








Contactor 110...127 V AC/DC AC3 kW 400 V AC (50...60 Hz) / DC operation  
auxiliary contacts 2 NO + 2 NC, 3-pole, size S6 bar connections conventional  
operating mechan. screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT5
<b>General technical data</b>	
size of contactor	S6
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state per pole	9 W
• without load current share typical	5.2 W
type of calculation of power loss depending on pole	quadratic
insulation voltage rated value	1 000 V
degree of pollution	3
surge voltage resistance rated value	8 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	690 V
shock resistance at rectangular impulse	
• at AC	8,5g / 5 ms, 4,2g / 10 ms
• at DC	8,5g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	13,4g / 5 ms, 6,5g / 10 ms
• at DC	13,4g / 5 ms, 6,5g / 10 ms
mechanical service life (operating cycles)	
• of contactor typical	10 000 000
• of the contactor with added auxiliary switch block typical	10 000 000
Substance Prohibitance (Date)	03/01/2017
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-55 ... +80 °C
<b>Main circuit</b>	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
number of NC contacts for main contacts	0
operating voltage	
• at AC-3e rated value maximum	1 000 V
operational current	
• at AC-1 up to 690 V	
— at ambient temperature 40 °C rated value	185 A
— at ambient temperature 60 °C rated value	160 A

<ul style="list-style-type: none"> <li>● at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> <li>● at AC-3e <ul style="list-style-type: none"> <li>— at 400 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul>	150 A 150 A 150 A 150 A
<b>connectable conductor cross-section in main circuit at AC-1</b>	
<ul style="list-style-type: none"> <li>● at 60 °C minimum permissible</li> <li>● at 40 °C minimum permissible</li> </ul>	70 mm <sup>2</sup> 95 mm <sup>2</sup>
<b>operational current for approx. 200000 operating cycles at AC-4</b>	
<ul style="list-style-type: none"> <li>● at 400 V rated value</li> <li>● at 690 V rated value</li> </ul>	68 A 57 A
<b>operating power</b>	
<ul style="list-style-type: none"> <li>● at AC-1 <ul style="list-style-type: none"> <li>— at 230 V at 60 °C rated value</li> <li>— at 400 V at 60 °C rated value</li> <li>— at 690 V at 60 °C rated value</li> </ul> </li> <li>● at AC-3 <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> <li>● at AC-3e <ul style="list-style-type: none"> <li>— at 400 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul>	60 kW 105 kW 181 kW 50 kW 84 kW 146 kW 75 kW 132 kW
<b>operating power for approx. 200000 operating cycles at AC-4</b>	
<ul style="list-style-type: none"> <li>● at 400 V rated value</li> <li>● at 690 V rated value</li> </ul>	38 kW 55 kW
<b>no-load switching frequency</b>	
<ul style="list-style-type: none"> <li>● at AC</li> <li>● at DC</li> </ul>	2 000 1/h 2 000 1/h
<b>operating frequency</b>	
<ul style="list-style-type: none"> <li>● at AC-1 maximum</li> <li>● at AC-3 maximum</li> <li>● at AC-3e maximum</li> <li>● at AC-4 maximum</li> </ul>	800 1/h 750 1/h 750 1/h 130 1/h
<b>Control circuit/ Control</b>	
<b>type of voltage of the control supply voltage</b>	AC/DC
<b>control supply voltage at AC</b>	
<ul style="list-style-type: none"> <li>● at 50 Hz rated value</li> <li>● at 60 Hz rated value</li> </ul>	110 ... 127 V 110 ... 127 V
<b>control supply voltage at DC</b>	
<ul style="list-style-type: none"> <li>● rated value</li> </ul>	110 ... 127 V
<b>operating range factor control supply voltage rated value of magnet coil at AC</b>	
<ul style="list-style-type: none"> <li>● at 50 Hz</li> <li>● at 60 Hz</li> </ul>	0.8 ... 1.1 0.8 ... 1.1
<b>design of the surge suppressor</b>	with varistor
<b>apparent pick-up power of magnet coil at AC</b>	
<ul style="list-style-type: none"> <li>● at 50 Hz</li> <li>● at 60 Hz</li> </ul>	300 VA 300 VA
<b>inductive power factor with closing power of the coil</b>	
<ul style="list-style-type: none"> <li>● at 50 Hz</li> <li>● at 60 Hz</li> </ul>	0.9 0.9
<b>apparent holding power of magnet coil at AC</b>	
<ul style="list-style-type: none"> <li>● at 50 Hz</li> <li>● at 60 Hz</li> </ul>	5.8 VA 5.8 VA
<b>inductive power factor with the holding power of the coil</b>	
<ul style="list-style-type: none"> <li>● at 50 Hz</li> <li>● at 60 Hz</li> </ul>	0.8 0.8

