## SIEMENS

## Data sheet

## 3RT2026-1AD04



power contactor, AC-3e/AC-3, 25 A, 11 kW / 400 V, 3-pole, 42 V AC, 50 Hz, auxiliary contacts: 2 NO + 2 NC, screw terminal, size: S0, removable auxiliary switch

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S0
product extension	
<ul> <li>function module for communication</li> </ul>	No
auxiliary switch	No
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	5.7 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	1.9 W
<ul> <li>without load current share typical</li> </ul>	9.8 W
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	6 kV
<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
● at AC	8,3g / 5 ms, 5,3g / 10 ms
shock resistance with sine pulse	
● at AC	13,5g / 5 ms, 8,3g / 10 ms
mechanical service life (operating cycles)	
<ul> <li>of contactor typical</li> </ul>	10 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Main circuit	
number of poles for main current circuit	3

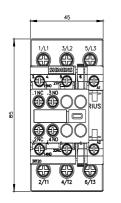
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated	40 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	40 A
— up to 690 V at ambient temperature 60 °C rated	35 A
value	
● at AC-3	
— at 400 V rated value	25 A
— at 500 V rated value	18 A
— at 690 V rated value	13 A
• at AC-3e	
— at 400 V rated value	25 A
— at 500 V rated value	18 A
— at 690 V rated value	13 A
• at AC-4 at 400 V rated value	15.5 A
at AC-5a up to 690 V rated value	35.2 A
<ul> <li>at AC-5b up to 400 V rated value</li> <li>at AC-6a</li> </ul>	20.7 A
	20.2 A
— up to 230 V for current peak value n=20 rated value	
<ul> <li>— up to 400 V for current peak value n=20 rated value</li> <li>— up to 500 V for current peak value n=20 rated value</li> </ul>	20.2 A 20.2 A
— up to 690 V for current peak value n=20 rated value	12.9 A
at AC-6a	12.9 A
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	13.5 A
— up to 200 V for current peak value n=30 rated value	13.5 A
— up to 500 V for current peak value n=30 rated value	13.5 A
— up to 690 V for current peak value n=30 rated value	13 A
minimum cross-section in main circuit at maximum AC-1 rated	10 mm <sup>2</sup>
value	
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	9 A
at 690 V rated value	9A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	35 A
— at 60 V rated value	20 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	35 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	

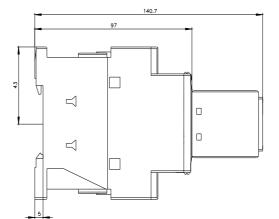
— at 24 V rated value	20 A			
— at 60 V rated value	5 A			
— at 220 V rated value	1 A			
— at 440 V rated value	0.09 A			
— at 600 V rated value	0.06 A			
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>				
— at 24 V rated value	35 A			
— at 60 V rated value	35 A			
— at 110 V rated value	15 A			
— at 220 V rated value	3 A			
— at 440 V rated value	0.27 A			
— at 600 V rated value	0.16 A			
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>				
— at 24 V rated value	35 A			
— at 60 V rated value	35 A			
— at 110 V rated value	35 A			
— at 220 V rated value	10 A			
— at 440 V rated value	0.6 A			
— at 600 V rated value	0.6 A			
operating power				
• at AC-2 at 400 V rated value	11 kW			
• at AC-3				
— at 230 V rated value	5.5 kW			
— at 400 V rated value	11 kW			
— at 500 V rated value	11 kW			
— at 690 V rated value	11 kW			
• at AC-3e				
— at 230 V rated value	5.5 kW			
— at 400 V rated value	11 kW			
— at 500 V rated value	11 kW			
— at 690 V rated value	11 kW			
operating power for approx. 200000 operating cycles at AC-				
4	4 4 1-141			
<ul> <li>at 400 V rated value</li> <li>at 690 V rated value</li> </ul>	4.4 kW			
	7.7 kW			
operating apparent power at AC-6a	8 kVA			
• up to 230 V for current peak value n=20 rated value	0 KVA 13.9 kVA			
• up to 400 V for current peak value n=20 rated value	17.4 kVA			
• up to 500 V for current peak value n=20 rated value	15.4 kVA			
up to 690 V for current peak value n=20 rated value				
operating apparent power at AC-6a	5.3 kVA			
<ul> <li>up to 230 V for current peak value n=30 rated value</li> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	9.3 kVA			
<ul> <li>up to 400 v for current peak value n=30 rated value</li> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	9.5 KVA 11.6 kVA			
<ul> <li>up to 500 V for current peak value n=30 rated value</li> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	15.5 kVA			
short-time withstand current in cold operating state up to				
40 °C				
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	375 A; Use minimum cross-section acc. to AC-1 rated value			
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	300 A; Use minimum cross-section acc. to AC-1 rated value			
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	210 A; Use minimum cross-section acc. to AC-1 rated value			
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	144 A; Use minimum cross-section acc. to AC-1 rated value			
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	118 A; Use minimum cross-section acc. to AC-1 rated value			
no-load switching frequency				
• at AC	5 000 1/h			
operating frequency				
operating frequency     o at AC-1 maximum	1 000 1/h			
	1 000 1/h 750 1/h			
• at AC-1 maximum				
<ul><li>at AC-1 maximum</li><li>at AC-2 maximum</li></ul>	750 1/h			
<ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> </ul>	750 1/h 750 1/h			
<ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3e maximum</li> </ul>	750 1/h 750 1/h 750 1/h			

