



Contactor DC 24 V AC3 4 kW 400 V AUX contacts 1 NO +1 NC 3-pole, size S0 screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT6
General technical data	
size of contactor	S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state per pole	0.4 W
• without load current share typical	5.9 W
type of calculation of power loss current-dependent	quadratic
insulation voltage rated value	690 V
degree of pollution	3
surge voltage resistance rated value	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 DC	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
• at DC	15 g / 5 ms, 10 g / 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 (day/month/year)	05/01/2012
Net Weight	0.58 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-55 ... +80 °C
Main circuit	
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-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
operational current	
• at AC-1 up to 690 V	
— at ambient temperature 40 °C rated value	40 A

— at ambient temperature 60 °C rated value	35 A
● at AC-3 — at 400 V rated value — at 690 V rated value	9 A 9 A
● at AC-3e — at 400 V rated value — at 690 V rated value	9 A 9 A
connectable conductor cross-section in main circuit at AC-1	
● at 60 °C minimum permissible	10 mm ²
● at 40 °C minimum permissible	10 mm ²
operational current for approx. 200000 operating cycles at AC-4	
● at 400 V rated value	4.1 A
● at 690 V rated value	3.3 A
operating power	
● at AC-1 — at 230 V rated value — at 230 V at 60 °C rated value — at 400 V at 60 °C rated value — at 690 V at 60 °C rated value	13.3 kW 13.3 kW 23 kW 40 kW
● at AC-3 — at 230 V rated value — at 400 V rated value — at 690 V rated value	2.2 kW 4 kW 7.5 kW
● at AC-3e — at 230 V rated value — at 400 V rated value — at 690 V rated value	2.2 kW 4 kW 7.5 kW
operating power for approx. 200000 operating cycles at AC-4	
● at 400 V rated value	2 kW
● at 690 V rated value	2.5 kW
short-time withstand current in cold operating state up to 40 °C limited to 10 s switching at zero current maximum	80 A
no-load switching frequency	
● at DC	1 500 1/h
operating frequency	
● at AC-1 maximum	1 000 1/h
● at AC-3 maximum	1 000 1/h
● at AC-3e maximum	1 000 1/h
● at AC-4 maximum	300 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC rated value	24 V
operating range factor control supply voltage rated value of magnet coil at DC	
● initial value	0.8
● full-scale value	1.1
closing power of magnet coil at DC	5.9 W
holding power of magnet coil at DC	5.9 W
Auxiliary circuit	
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
operational current at AC-15	
● at 230 V rated value	10 A
● at 400 V rated value	3 A
● at 690 V rated value	1 A

operational current at DC-12			
• at 24 V rated value	6 A		
• at 110 V rated value	3 A		
• at 220 V rated value	1 A		
operational current at DC-13			
• at 24 V rated value	6 A		
• at 110 V rated value	1 A		
• at 220 V rated value	0.3 A		
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)		
UL/CSA ratings			
yielded mechanical performance [hp] for 3-phase AC motor at 460/480 V rated value	5 hp		
Short-circuit protection			
design of the fuse link			
• for short-circuit protection of the main circuit	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gL/gG: 10 A		
— with type of coordination 1 required			
— with type of coordination 2 required			
• for short-circuit protection of the auxiliary switch required			
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 side-by-side mounting	Yes		
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 50022		
height	85 mm		
width	45 mm		
depth	107 mm		
required spacing			
• with side-by-side mounting	0 mm		
— at the side			
Connections/ Terminals			
type of electrical connection			
• for main current circuit	screw-type terminals		
• for auxiliary and control circuit	screw-type terminals		
type of connectable conductor cross-sections for main contacts			
• solid or 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		
type of connectable conductor cross-sections			
• for auxiliary contacts	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14)		
— solid or stranded			
— finely stranded with core end processing			
• for AWG cables for auxiliary contacts			
Safety related data			
product function mirror contact according to IEC 60947-4-1	Yes		
Electrical Safety			
protection class IP on the front according to IEC 60529	IP20		
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front		
Approvals Certificates			
General Product Approval			
EMV			
 CCC Confirmation  UL   EG-Konf.  RCM			
Maritime application	other	Dangerous goods	Environment

[Confirmation](#)



Further information

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

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



