



Contactor AC 110 V 50/60 HZ AC3 5.5 kW 400 V AUX contacts: 1 NO 3-pole, size S00 screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT6
General technical data	
size of contactor	S00
product extension auxiliary switch	Yes
insulation voltage rated value	690 V
degree of pollution	3
surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	7,3g / 5 ms, 4,7g / 10 ms
shock resistance with sine pulse	
• at AC	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (operating cycles)	
• of contactor typical	30 000 000
• of the contactor with added auxiliary switch block typical	10 000 000
Substance Prohibitance (Date)	05/01/2012
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	22 A
— at ambient temperature 60 °C rated value	20 A
• at AC-3	
— at 400 V rated value	12 A
— at 690 V rated value	6.7 A
• at AC-3e	
— at 400 V rated value	12 A
— at 690 V rated value	6.7 A

connectable conductor cross-section in main circuit at AC-1

- at 60 °C minimum permissible
- at 40 °C minimum permissible

2.5 mm²
4 mm²

operational current for approx. 200000 operating cycles at AC-4

- at 400 V rated value
- at 690 V rated value

4.1 A
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

7.5 kW
7.5 kW
13 kW
22 kW

- at AC-3
 - at 230 V rated value
 - at 400 V rated value
 - at 690 V rated value

3 kW
5.5 kW
5.5 kW

- at AC-3e
 - at 400 V rated value
 - at 690 V rated value

5.5 kW
5.5 kW

operating power for approx. 200000 operating cycles at AC-4

- at 400 V rated value
- at 690 V rated value

2 kW
2.5 kW

no-load switching frequency

- at AC

10 000 1/h

operating frequency

- at AC-1 maximum
- at AC-3 maximum
- at AC-3e maximum
- at AC-4 maximum

1 000 1/h
750 1/h
750 1/h
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
- at 60 Hz rated value

110 V
110 V

operating range factor control supply voltage rated value of magnet coil at AC

- at 50 Hz
- at 60 Hz

0.8 ... 1.1
0.85 ... 1.1

apparent pick-up power of magnet coil at AC

- at 50 Hz
- at 60 Hz

37 VA
43 VA

inductive power factor with closing power of the coil

- at 50 Hz
- at 60 Hz

0.8
0.8

apparent holding power of magnet coil at AC

- at 50 Hz
- at 60 Hz

5.7 VA
6.5 VA

inductive power factor with the holding power of the coil

- at 50 Hz
- at 60 Hz

0.25
0.25

Auxiliary circuit

number of NC contacts for auxiliary contacts
instantaneous contact

0

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
- at 400 V rated value
- at 690 V rated value

10 A
3 A
1 A

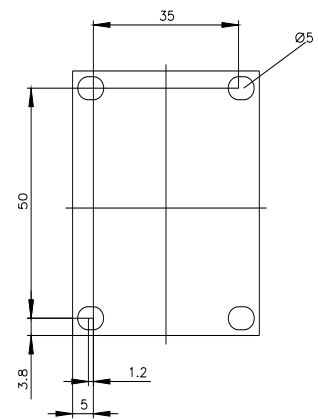
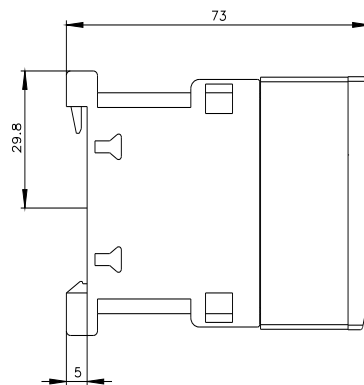
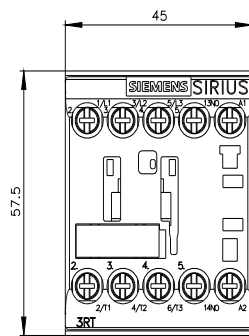
operational current at DC-12

