SIEMENS

Product data sheet 3RT2317-2BB40



4NO CONTACTOR, AC1: 22A DC 24V 4-POLE, 4NO, SZ: S00, SPRING-LOADED TERMINAL

General technical data:		
product brand name		SIRIUS
Size of the contactor		S00
Product extension / auxiliary switch		Yes
Product extension / function module for communication		No
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

Maximum permissible voltage for protective separation / between coil and main contacts / in accordance with EN 60947-1	V	400
Mechanical operating cycles as operating time		
of the contactor / typical		30,000,000
• of the contactor with added auxiliary switch block / typical		10,000,000
 of the contactor with added electronics-compatible auxiliary switch block / typical 		5,000,000

Main circuit:		
Number of NC contacts / for main contacts		0
Number of NO contacts / for main contacts		4
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
Connectable conductor cross-section / in main circuit		
• at AC-1		
• at 40 °C / minimum permissible	m²	4
• at 60 °C / minimum permissible	m²	2.5
Operational current		
• at AC-2 / at 400 V / rated value	Α	12
• at AC-3		
• at 400 V / rated value	Α	12
• at AC-4 / at 400 V / rated value	А	8.5
Operational current		
• with 1 current path / 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	Α	0.6
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	12
• at 220 V / rated value	Α	1.6
• at 440 V / rated value	А	0.8
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	20
• at 220 V / rated value	Α	20
• at 440 V / rated value	Α	1.3
Operational current		
• 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
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	20
• at 220 V / rated value	Α	1.5
• at 440 V / rated value	Α	0.2
Service power		
• at AC-1		
• at 230 V / rated value	kW	7.5
• at 400 V / rated value	kW	13
• at AC-2 / at 400 V / rated value	kW	5.5
• at AC-3		
• at 230 V / rated value	kW	3
• at 400 V / rated value	kW	5.5
• at AC-4 / at 400 V / rated value	kW	4
Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductor	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
• at AC-2 / according to IEC 60947-6-2	1/h	750
• at AC-3 / according to IEC 60947-6-2	1/h	750
• 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		
• 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
UL/CSA ratings:		
yielded mechanical performance (hp)		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.33
• at 230 V / rated value	hp	1
for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	2
• at 220/230 V / rated value	hp	3
• at 460/480 V / rated value	hp	5
• at 575/600 V / rated value	hp	7.5
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	Α	7.6
• at 600 V / rated value	Α	9
Contact rating designation / for auxiliary contacts / according to UL		A600 / Q600
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
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	70
Depth	mm	73
Distance, to be maintained, to the ranks assembly / sidewards	mm	0

Connections:		
Design of the electrical connection		
• for main current circuit	spring-loaded terminals	
• for auxiliary and control current circuit	spring-loaded terminals	
Type of the connectable conductor cross-section		
• for main contacts		
• solid	2x (0.5 4 mm²)	
• finely stranded		
 with conductor end processing 	2x (0.5 2.5 mm²)	
 without conductor final cutting 	2x (0.5 2.5 mm²)	
• for AWG conductors / for main contacts	2x (20 12)	
• for auxiliary contacts		
• solid	2x (0.5 4 mm²)	
• finely stranded		
 with conductor end processing 	2x (0.5 2.5 mm²)	
 without conductor final cutting 	2x (0.5 2.5 mm²)	
• for AWG conductors / for auxiliary contacts	2x (20 12)	

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		with 3RH29
 positively driven operation to IEC 60947-5-1 		No

Certificates/approvals:

General Product Approval

Functional Safety / Safety of Machinery Declaration of Conformity









Type Examination



Test Certificates

Special Test Certificate Type Test
Certificates/Test
Report

Shipping Approval













Shipping Approval

other









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

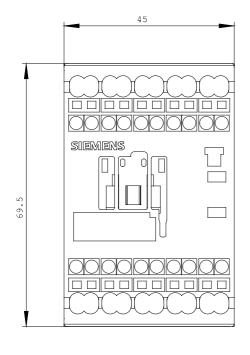
http://www.siemens.com/cax

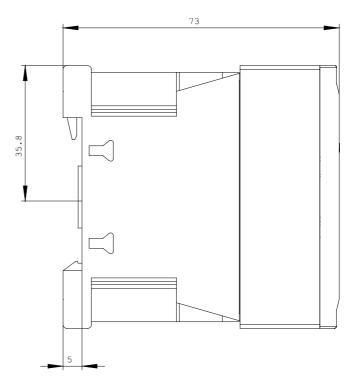
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

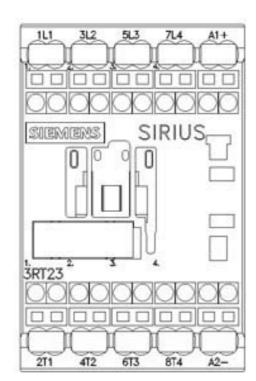
http://support.automation.siemens.com/WW/view/en/3RT2317-2BB40/all

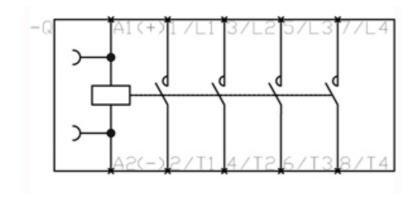
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2317-2BB40}$









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