SIEMENS

Data sheet 3RT2017-1BE41



CONTACTOR, AC-3, 5.5KW/400V, 1NO, DC 60V, 3-POLE, SZ S00 SCREW TERMINAL

product brand name	SIRIUS
Product designation	3RT2 contactor
3	
Canaral tackmical data:	
General technical data:	
General technical data: Insulation voltage	

V	690
	3
kV	6
	30 000 000
	5 000 000
	10 000 000
Α	90
	IP20
	IP20
	Q
	Q
	kV

Main circuit:		
Number of poles for main current circuit		3
Number of NC contacts for main contacts		0
Number of NO contacts for main contacts		3
Operating voltage		

 at AC-3 Rated value maximum 	V	690
Operating current		
• at AC-1		
 — at 400 V at ambient temperature 40 °C Rated value 	Α	22
 up to 690 V at ambient temperature 40 °C Rated value 	Α	22
— up to 690 V at ambient temperature 60 °C Rated value	Α	20
• 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
Operating 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
• at DC-3 at DC-5		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	0.1
Operating current 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
• at DC-3 at DC-5		
— at 110 V Rated value	Α	0.35
— at 24 V Rated value	Α	20
Operating current 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

• at DC-3 at DC-5	
— at 110 V Rated value	20
— at 220 V Rated value A	1.5
— at 24 V Rated value	20
— at 440 V Rated value A	0.2
— at 600 V Rated value	
Operating power	
at AC-1 at 400 V Rated value	W 13
at AC-2 at 400 V Rated value	W 5.5
at AC-4 at 400 V Rated value	W 4
Operating power	
• at AC-1	
— at 230 V at 60 °C Rated value	W 7.5
— at 230 V Rated value kV	W 7.5
— at 400 V at 60 °C Rated value	W 13
— at 690 V at 60 °C Rated value	W 22
— at 690 V Rated value kV	W 22
• at AC-3	
— at 230 V Rated value k\	W 3
— at 400 V Rated value k\	W 5.5
— at 690 V Rated value k\	W 5.5
Operating power for ≥ 200000 operating cycles at AC-4	
• at 400 V Rated value k\	W 2
• at 690 V Rated value kV	W 2.5
Operating frequency	
• at AC-3 maximum 1/	/h 750
Control circuit/ Control:	
Type of voltage of the control supply voltage	DC
Control supply voltage for DC	
• Rated value V	60
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	
Holding power of the magnet coil for DC	1 4
Auxiliary circuit:	
Number of NC contacts	
• for auxiliary contacts	
— instantaneous contact	0
Number of NO contacts • for auxiliary contacts	

— instantaneous contact		1
Product expansion Auxiliary switch		Yes
Operating current at AC-15		
● at 230 V Rated value	Α	10
● at 400 V Rated value	Α	3
● at 690 V Rated value	Α	1
Operating current		
● at DC-12 at 125 V Rated value	Α	2
• at DC-12 at 220 V Rated value	Α	1
• at DC-12 at 600 V Rated value	Α	0.15
• at DC-13 at 125 V Rated value	Α	0.9
• at DC-13 at 220 V Rated value	Α	0.3
• at DC-13 at 600 V Rated value	Α	0.1
Operating current		
• at DC-12		
— at 60 V Rated value	Α	6
— at 110 V Rated value	Α	3
• at DC-13		
— at 24 V Rated value	Α	10
— at 60 V Rated value	Α	2
— at 110 V Rated value	Α	1
Contact reliability of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
JL/CSA ratings:		

JL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	Α	11
• at 600 V Rated value	Α	11
yielded mechanical performance [hp]		
 for single-phase AC motor at 110/120 V Rated value 	metric hp	0.5
 for single-phase AC motor at 230 V Rated value 	metric hp	2
 for three-phase AC motor at 200/208 V Rated value 	metric hp	3
 for three-phase AC motor at 220/230 V Rated value 	metric hp	3
• for three-phase AC motor at 460/480 V Rated value	metric hp	7.5
 for three-phase AC motor at 575/600 V Rated value 	metric hp	10
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

 $\ensuremath{\mathsf{gL/gG}}$ LV HRC 3NA, DIAZED 5SB, NEOZED 5SE:

20 A

fuse gL/gG: 10 A

mounting position		+/-180° rotation possible on vertical mounting
		surface; can be tilted forward and backward by +/-
		22.5° on vertical mounting surface
Mounting type		screw and snap-on mounting onto 35 mm standard
		mounting rail according to DIN EN 50022
Side-by-side mounting		Yes
Height	mm	57.5
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
• for grounded parts		
— 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		
• for main current circuit		screw-type terminals
 for auxiliary and control current circuit 		screw-type terminals
Type of connectable conductor cross-section		
• for main contacts		

— single or multi-stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG conductors for main contacts 	2x (20 16), 2x (18 14), 2x 12
• for auxiliary contacts	
— single or multi-stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG conductors for auxiliary contacts 	2x (20 16), 2x (18 14), 2x 12

Safety related data:			
B10 value with high demand rate acc. to SN 31920		1 000 000	
		1 000 000	
Proportion of dangerous failures			
 with low demand rate acc. to SN 31920 	%	40	
 with high demand rate acc. to SN 31920 	%	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			
during operation	°C	-25 + 60	
• during storage	°C	-55 + 80	

Certificates/ approvals:

General Product Approval

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination



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Shipping Approval

Certificates

Special Test Certificate











GL

LRS

Shipping Approval

other







Confirmation

Environmental Confirmations



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

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT20171BE41}$

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

http://support.automation.siemens.com/WW/view/en/3RT20171BE41/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=3RT20171BE41&lang=en



