SIEMENS

Data sheet

3RT2026-1AC20



CONTACTOR, AC-3, 11KW/400V, 1NO+1NC, AC 24V 50/60HZ, 3-POLE, SZ S0 SCREW TERMINAL

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)			
 of the contactor typical 		10 000 000	
 of the contactor with added electronics- compatible auxiliary switch block typical 		5 000 000	
 of the contactor with added auxiliary switch block typical 		10 000 000	
Thermal short-time current restricted to 10 s	А	200	
Protection class IP			
• on the front		IP20	
• of the terminal		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		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 $^\circ\mathrm{C}$	А	40
Rated value		
— up to 690 V at ambient temperature 40 °C	A	40
Rated value		25
— up to 690 V at ambient temperature 60 °C Rated value	A	35
• at AC-2 at 400 V Rated value	А	25
● at AC-3		
— at 400 V Rated value	А	25
— at 500 V Rated value	А	18
— at 690 V Rated value	А	13
• at AC-4 at 400 V Rated value	А	15.5
Operating current with 1 current path		
● at DC-1		
— at 24 V Rated value	А	35
— at 110 V Rated value	А	4.5
— at 220 V Rated value	А	1
— at 440 V Rated value	А	0.4
— at 600 V Rated value	А	0.25
• at DC-3 at DC-5		
— at 24 V Rated value	А	20
— at 110 V Rated value	А	2.5
— at 220 V Rated value	А	1
— at 440 V Rated value	А	0.09
— at 600 V Rated value	А	0.06
Operating current with 2 current paths in series		
● at DC-1		
— at 24 V Rated value	А	35
— at 110 V Rated value	А	35
— at 220 V Rated value	А	5
— at 440 V Rated value	А	1
— at 600 V Rated value	А	0.8
• at DC-3 at DC-5		
— at 110 V Rated value	А	15
— at 220 V Rated value	А	3
— at 24 V Rated value	А	35
— at 440 V Rated value	А	0.27
— at 600 V Rated value	А	0.16
Operating current with 3 current paths in series		

• at DC-1		
— at 24 V Rated value	А	35
— at 110 V Rated value	А	35
— at 220 V Rated value	А	35
— at 440 V Rated value	А	2.9
— at 600 V Rated value	А	1.4
• at DC-3 at DC-5		
— at 110 V Rated value	А	35
— at 220 V Rated value	А	10
— at 24 V Rated value	А	35
— at 440 V Rated value	А	0.6
— at 600 V Rated value	А	0.6
Operating power	_	
• at AC-1 at 400 V Rated value	kW	23
• at AC-2 at 400 V Rated value	kW	11
• at AC-4 at 400 V Rated value	kW	7.5
Operating power	_	
● at AC-1		
— at 230 V at 60 °C Rated value	kW	13.3
— at 230 V Rated value	kW	13.3
— at 400 V at 60 °C Rated value	kW	23
— at 690 V at 60 °C Rated value	kW	40
— at 690 V Rated value	kW	40
• at AC-3		
— at 230 V Rated value	kW	5.5
— at 400 V Rated value	kW	11
— at 690 V Rated value	kW	11
Operating power for \geq 200000 operating cycles at		
AC-4		
• at 400 V Rated value	kW	4.4
• at 690 V Rated value	kW	7.7
Operating frequency	4.11	750
• at AC-3 maximum	1/h	750
Control circuit/ Control:		
Type of voltage of the control supply voltage		AC
Control supply voltage with AC		24
• at 50 Hz Rated value	V	24
• at 60 Hz Rated value	V	24
Operating range factor control supply voltage rated value of the magnet coil with AC		
● at 50 Hz		0.8 1.1

• at 60 Hz		0.85 1.1
Auxiliary circuit:		
Number of NC contacts		
 for auxiliary contacts 		
— instantaneous contact		1
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	А	10
• at 400 V Rated value	А	3
• at 690 V Rated value	А	1
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
• at DC-13 at 125 V Rated value	А	0.9
• at DC-13 at 220 V Rated value	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:		
Full-load current (FLA) for three-phase AC motor		24
• at 480 V Rated value	A	21

