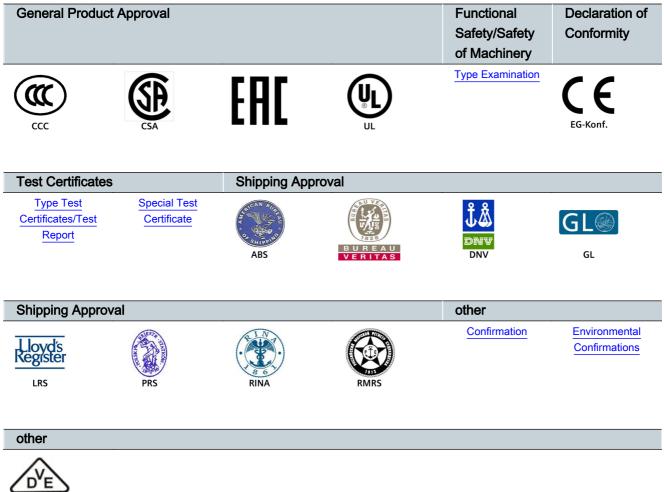
Control circuit/ Control:		
Type of voltage of the control supply voltage		DC
Control supply voltage for DC		
Rated value	V	24
Operating range factor control supply voltage rated	-	0.8 1.1
value of the magnet coil for DC		
Closing power of the magnet coil for DC	W	4
Holding power of the magnet coil for DC	W	4
Auxiliary circuit:		
Number of NC contacts		
<ul> <li>for auxiliary contacts</li> </ul>		
— instantaneous contact		0
Number of NO contacts		
<ul> <li>for auxiliary contacts</li> </ul>		
— instantaneous contact		0
Product expansion Auxiliary switch	_	Yes
Operating current at AC-15	-	
• at 230 V Rated value	А	10
• at 400 V Rated value	А	3
Operating current		
• at DC-12 at 125 V Rated value	А	2
• at DC-12 at 220 V Rated value	А	1
• at DC-12 at 600 V Rated value	А	0.15
<ul> <li>at DC-13 at 220 V Rated value</li> </ul>	А	0.3
• at DC-13 at 600 V Rated value	А	0.1
Operating current	_	
• at DC-12		
— at 60 V Rated value	А	6
— at 110 V Rated value	А	3
• at DC-13		
— at 24 V Rated value	А	10
— at 60 V Rated value	А	2
— at 110 V Rated value	А	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	metric	0.5
value	hp	
	metric	2
<ul> <li>for single-phase AC motor at 230 V Rated</li> </ul>	mouno	
<ul> <li>for single-phase AC motor at 230 V Rated value</li> </ul>	hp	

Short-circuit:		
Design of the fuse link		
<ul> <li>for short-circuit protection of the main circuit</li> </ul>		
— with type of assignment 1 required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
— with type of assignment 2 required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>		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	70
Width	mm	45
Depth	mm	73
Required spacing		
with side-by-side mounting		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
<ul> <li>for grounded parts</li> </ul>		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— at the side	mm	6
— downwards	mm	0
● for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	6
Connections/ Terminals:		
Type of electrical connection		

Type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	spring-loaded terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	spring-loaded terminals

Type of connectable conductor cross-section	_	
<ul> <li>for main contacts</li> </ul>		
— solid		2x (0.5 4 mm²)
— single or multi-stranded		2x (0,5 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 2.5 mm²)
— finely stranded without core end		2x (0.5 2.5 mm²)
processing		
<ul> <li>for AWG conductors for main contacts</li> </ul>		2x (20 12)
<ul> <li>for auxiliary contacts</li> </ul>		
— solid		2x (0.5 4 mm²)
— single or multi-stranded		2x (0,5 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 2.5 mm²)
— finely stranded without core end		2x (0.5 2.5 mm²)
processing		
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (20 12)
Safety related data:		
B10 value with high demand rate acc. to SN 31920		1 000 000
Proportion of dangerous failures	-	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	%	40
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	%	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	У	20
Protection against electrical shock	-	finger-safe
Mechanical data:		
Size of contactor		S00
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-25 +60
<ul> <li>during storage</li> </ul>	°C	-55 +80

Certificates/ approvals:



VDE

#### Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

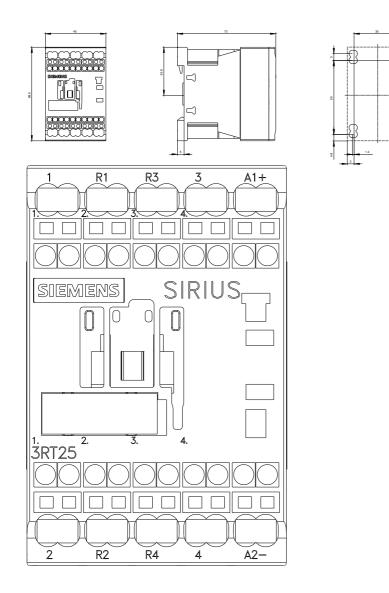
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT25172BB40

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RT25172BB40/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=3RT25172BB40&lang=en



8