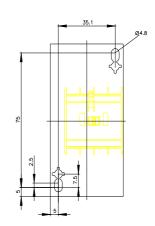
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type of voltage of the control supply voltage	AC
control supply voltage at AC	
• at 50 Hz rated value	42 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
<ul> <li>apparent pick-up power of magnet coil at AC</li> <li>at 50 Hz</li> </ul>	77 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.82
apparent holding power of magnet coil at AC	0.02
• at 50 Hz	9.8 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.25
closing delay	0.23
• at AC	8 40 ms
opening delay	
• at AC	4 16 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	2
number of NO contacts for auxiliary contacts instantaneous	2
contact operational current at AC-12 maximum	10 A
	10 A
operational current at AC-15 • at 230 V rated value	6 A
at 250 V rated value     at 400 V rated value	3 A
at 400 V rated value     at 500 V rated value	2 A
at 690 V rated value	1A
operational current at DC-12	
• at 24 V rated value	10 A
at 24 V rated value     at 48 V rated value	6 A
• at 60 V rated value	6 A
at 10 V rated value	3 A
at 125 V rated value	2A
at 220 V rated value	1A
at 600 V rated value	0.15 A
operational current at DC-13	
• at 24 V rated value	6 A
at 48 V rated value	2 A
at 60 V rated value	2 A
• at 110 V rated value	1A
at 125 V rated value	0.9 A
• at 220 V rated value	0.3 A
• at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	21 A
at 600 V rated value	22 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	2 hp
— at 230 V rated value	3 hp
• for 3-phase AC motor	
— at 200/208 V rated value	5 hp
— at 220/230 V rated value	7.5 hp
— at 460/480 V rated value	15 hp
- at 575/600 V rated value	20 hp
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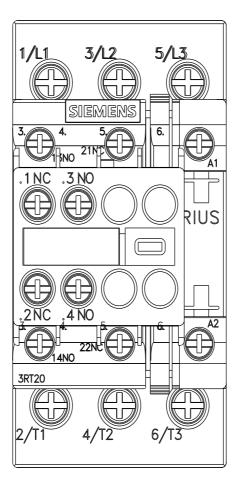
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
design of the fuse link	
for short-circuit protection of the main circuit	
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 100 A (690 V, 100 kA), aM: 50 A (690 V, 100 kA), BS88: 100 A (415 V, 80
with type of oboldination in required	kA)
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 35A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA)
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	gG: 10 A (500 V, 1 kA)
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
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
<ul> <li>side-by-side mounting</li> </ul>	Yes
height	85 mm
width	45 mm
depth	141 mm
required spacing	
<ul> <li>with side-by-side mounting</li> </ul>	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
<ul> <li>for grounded parts</li> </ul>	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
solid or stranded	2x (1 2.5 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm <sup>2</sup> ), 2x (2.5 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup>
connectable conductor cross-section for main contacts	
solid	1 10 mm²
stranded	1 10 mm <sup>2</sup>
<ul> <li>finely stranded with core end processing</li> </ul>	1 10 mm <sup>2</sup>
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 2.5 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> <li>— solid or stranded</li> </ul>	$2 \times (0.5 - 1.5 \text{ mm}^2) 2 \times (0.75 - 2.5 \text{ mm}^2)$
<ul> <li>— solid of stranded</li> <li>— finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross	2x (20 16), 2x (18 14)
AWG number as coded connectable conductor cross section	
for main contacts	16 8
for auxiliary contacts	20 14
Safety related data	
product function	
mirror contact according to IEC 60947-4-1	Yes

