SIEMENS

Product data sheet 3RT2517-1BB40



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

General technical data:			
product brand name		SIRIUS	
Size of the contactor		S00	
Product extension / auxiliary switch		Yes	
Protection class IP / on the front		IP20	
Protection against electrical shock		finger-safe	
Degree of pollution		3	
Installation altitude / at a height over sea level / maximum	m	2,000	
Ambient temperature			
during storage	°C	-55 +80	
during operating	°C	-25 +60	
Shock resistance			
at rectangular impulse			
• at DC		7.3g / 5 ms, 4.7g / 10 ms	
at sine pulse			
• at DC		11,4g / 5 ms, 7,3g / 10 ms	
Impulse voltage resistance / rated value	kV	6	
Insulation voltage / rated value	V	690	
Mechanical operating cycles as operating time			
• of the contactor / typical		30,000,000	

• of the contactor with added auxiliary switch block / typical

• of the contactor with added electronics-compatible auxiliary switch block / typical

10,000,000
5,000,000

Main circuit:		
Number of NC contacts / for main contacts		2
Number of NO contacts / for main contacts		2
Operating current		
• at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	Α	22
• at 60 °C ambient temperature / rated value	Α	20
• at AC-2 / at 400 V / rated value	Α	12
• at AC-3 / at 400 V / rated value	Α	9
• at AC-4 / at 400 V / rated value	Α	8.5
Operating current		
• with 1 current path / at DC-1		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	2.1
 with 2 current paths in series / at DC-1 		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	12
with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	0.1
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	0.35
Service power		
• at AC-2 / at 400 V / rated value	kW	5.5
• at AC-3 / at 400 V / rated value	kW	4
• at AC-4 / at 400 V / rated value	kW	4
Active power loss / per conductor / typical	W	1.2
Off-load operating frequency		
• at AC	1/h	10,000
• at DC	1/h	10,000
Frequency of operation / at AC-1 / according to IEC 60947-6-2	1/h	1,000
Frequency of operation / at AC-2 / according to IEC 60947-6-2	1/h	750
Frequency of operation / at AC-3 / according to IEC 60947-6-2	1/h	750
Frequency of operation / at AC-4 / according to IEC 60947-6-2	1/h	250

Control circuit:

Type of voltage / of the controlled supply voltage		DC
Control supply voltage / 1		
• for DC / rated value	V	24
Operating range factor control supply voltage rated value / of the magnet coil		
• for DC		0.8 1.1
Pull-in power / of the solenoid / for DC	W	4
Holding power / of the solenoid / for DC	W	4
Closing delay		
• at DC	ms	30 100
Opening delay		
• at DC	ms	7 13
Arcing time	ms	10 15

Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching		0
Number of NO contacts / for auxiliary contacts / instantaneous switching		0
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	Α	10
• at AC-15		
• at 230 V	Α	10
• at 400 V	Α	3
• at DC-12		
• at 48 V	Α	6
• at 60 V	Α	6
• at 110 V	Α	3
• at 220 V	Α	1
• at DC-13		
• at 24 V	Α	10
• at 48 V	Α	2
• at 60 V	А	2
• at 110 V	Α	1
• at 220 V	Α	0.3

Short-circuit:			
Design of the fuse link			
• for short-circuit protection of the auxiliary switch / required		fuse gL/gG: 10 A	
• for short-circuit protection of the main circuit			

• with type of assignment 1 / required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
• at type of coordination 2 / required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20A

		20A	
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	
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022	
Type of fixing/fixation / series installation		Yes	
Width	mm	45	
Height	mm	57.5	
Depth	mm	73	
Distance, to be maintained, to the ranks assembly / sidewards	mm	0	
Distance, to be maintained, to earthed part / sidewards	mm	6	
Connections:			
Connections: Design of the electrical connection			
		screw-type terminals	
Design of the electrical connection		screw-type terminals screw-type terminals	
Design of the electrical connection • for main current circuit			
Pesign of the electrical connection for main current circuit for auxiliary and control current circuit			
Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section			
Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts		screw-type terminals	
Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid		screw-type terminals	
Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid • finely stranded		screw-type terminals 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²	
Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid • finely stranded • with conductor end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	

Certificates/approvals:

• finely stranded

• with conductor end processing

• for AWG conductors / for auxiliary contacts

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 2x 12

General Product Approval

Declaration of Conformity











Test Certificates

Special Test Certificate Type Test
Certificates/Test
Report

Shipping Approval







GL







Shipping Approval

other



Confirmation



UL/CSA ratings:		
yielded mechanical performance (hp)		
for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.5
• at 230 V / rated value	hp	2
for three-phase squirrel cage motors		
• at 220/230 V / rated value	hp	3
• at 460/480 V / rated value	hp	7.5
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	Α	11
Contact rating designation / for auxiliary contacts / according to UL		A600 / Q600

Sicherheitsrelevante Kenngrößen:		
B10 value / with high demand rate		
according to SN 31920		1,000,000
T1 value / for proof test interval or service life		
according to IEC 61508	а	20
Proportion of dangerous failures		
 with low demand rate / according to SN 31920 	%	40
with high demand rate / according to SN 31920	%	73
Failure rate (FIT value) / with low demand rate		
• according to SN 31920	FIT	100
Product function		
• mirror contact to IEC 60947-4-1		Yes

• comment

• positively driven operation to IEC 60947-5-1

with 3RH29

No

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

Cax online generator:

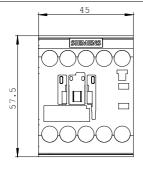
http://www.siemens.com/cax

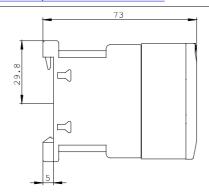
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

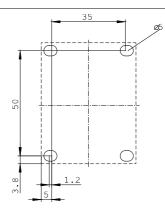
http://support.automation.siemens.com/WW/view/en/3RT2517-1BB40/all

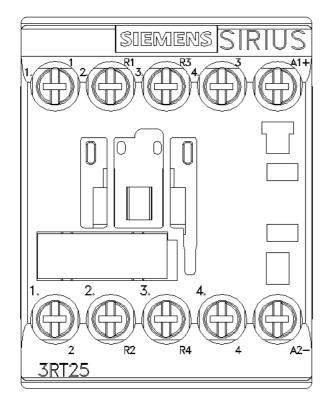
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

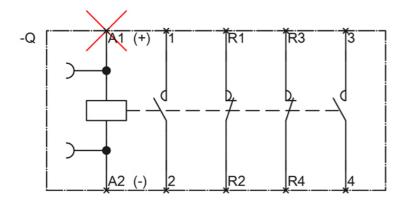
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2517-1BB40}$











last change: Jul 26, 2012