

power contactor, AC-3e/AC-3, 25 A, 11 kW / 400 V, 3-pole, 220 V AC, 50 Hz / 240 V, 60 Hz, auxiliary contacts: 1 NO + 1 NC, ring cable lug connection, size: S0

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
<b>General technical data</b>	
size of contactor	S0
product extension	
<ul style="list-style-type: none"> <li>• function module for communication</li> <li>• auxiliary switch</li> </ul>	No Yes
power loss [W] for rated value of the current	
<ul style="list-style-type: none"> <li>• at AC in hot operating state</li> <li>• at AC in hot operating state per pole</li> <li>• without load current share typical</li> </ul>	5.7 W 1.9 W 2.7 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
<ul style="list-style-type: none"> <li>• of main circuit with degree of pollution 3 rated value</li> <li>• of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V 690 V
surge voltage resistance	
<ul style="list-style-type: none"> <li>• of main circuit rated value</li> <li>• of auxiliary circuit rated value</li> </ul>	6 kV 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	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	8,3g / 5 ms, 5,3g / 10 ms
shock resistance with sine pulse	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	13,5g / 5 ms, 8,3g / 10 ms
<b>mechanical service life (operating cycles)</b>	
<ul style="list-style-type: none"> <li>• of contactor typical</li> <li>• of the contactor with added electronically optimized auxiliary switch block typical</li> <li>• of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000 5 000 000 10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	
Weight	0.403 kg
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>	-25 ... +60 °C -55 ... +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %

<b>Environmental footprint</b>	
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total	74.2 kg
Global Warming Potential [CO2 eq] during manufacturing	1.9 kg
Global Warming Potential [CO2 eq] during operation	72.4 kg
Global Warming Potential [CO2 eq] after end of life	-0.117 kg
<b>Main circuit</b>	
<b>number of poles for main current circuit</b>	3
<b>number of NO contacts for main contacts</b>	3
<b>operating voltage</b>	
• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
<b>operational current</b>	
• at AC-1 at 400 V at ambient temperature 40 °C rated value	40 A
• at AC-1 <ul style="list-style-type: none"> <li>— up to 690 V at ambient temperature 40 °C rated value</li> <li>— up to 690 V at ambient temperature 60 °C rated value</li> </ul>	40 A
• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul>	25 A
• at AC-3e <ul style="list-style-type: none"> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul>	18 A
• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul>	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
• at AC-5b up to 400 V rated value	20.7 A
• at AC-6a <ul style="list-style-type: none"> <li>— up to 230 V for current peak value n=20 rated value</li> <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> <li>— up to 690 V for current peak value n=20 rated value</li> </ul>	20.2 A
• at AC-6a <ul style="list-style-type: none"> <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> <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>	20.2 A
• at AC-6a <ul style="list-style-type: none"> <li>— up to 230 V for current peak value n=20 rated value</li> <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> <li>— up to 690 V for current peak value n=20 rated value</li> </ul>	20.2 A
• at AC-6a <ul style="list-style-type: none"> <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> <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>	12.9 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm <sup>2</sup>
<b>operational current for approx. 200000 operating cycles at AC-4</b>	
• at 400 V rated value	9 A
• at 690 V rated value	9 A
<b>operational current</b>	
<b>• at 1 current path at DC-1</b>	
— 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
<b>• with 2 current paths in series at DC-1</b>	
— 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