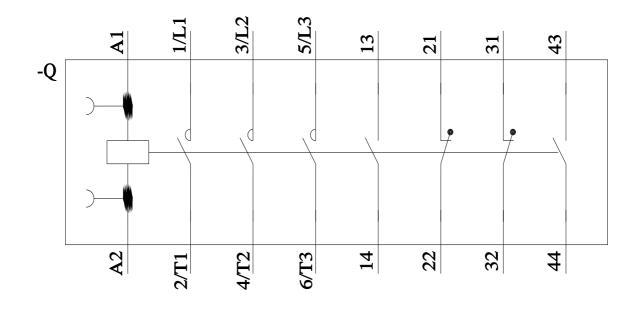
<ul> <li>positively driven</li> </ul>	operation according to IEC	C 60947-5-1	lo			
positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920			50 000			
proportion of dangerous failures						
<ul> <li>with low deman</li> </ul>	d rate according to SN 319	20 4	0 %			
<ul> <li>with high deman</li> </ul>	nd rate according to SN 319	920 7	3 %			
	ow demand rate according		00 FIT			
T1 value for proof test 61508	interval or service life acco	rding to IEC 2	0 a			
	n the front according to I	EC 60529	IP20			
-	the front according to IEC		nger-safe, for vertical contact	from the front		
suitability for use						
<ul> <li>safety-related system</li> </ul>	witching OFF	Y	′es			
ertificates/ approvals	1					
General Product App	oroval					
SP M		<u>Confirmation</u>		KC	EHC	
EMC	Functional Safety/Safety of Ma- chinery	Declaration of Co	nformity	Test Certificates		
RCM	<u>Type Examination Cer-</u> tificate	UK CA	CE EG-Konf.	<u>Type Test Certific-</u> ates/Test Report	<u>Special Test Certific-</u> <u>ate</u>	
Marine / Shipping		2.2			•	
ABS	BUREAU		Lloyds Register us	RINA	RMRS	
other			Railway	Environment		
<u>Confirmation</u>		<u>Confirmation</u>	Vibration and Shock	Environmental Con- firmations		
urther information Siemens has decided	d to exit the Russian mark	tet (see here).				
Siemens is working of Please contact your lo EAC relevant market ( Information on the pa https://support.industry	other than the sanctioned E ackaging y.siemens.com/cs/ww/en/vi vnloadcenter (Catalogs, E com/ic10	ent EAC certificates tatus of validity of the EAEU member states ew/109813875 Brochures,)	EAC certification if you intend Russia or Belarus). <u>RT2026-1AD04</u>		bly these products to an	
Cax online generator http://support.automati Service&Support (Ma https://support.industry Image database (pro http://www.automation	ion.siemens.com/WW/CAX anuals, Certificates, Chara z.siemens.com/cs/ww/en/ps	acteristics, FAQs,) 3/3RT2026-1AD04 on drawings, 3D moo le.aspx?mlfb=3RT202	dels, device circuit diagram			











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