SIEMENS

Product data sheet 3RT2017-4LB41



COUPLING CONTACTOR RAIL, AC3:5.5KW,DC24V,0,7...1,25*US, 1NO, VARISTOR INTEGRATED, 3-POLE, SZ S00 RING CABLE LUG CONNECTION SZ. S00, RING CABLE LUG CONNECTION

General technical data:			
product brand name		SIRIUS	
Size of the contactor		S00	
Product extension / auxiliary switch		No	
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	
• note		Railway application: See catalog for rated conditions	
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		3
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 500 V / rated value	Α	9.2
• at 690 V / rated value	Α	6.7
• at AC-4 / at 400 V / rated value	Α	8.5
Operational current		
• with 1 current path / at DC-1		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	2.1
• at 220 V / rated value	Α	0.8
• at 440 V / rated value	Α	0.6
• at 600 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	Α	0.8
• at 600 V / rated value	Α	0.7
• 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
• at 600 V / rated value	Α	1
Operational current		
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	Α	20
• at 110 V / rated value	А	0.1
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	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
• at 600 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 500 V / rated value	kW	17
• at 690 V / rated value	kW	22
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 690 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:

Design of the surge suppressor		with varistor
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		0.7 1.25
Pull-in power / of the solenoid / for DC	W	2.8
Holding power / of the solenoid / for DC	W	2.8
Closing delay		
• at DC	ms	30 100
Opening delay		
• at DC	ms	7 13
Arcing time	ms	10 15
Residual current / of electronics / for control with signal <0>		
• at 230 V / with AC / maximum permissible	mA	4
• at 24 V / with DC / maximum permissible	mA	10
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		1
Operating current / of the auxiliary contacts		
• [nicht versorgt: PMD_ABP551_001_000]		
•	А	2
• at 690 V	Α	1
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 200/208 V / rated value	hp	3
• at 220/230 V / rated value	hp	3
• at 460/480 V / rated value	hp	7.5

• at 480 V / rated value

Operating current (FLA) / for three-phase squirrel cage motors

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Α

• at 600 V / rated value	Α	11
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	57.5	
Depth	mm	73	
Distance, to be maintained, to the ranks assembly / sidewards	mm	0	

Connections:	
Design of the electrical connection	
for main current circuit	ring cable connection
 for auxiliary and control current circuit 	ring cable connection

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	

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

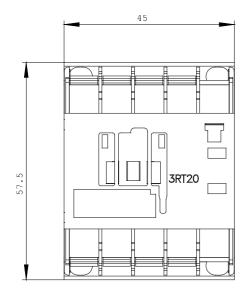
http://www.siemens.com/cax

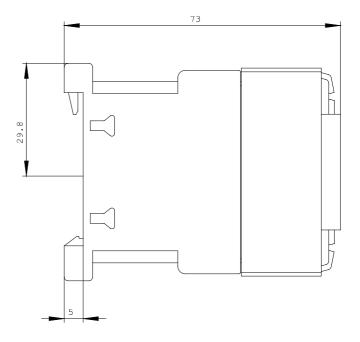
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

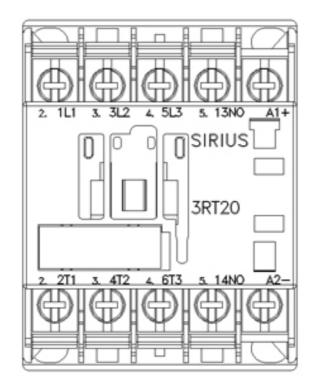
http://support.automation.siemens.com/WW/view/en/3RT2017-4LB41/all

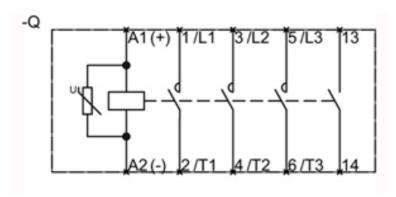
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2017-4LB41}$









last change: Feb 15, 2013