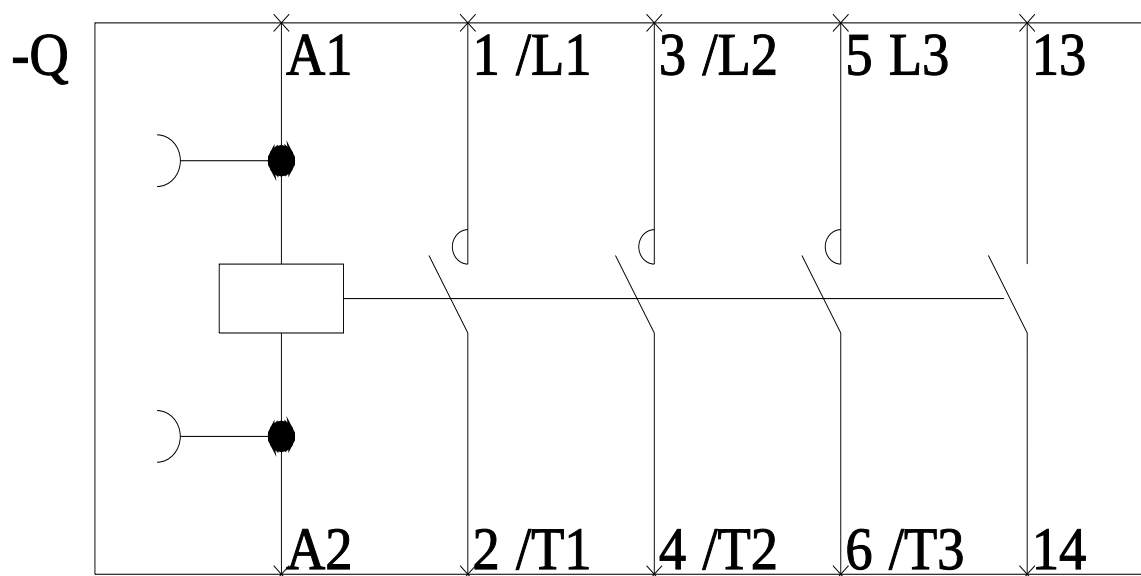
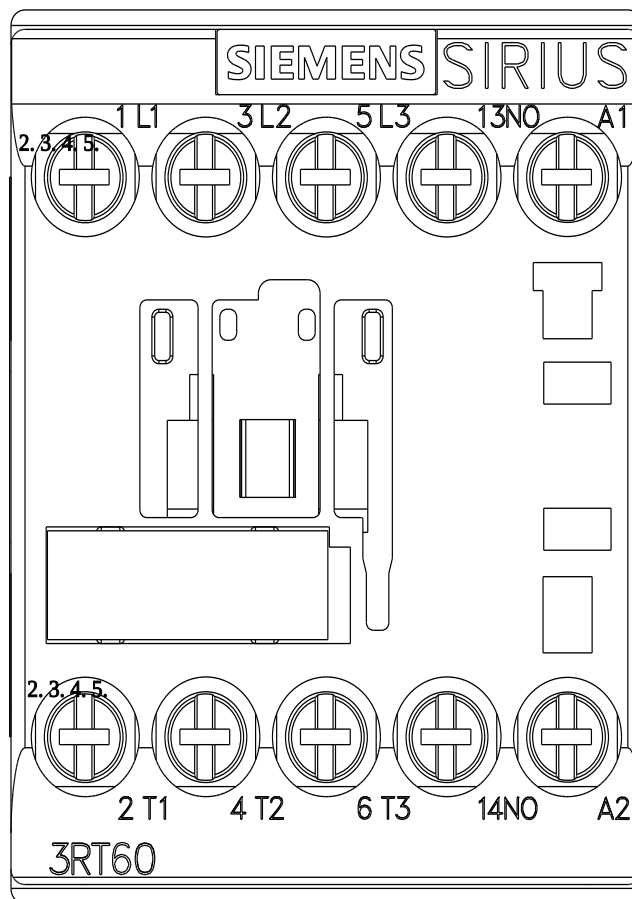
• at 24 V rated value • at 110 V rated value • at 220 V rated value	6 A 3 A 1 A
operational current at DC-13	
• at 24 V rated value • at 110 V rated value • at 220 V rated value	6 A 1 A 0.3 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
yielded mechanical performance [hp] for 3-phase AC motor at 460/480 V rated value	7.5 hp
Short-circuit protection	
design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A fuse gL/gG: 10 A
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 50022
• side-by-side mounting	Yes
height	57.5 mm
width	45 mm
depth	73 mm
required spacing with side-by-side mounting at the side	0 mm
Connections/ Terminals	
type of electrical connection • for main current circuit • for auxiliary and control circuit	screw-type terminals screw-type terminals
type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts	2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x 4 mm² 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14), 2x 12
type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm² 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14), 2x 12
Safety related data	
product function mirror contact according to IEC 60947-4-1	Yes
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
Certificates/ approvals	
General Product Approval	EMC
 Confirmation    	
Declaration of Conformity	other

Further information

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

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





last modified:

11/21/2022 