SIEMENS

Data sheet 3RT6027-1AN20



Contactor AC 220 V 50/60 HZ AC3 15 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 	2.7 W
without load current share typical	2.62 W
type of calculation of power loss depending on pole	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 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)	
 of contactor typical 	10 000 000
of the contactor with added auxiliary switch block typical	10 000 000
Substance Prohibitance (Date)	05/01/2012
Weight	0.435 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 AC-1 up to 050 v	
— at ambient temperature 40 °C rated value	50 A

• at AC-3	
— at 400 V rated value	32 A
— at 690 V rated value	21 A
• at AC-3e	
— at 400 V rated value	32 A
— at 690 V rated value	21 A
connectable conductor cross-section in main circuit at AC-	
• at 60 °C minimum permissible	10 mm²
• at 40 °C minimum permissible	10 mm²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	12 A
• at 690 V rated value	12 A
operating power	
• at AC-1	
— at 230 V rated value	16 kW
— at 230 V at 60 °C rated value	15.5 kW
— at 400 V at 60 °C rated value	27.5 kW
— at 690 V at 60 °C rated value	47.5 kW
• at AC-3	
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 400 V rated value — at 690 V rated value	18.5 kW
• at AC-3e	
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 690 V rated value	18.5 kW
operating power for approx. 200000 operating cycles at AC-	10.5 KVV
4	
• at 400 V rated value	6 kW
• at 690 V rated value	10.3 kW
no-load switching frequency	
• at AC	5 000 1/h
operating frequency	
at AC-1 maximum	1 000 1/h
• at AC-3 maximum	750 1/h
• at AC-3e maximum	750 1/h
• at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
at 50 Hz rated value	220 V
at 60 Hz rated value	220 V
operating range factor control supply voltage rated value of	
magnet coil at AC	
● at 50 Hz	0.8 1.1
• at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	81 VA
● at 60 Hz	79 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.72
● at 60 Hz	0.74
apparent holding power of magnet coil at AC	
• at 50 Hz	10.5 VA
• at 60 Hz	8.5 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.25
• at 60 Hz	0.28
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous	1
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and a d	
contact	4
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	20 hp
Short-circuit protection	
design of the fuse link	
for short-circuit protection of the main circuit	
with type of coordination 1 required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A
with type of assignment 2 required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
Installation/ mounting/ dimensions	idat grigo. To A
	+/-180° rotation possible on vertical mounting surface; can be tilted forward and
mounting position	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	97 mm
required spacing with side-by-side mounting at the side	0 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	
	screw-type terminals
 for auxiliary and control circuit 	
for auxiliary and control circuit type of connectable conductor cross-sections for main contacts	screw-type terminals screw-type terminals
·	screw-type terminals
type of connectable conductor cross-sections for main contacts • solid or stranded	screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²)
type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing	screw-type terminals
type of connectable conductor cross-sections for main contacts	screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²)
type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts	screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded	screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing	2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
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type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — 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	2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
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Confirmation



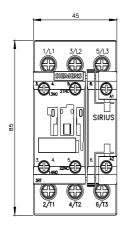


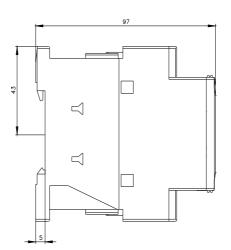
EMV Marine / Shipping other Environment

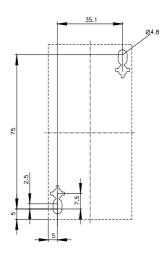


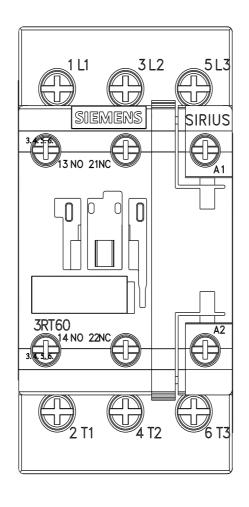
Further information

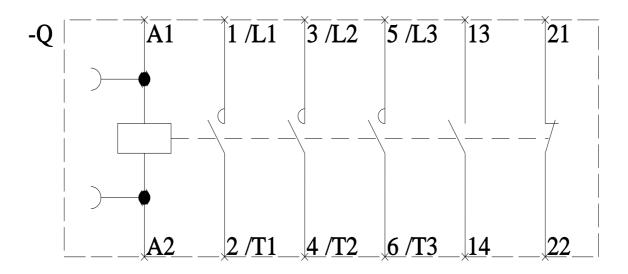
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