SIEMENS

Data sheet 3RT2026-1AN20



CONTACTOR, AC-3, 11KW/400V, 1NO+1NC, AC 220V 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	Α	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 °C Rated value	Α	40
— up to 690 V at ambient temperature 40 °C Rated value	Α	40
— up to 690 V at ambient temperature 60 °C Rated value	Α	35
• at AC-2 at 400 V Rated value	Α	25
• at AC-3		
— at 400 V Rated value	Α	25
— at 500 V Rated value	Α	18
— at 690 V Rated value	Α	13
• at AC-4 at 400 V Rated value	Α	15.5
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	Α	35
— at 110 V Rated value	Α	4.5
— at 220 V Rated value	Α	1
— at 440 V Rated value	Α	0.4
— at 600 V Rated value	Α	0.25
• at DC-3 at DC-5		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	2.5
— at 220 V Rated value	Α	1
— at 440 V Rated value	Α	0.09
— at 600 V Rated value	Α	0.06
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	35
— at 110 V Rated value	Α	35
— at 220 V Rated value	Α	5
— at 440 V Rated value	Α	1
— at 600 V Rated value	Α	0.8
• at DC-3 at DC-5		
— at 110 V Rated value	Α	15
— at 220 V Rated value	Α	3
— at 24 V Rated value	Α	35
— at 440 V Rated value	Α	0.27
— at 600 V Rated value	Α	0.16
Operating current with 3 current paths in series		

• at DC-1		
— at 24 V Rated value	Α	35
— at 110 V Rated value	Α	35
— at 220 V Rated value	Α	35
— at 440 V Rated value	Α	2.9
— at 600 V Rated value	Α	1.4
• at DC-3 at DC-5		
— at 110 V Rated value	Α	35
— at 220 V Rated value	Α	10
— at 24 V Rated value	Α	35
— at 440 V Rated value	Α	0.6
— at 600 V Rated value	Α	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 ≥ 200000 operating cycles at AC-4		
• at 400 V Rated value	kW	4.4
• at 690 V Rated value	kW	7.7
Operating frequency		
• at AC-3 maximum	1/h	750
Control circuit/ Control:		
Type of voltage of the control supply voltage		AC
Control supply voltage with AC		
• at 50 Hz Rated value	V	220
at 60 Hz Rated value	V	220
Operating range factor control supply voltage rated		

• at 50 Hz

value of the magnet coil with AC

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	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)
III ICCA vetices		
UL/CSA ratings: Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	Α	21
at 600 V Rated value at 600 V Rated value	A	22
yielded mechanical performance [hp]	7.	
• for single-phase AC motor at 110/120 V Rated	metric	2
value	hp	
 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

 for three-phase AC motor at 460/480 V Rated value 	metric hp	15
 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

Contact rating of the auxiliary contacts acc. to OL	A000 / Q000
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, NEOZED 5SE: 100 A
 with type of assignment 2 required 	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
 for short-circuit protection of the auxiliary switch required 	fuse gL/gG: 10 A
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

nstallation/ mounting/ dimensions:		
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 type		mounting rail according to DIN EN 50022
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	
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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	m	2 000
maximum		
Ambient temperature		
 during operation 	°C	-25 + 60
during storage	°C	-55 + 80

Certificates/ approvals:

General Product Approval

EMC

Functional Safety/Safety of Machinery

Type Examination











Declaration	0
Conformity	

Test Certificates

Shipping Approval



Special Test Certificate Type Test
Certificates/Test
Report







Shipping Approval

other



GL



LRS







Confirmation

other

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

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT20261AN20}$

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

http://support.automation.siemens.com/WW/view/en/3RT20261AN20/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=3RT20261AN20&lang=en