• at 480 V Rated value	А	21
• at 600 V Rated value	А	22
yielded mechanical performance [hp]		
 for single-phase AC motor at 110/120 V Rated value 	metric hp	2
 for single-phase AC motor at 230 V Rated value 	metric hp	3
 for three-phase AC motor at 200/208 V Rated value 	metric hp	5
 for three-phase AC motor at 220/230 V Rated value 	metric hp	7.5

value hp • for three-phase AC motor at 575/600 V Rated value metric hp 20 Contact rating of the auxiliary contacts acc. to UL A600 / Q600 Short-circuit: A600 / Q600 Short-circuit: Image: Contact rating of the fuse link • for short-circuit protection of the main circuit Image: Contact rating of the fuse link • for short-circuit protection of the main circuit Image: Contact rating of the fuse link • for short-circuit protection of the main circuit Image: Contact rating of the fuse link • for short-circuit protection of the main circuit Image: Contact rating of the fuse link • for short-circuit protection of the main circuit Image: Contact rating of the fuse link • for short-circuit protection of the auxiliary switch required Image: Contact rating of the fuse link • for short-circuit protection of the auxiliary switch required Image: Contact rating of the fuse link • for short-circuit protection of the auxiliary switch required Image: Contact rating of the fuse link • for short-circuit protection of the auxiliary switch required Image: Contact rating of the fuse link	D 5SE:
value hp Contact rating of the auxiliary contacts acc. to UL A600 / Q600 Short-circuit: A600 / Q600 Design of the fuse link e for short-circuit protection of the main circuit — with type of assignment 1 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZE 100 A — with type of assignment 2 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZE 35 A • for short-circuit protection of the auxiliary switch fuse gL/gG: 10 A	 D 5SE:
Short-circuit: Design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 1 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZE 100 A — with type of assignment 2 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZE 35 A • for short-circuit protection of the auxiliary switch	D 5SE:
Design of the fuse link gL/gG LV HRC 3NA, DIAZED 5SB, NEOZE — with type of assignment 1 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZE — with type of assignment 2 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZE — with type of assignment 2 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZE — with type of assignment 2 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZE — of or short-circuit protection of the auxiliary switch fuse gL/gG: 10 A	D 5SE:
 for short-circuit protection of the main circuit with type of assignment 1 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZE 100 A with type of assignment 2 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZE 35 A for short-circuit protection of the auxiliary switch fuse gL/gG: 10 A 	D 5SE:
 with type of assignment 1 required with type of assignment 2 required for short-circuit protection of the auxiliary switch gL/gG LV HRC 3NA, DIAZED 5SB, NEOZE 35 A fuse gL/gG: 10 A 	D 5SE:
• for short-circuit protection of the auxiliary switch	D 5SE:
• for short-circuit protection of the auxiliary switch fuse gL/gG: 10 A	
	D 5SE:
Installation/ mounting/ dimensions:	
mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward 22.5° on vertical mounting surface	-
Mounting type screw and snap-on mounting onto 35 mm s mounting rail according to DIN EN 50022	tandard
Side-by-side mounting Yes	
Height mm 85	
Width mm 45	
Depth mm 97	
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 (1 2,5 mm²), 2x (2,5 10 mm²)
 finely stranded with core end processing 		2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
 for AWG conductors for main contacts 		2x (16 12), 2x (14 8)
 for auxiliary contacts 		
— single or multi-stranded		2x (0,5 1,5 mm²), 2x (0,75 2,5 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)
Apparent pick-up power of the magnet coil with AC		
● at 50 Hz	V·A	81
• at 60 Hz	V·A	79
Safety related data:		
B10 value with high demand rate acc. to SN 31920		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
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		S0
Ambient conditions:		
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
during operation	°C	-25 +60
during storage	°C	-55 +80
Certificates/ approvals:		

General Product	t Approval			EMC	Functional Safety/Safety of Machinery
	CSA		EHC	С-тіск	Type Examination
Declaration of Conformity	Test Certificates		Shipping App	roval	
EG-Konf.	Special Test Certificate	<u>Type Test</u> Certificates/Test <u>Report</u>	ABS	B U R E A U VERITAS	
Shipping Approv	val				other
GL	Lloyd's Register LRS	PRS	RINA	RMRS	Environmental Confirmations
other					
Confirmation	VDE				
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT20261AC20&lang=en