• with 3 current paths in series at DC-1	— at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value	35 A 35 A 35 A 35 A 2.9 A 1.4 A
• at 1 current path at DC-3 at DC-5	— at 24 V rated value — at 60 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value	20 A 5 A 1 A 0.09 A 0.06 A
• with 2 current paths in series at DC-3 at DC-5	— at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value	35 A 35 A 15 A 3 A 0.27 A 0.16 A
• with 3 current paths in series at DC-3 at DC-5	— at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value	35 A 35 A 35 A 10 A 0.6 A 0.6 A
<b>operating power</b>		
• at AC-3	— at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value	5.5 kW 11 kW 11 kW 11 kW
• at AC-3e	— at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value	5.5 kW 11 kW 11 kW 11 kW
<b>operating power for approx. 200000 operating cycles at AC-4</b>		
• at 400 V rated value • at 690 V rated value		4.4 kW 7.7 kW
<b>operating apparent power at AC-6a</b>		
• up to 230 V for current peak value n=20 rated value • up to 400 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value		8 kVA 13.9 kVA 17.4 kVA 15.4 kVA
<b>operating apparent power at AC-6a</b>		
• up to 230 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value		5.3 kVA 9.3 kVA 11.6 kVA 15.5 kVA
<b>short-time withstand current in cold operating state up to 40 °C</b>		
• limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at zero current maximum		375 A; Use minimum cross-section acc. to AC-1 rated value 300 A; Use minimum cross-section acc. to AC-1 rated value 210 A; Use minimum cross-section acc. to AC-1 rated value 144 A; Use minimum cross-section acc. to AC-1 rated value 118 A; Use minimum cross-section acc. to AC-1 rated value
<b>no-load switching frequency</b>		
• at AC		5 000 1/h

<b>operating frequency</b>	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	750 1/h
• at AC-3e maximum	750 1/h
• at AC-4 maximum	250 1/h
<b>Control circuit/ Control</b>	
<b>type of voltage of the control supply voltage</b>	AC
<b>control supply voltage at AC</b>	
• at 50 Hz rated value	220 V
• at 60 Hz rated value	240 V
<b>operating range factor control supply voltage rated value of magnet coil at AC</b>	
• at 50 Hz	0.8 ... 1.1
• at 60 Hz	0.8 ... 1.1
<b>apparent pick-up power of magnet coil at AC</b>	
• at 50 Hz	81 VA
• at 60 Hz	79 VA
<b>inductive power factor with closing power of the coil</b>	
• at 50 Hz	0.72
• at 60 Hz	0.74
<b>apparent holding power of magnet coil at AC</b>	
• at 50 Hz	10.5 VA
• at 60 Hz	8.5 VA
<b>inductive power factor with the holding power of the coil</b>	
• at 50 Hz	0.25
• at 60 Hz	0.28
<b>closing delay</b>	
• at AC	8 ... 40 ms
<b>opening delay</b>	
• at AC	4 ... 16 ms
<b>arcing time</b>	10 ... 10 ms
<b>control version of the switch operating mechanism</b>	Standard A1 - A2
<b>Auxiliary circuit</b>	
number of NC contacts for auxiliary contacts instantaneous contact	1
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
<b>operational current at AC-15</b>	
• at 230 V rated value	10 A
• at 400 V rated value	3 A
• at 500 V rated value	2 A
• at 690 V rated value	1 A
<b>operational current at DC-12</b>	
• at 24 V rated value	10 A
• at 48 V rated value	6 A
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
• at 220 V rated value	1 A
• at 600 V rated value	0.15 A
<b>operational current at DC-13</b>	
• at 24 V rated value	10 A
• at 48 V rated value	2 A
• at 60 V rated value	2 A
• at 110 V rated value	1 A
• at 125 V rated value	0.9 A
• at 220 V rated value	0.3 A
• at 600 V rated value	0.1 A
<b>contact reliability of auxiliary contacts</b>	1 faulty switching per 100 million (17 V, 1 mA)