<b>closing power of magnet coil at DC</b>	360 W				
<b>holding power of magnet coil at DC</b>	5.2 W				
<b>Auxiliary circuit</b>					
number of NC contacts for auxiliary contacts instantaneous contact	2				
number of NO contacts for auxiliary contacts instantaneous contact	2				
operational current at AC-12 maximum	10 A				
<b>operational current at AC-15</b>					
• at 230 V rated value	6 A				
• at 400 V rated value	3 A				
<b>operational current at DC-12</b>					
• at 24 V rated value	6 A				
• at 110 V rated value	3 A				
• at 220 V rated value	1 A				
<b>operational current at DC-13</b>					
• at 24 V rated value	6 A				
• at 110 V rated value	1 A				
• at 220 V rated value	0.3 A				
<b>UL/CSA ratings</b>					
yielded mechanical performance [hp] for 3-phase AC motor at 460/480 V rated value	125 hp				
<b>Short-circuit protection</b>					
<b>design of the fuse link</b>					
• for short-circuit protection of the main circuit					
— with type of coordination 1 required	fuse gL/gG: 355 A				
— with type of assignment 2 required	fuse gL/gG: 315 A				
• for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A				
<b>Installation/ mounting/ dimensions</b>					
<b>mounting position</b>	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back				
<b>fastening method</b>	screw fixing				
• side-by-side mounting	Yes				
<b>height</b>	172 mm				
<b>width</b>	120 mm				
<b>depth</b>	170 mm				
<b>Connections/ Terminals</b>					
<b>type of electrical connection</b>					
• for main current circuit	screw-type terminals				
• for auxiliary and control circuit	screw-type terminals				
<b>type of connectable conductor cross-sections</b>					
• for auxiliary contacts					
— finely stranded with core end processing	2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )				
• for AWG cables for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14), 1x 12				
<b>Safety related data</b>					
product function mirror contact according to IEC 60947-4-1	Yes				
<b>protection class IP on the front according to IEC 60529</b>	IP00; IP20 with box terminal/cover				
<b>touch protection on the front according to IEC 60529</b>	finger-safe, for vertical contact from the front with box terminal/cover				
<b>Certificates/ approvals</b>					
<b>General Product Approval</b>	<b>EMC</b>				
	<a href="#">Confirmation</a>				
<b>Declaration of Conformity</b>	<b>other</b>				

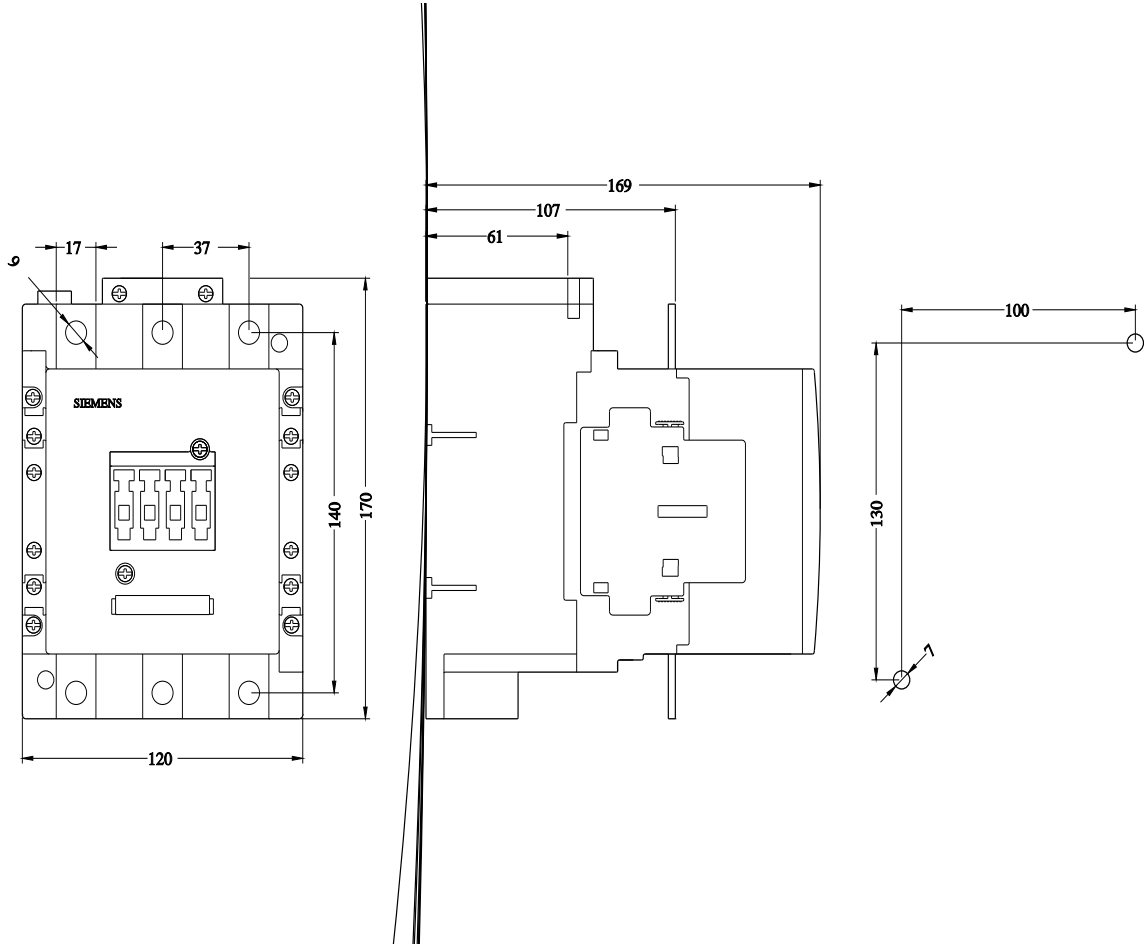


Confirmation

Further information

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

<https://support.industry.siemens.com/cs/products?pnid=16027&lc=en-CN>



last modified:

10/20/2023