# **SIEMENS**

Product data sheet 3RT2026-1AC20



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

General technical data:			
product brand name		SIRIUS	
Size of the contactor		S0	
Product extension			
auxiliary switch		Yes	
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 <b>+</b> 80	
during operating	°C	-25 +60	
Shock resistance			
at rectangular impulse			
• at AC		8,3g / 5 ms, 5,3g / 10 ms	
at sine pulse			
• at AC		13,5g / 5 ms, 8,3g / 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		10,000,000
of the contactor with added auxiliary switch block / typical		10,000,000
<ul> <li>of the contactor with added electronics-compatible auxiliary switch block / typical</li> </ul>		5,000,000

Main circuit:		
Number of NC contacts / for main contacts		0
Number of NO contacts / for main contacts		3
Connectable conductor cross-section / in main circuit		
• at AC-1		
• at 40 °C / minimum permissible	mm²	10
• at 60 °C / minimum permissible	mm²	10
Operating current		
• at AC-1 / up to 690 V		
• at 40 °C ambient temperature / rated value	Α	40
• at 60 °C ambient temperature / 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
Operational current / for ≥ 200000 operating cycles / at AC-4		
• at 400 V / rated value	Α	9
• at 690 V / rated value	Α	9
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
• 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

• 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
Operating current		
• with 1 current path / 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
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	15
• at 220 V / rated value	Α	3
• at 440 V / rated value	Α	0.27
• at 600 V / rated value	Α	0.16
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	35
• at 220 V / rated value	Α	10
• at 440 V / rated value	Α	0.6
• at 600 V / rated value	Α	0.6
Operating performance		
• at AC-1 / at 230 V / rated value	kW	13.3
• at AC-1 / at 400 V / rated value	kW	23
• at AC-1 / at 690 V / rated value	kW	40
• at AC-2		
• at 400 V / rated value	kW	11
• 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
• at AC-4		
• at 400 V / rated value	kW	7.5
Operating performance / for ≥ 200000 operating cycles / at AC-4		
• at 400 V / rated value	kW	4.4
• at 690 V / rated value	kW	7.7

W	1.6
1/h	5,000
1/h	1,000
1/h	750
1/h	750
1/h	250
	1/h 1/h 1/h

Control circuit/ Control:			
Voltage type / of control feed voltage		AC	
Control supply voltage			
at 50 Hz / at AC / rated value	V	24	
at 60 Hz / at AC / rated value	V	24	
Operating range factor control supply voltage rated value / of the magnet coil			
• at 50 Hz / for AC		0.8 1.1	
• at 60 Hz / for AC		0.85 1.1	
Apparent pull-in power / of the solenoid / for AC	V·A	81	
Apparent holding power / of the solenoid / for AC	V·A	10.5	
Inductive power factor			
with the pull-in power of the coil		0.82	
with the pull-in power of the coil		0.25	
Closing delay			
• at AC	ms	8 40	
Opening delay			
• at AC	ms	4 16	
Arcing time	ms	10 10	
Residual current / of electronics / for control with signal <0>			
at 230 V / with AC / maximum permissible	mA	7	
at 24 V / with DC / maximum permissible	mA	16	

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		1	
Number of NO contacts / for auxiliary contacts / instantaneous switching		1	
Operating current			
• at AC-12 / maximum	А	10	

• at AC-15		10	
• at 230 V / rated value	Α	10	
• at 400 V / rated value	Α	3	
• at 500 V / rated value	Α	2	
at 690 V / rated value	A	1	
Operating current / at DC-12			
• at 24 V / rated value	Α	10	
• at 48 V / rated value	Α	6	
• at 60 V / rated value	А	6	
• at 110 V / rated value	А	3	
• at 125 V / rated value	Α	2	
• at 220 V / rated value	Α	1	
• at 440 V / rated value	Α	0.3	
• at 600 V / rated value	Α	0.15	
Operating current / at DC-13			
• at 24 V / rated value	Α	10	
• at 48 V / rated value	Α	2	
• at 60 V / rated value	Α	2	
• at 110 V / rated value	Α	1	
• at 125 V / rated value	Α	0.9	
• at 220 V / rated value	А	0.3	
• at 440 V / rated value	А	0.14	
at 600 V / rated value	Α	0.1	

UL/CSA ratings:			
yielded mechanical performance [hp]			
for single-phase squirrel cage motors			
• at 110/120 V / rated value	hp	2	
• at 230 V / rated value	hp	3	
for three-phase squirrel cage motors			
• at 200/208 V / rated value	hp	5	
• at 220/230 V / rated value	hp	7.5	
• at 460/480 V / rated value	hp	15	
• at 575/600 V / rated value	hp	20	
Full-load current (FLA) / for 3-phase motor			
• at 480 V / rated value	Α	21	
• at 600 V / rated value	Α	22	
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: 100 A	
at type of coordination 2 / required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35A	

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	
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022	
Mounting type / series installation		Yes	
Width	mm	45	
Height	mm	85	
Depth	mm	97	
Distance, to be maintained, to the ranks assembly / sidewards	mm	0	

#### Connections/ terminals: Design of the electrical connection • for main current circuit screw-type terminals screw-type terminals • for auxiliary and control current circuit • for main contacts / finely stranded / with conductor end 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm² processing • for AWG conductors / for main contacts 2x (16 ... 12), 2x (14 ... 8) • for auxiliary contacts / finely stranded / with conductor end 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) processing • for AWG conductors / for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14)

Safety related data:		
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] / with low demand rate		
according to SN 31920	FIT	100
Product function		
mirror contact to IEC 60947-4-1		Yes
<ul> <li>positively driven operation to IEC 60947-5-1</li> </ul>		No

# Certificates/ approvals:

### **General Product Approval**

**EMC** 

Functional Safety / Safety of Machinery

Type Examination











Declaration of Conformity

**Test Certificates** 



Special Test Certificate Type Test
Certificates/Test
Report

## **Shipping Approval**













**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://mall.industry.siemens.com/

#### Cax online generator

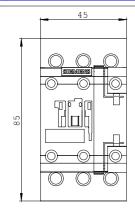
http://www.siemens.com/cax

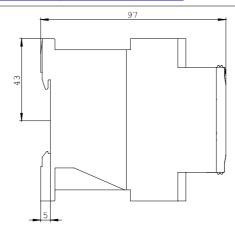
## Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

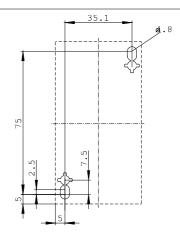
http://support.automation.siemens.com/WW/view/en/3RT2026-1AC20/all

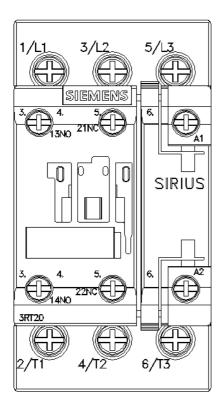
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

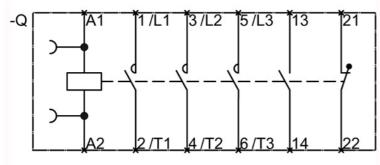
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RT2026-1AC20}$ 











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