UL/CSA ratings	
<b>full-load current (FLA) for 3-phase AC motor</b>	
• at 480 V rated value	21 A
• at 600 V rated value	22 A
<b>yielded mechanical performance [hp]</b>	
• 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
<b>contact rating of auxiliary contacts according to UL</b>	A600 / P600
Short-circuit protection	
<b>design of the fuse link</b>	
• for short-circuit protection of the main circuit	
— with type of coordination 1 required	gG: 100 A (690 V, 100 kA), aM: 50 A (690 V, 100 kA), BS88: 100 A (415 V, 80 kA)
— with type of assignment 2 required	gG: 35A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA)
• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
<b>mounting position</b>	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
<b>fastening method</b>	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
<b>height</b>	85 mm
<b>width</b>	45 mm
<b>depth</b>	97 mm
<b>required spacing</b>	
• with side-by-side mounting	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
• for grounded parts	
— 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	
<b>type of electrical connection</b>	
• for main current circuit	Ring cable lug connection
• for auxiliary and control circuit	ring terminal lug connection
• at contactor for auxiliary contacts	Ring cable lug connection
• of magnet coil	Ring cable lug connection
Safety related data	
<b>product function</b>	
• mirror contact according to IEC 60947-4-1	Yes
• positively driven operation according to IEC 60947-5-1	No
• suitable for safety function	Yes
<b>suitability for use safety-related switching OFF</b>	Yes
<b>service life maximum</b>	20 a
<b>test wear-related service life necessary</b>	Yes
<b>proportion of dangerous failures</b>	
• with low demand rate according to SN 31920	40 %
• with high demand rate according to SN 31920	73 %

B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
Electrical Safety	
protection class IP on the front according to IEC 60529	IP00

#### Approvals Certificates

##### General Product Approval

###### Confirmation



###### KC

General Product Approval	EMV	Functional Safety	Test Certificates	Marine / Shipping
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[Type Examination Certificate](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping	other
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[Miscellaneous](#)

other	Railway	Environment
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###### Confirmation

###### Confirmation

[Special Test Certificate](#)



[Environmental Confirmations](#)

Further information
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###### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

###### Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

###### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2026-4AP60>

###### Cax online generator

<http://support.automation.siemens.com/WW/CAxorder/default.aspx?lang=en&mlfb=3RT2026-4AP60>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2026-4AP60>

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

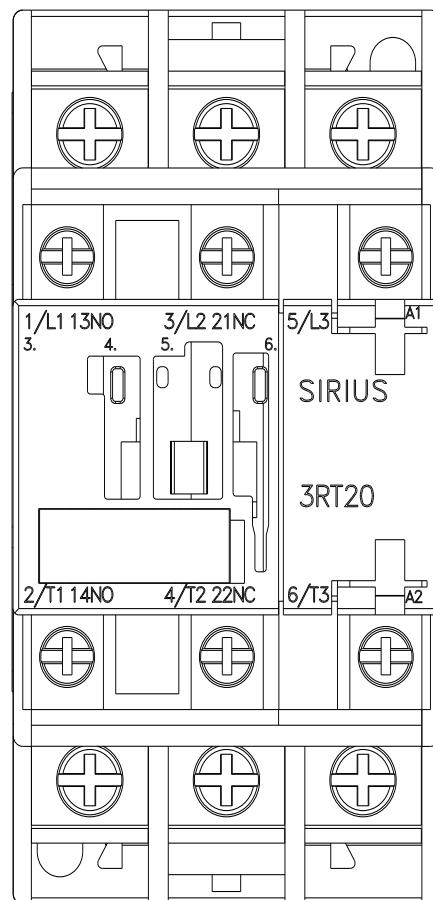
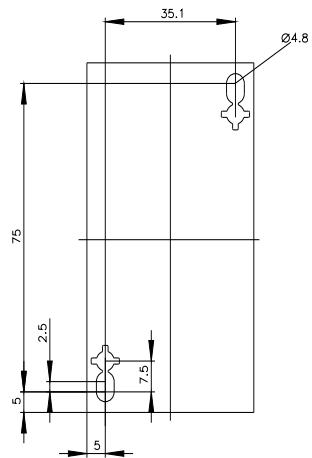
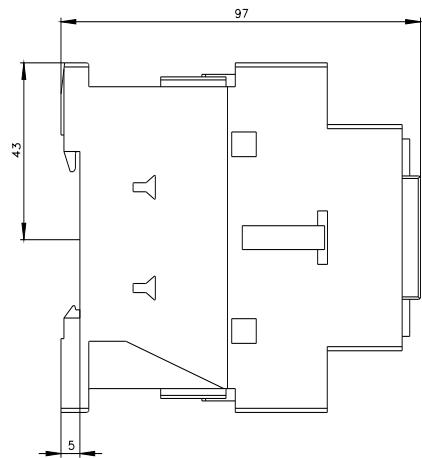
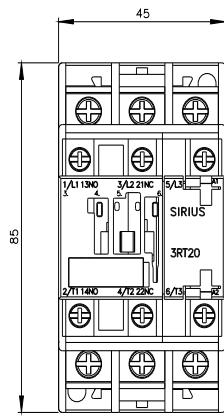
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT2026-4AP60&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2026-4AP60&lang=en)

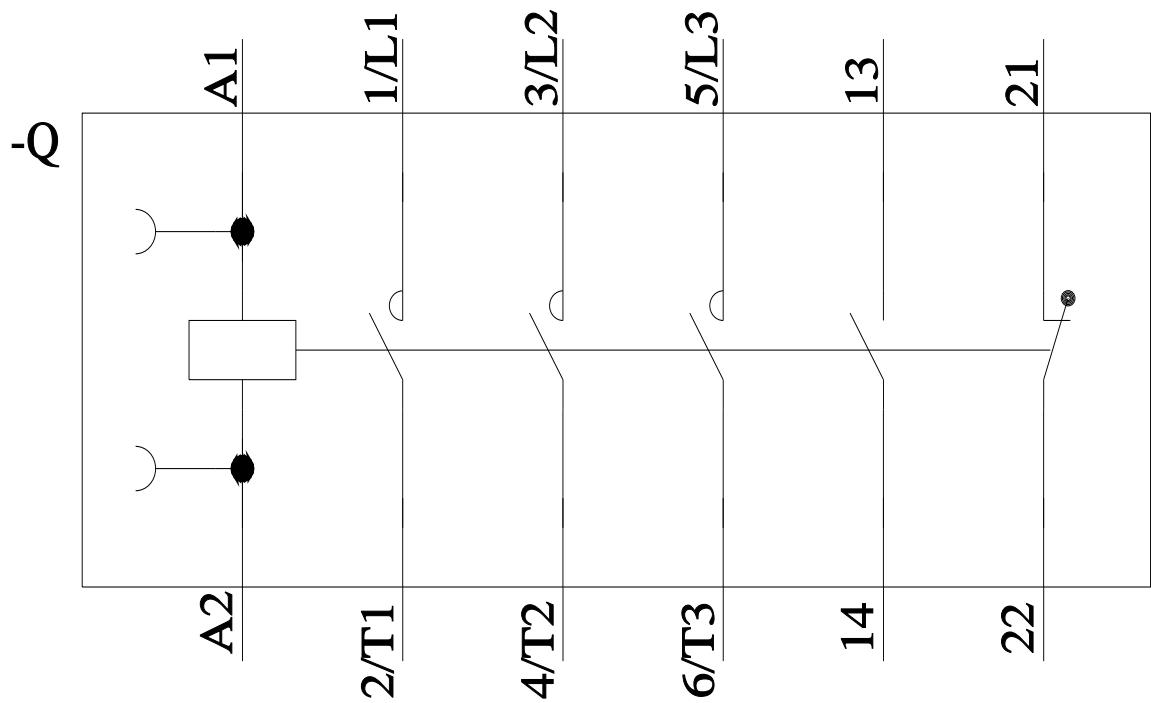
###### Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2026-4AP60/char>

###### Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2026-4AP60&objecttype=14&gridview=view1>





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