



Contactora AC 380 V 50 HZ AC3 22 kW 400 V 3 pole, mod. S2 screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT5
General technical data	
size of contactor	S2
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state per pole	5 W
• without load current share typical	4.5 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	10g / 5 ms, 5g / 10 ms
shock resistance with sine pulse	
• at AC	15g / 5 ms, 8g / 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 Prohibition (Date)	03/01/2017
SVHC substance name	Lead - 7439-92-1
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-3e rated value maximum	690 V
operational current	
• at AC-1 up to 690 V	
— at ambient temperature 40 °C rated value	60 A
— at ambient temperature 60 °C rated value	55 A
• at AC-3	

<ul style="list-style-type: none"> — at 400 V rated value — at 690 V rated value ● at AC-3e <ul style="list-style-type: none"> — at 400 V rated value — at 690 V rated value 	50 A 24 A 50 A 24 A
connectable conductor cross-section in main circuit at AC-1	
<ul style="list-style-type: none"> ● at 60 °C minimum permissible ● at 40 °C minimum permissible 	16 mm ² 16 mm ²
operational current for approx. 200000 operating cycles at AC-4	
<ul style="list-style-type: none"> ● at 400 V rated value ● at 690 V rated value 	24 A 12.6 A
operating power	
<ul style="list-style-type: none"> ● at AC-1 <ul style="list-style-type: none"> — at 230 V at 60 °C rated value — at 400 V at 60 °C rated value — at 690 V at 60 °C rated value ● at AC-3 <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 690 V rated value ● at AC-3e <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 690 V rated value 	22 kW 38 kW 66 kW 15 kW 22 kW 22 kW 15 kW 22 kW 22 kW
operating power for approx. 200000 operating cycles at AC-4	
<ul style="list-style-type: none"> ● at 400 V rated value ● at 690 V rated value 	12.6 kW 11.4 kW
no-load switching frequency	
<ul style="list-style-type: none"> ● at AC 	5 000 1/h
operating frequency	
<ul style="list-style-type: none"> ● at AC-1 maximum ● at AC-3 maximum ● at AC-3e maximum ● at AC-4 maximum 	1 000 1/h 800 1/h 800 1/h 300 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
<ul style="list-style-type: none"> ● at 50 Hz rated value 	380 V
operating range factor control supply voltage rated value of magnet coil at AC	
<ul style="list-style-type: none"> ● at 50 Hz 	0.8 ... 1.1
apparent pick-up power of magnet coil at AC	
<ul style="list-style-type: none"> ● at 50 Hz 	145 VA
inductive power factor with closing power of the coil	
<ul style="list-style-type: none"> ● at 50 Hz 	0.79
apparent holding power of magnet coil at AC	
<ul style="list-style-type: none"> ● at 50 Hz 	12.5 VA
inductive power factor with the holding power of the coil	
<ul style="list-style-type: none"> ● at 50 Hz 	0.36
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	0
number of NO contacts for auxiliary contacts instantaneous contact	0
operational current at AC-12 maximum	10 A
operational current at AC-15	
<ul style="list-style-type: none"> ● at 230 V rated value ● at 400 V rated value 	6 A 3 A
operational current at DC-12	

<ul style="list-style-type: none"> at 110 V rated value at 220 V rated value 	<p>3 A</p> <p>1 A</p>
operational current at DC-13	
<ul style="list-style-type: none"> at 24 V rated value at 110 V rated value at 220 V rated value 	<p>6 A</p> <p>1 A</p> <p>0.3 A</p>
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	40 hp
Short-circuit protection	
design of the fuse link	
<ul style="list-style-type: none"> for short-circuit protection of the main circuit <ul style="list-style-type: none"> with type of coordination 1 required with type of assignment 2 required for short-circuit protection of the auxiliary switch required 	<p>fuse gL/gG: 160 A</p> <p>fuse gL/gG: 80 A</p> <p>fuse gL/gG: 10 A</p>
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
<ul style="list-style-type: none"> side-by-side mounting 	Yes
height	112 mm
width	55 mm
depth	115 mm
Connections/ Terminals	
type of electrical connection	
<ul style="list-style-type: none"> for main current circuit for auxiliary and control circuit 	<p>screw-type terminals</p> <p>screw-type terminals</p>
type of connectable conductor cross-sections for main contacts	
<ul style="list-style-type: none"> solid or stranded finely stranded with core end processing finely stranded without core end processing 	<p>2x (0.75 ... 16 mm²)</p> <p>2x (0.75 ... 16 mm²)</p> <p>2x (0.75 ... 16 mm²)</p>
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> for auxiliary contacts <ul style="list-style-type: none"> finely stranded with core end processing for AWG cables for auxiliary contacts 	<p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14), 1x 12</p>
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

[Confirmation](#)



EG-Konf.



CCC



UL



RCM

Marine / Shipping	other	Environment
--------------------------	--------------	--------------------

[CCS \(China Classification Society\)](#)

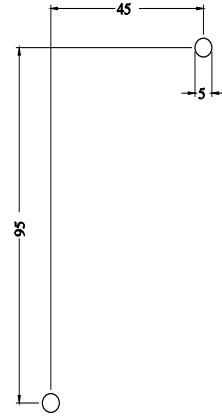
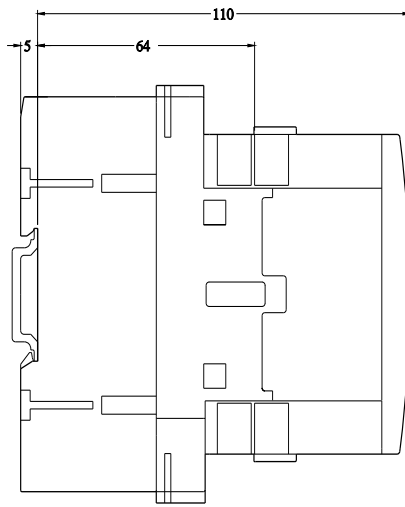
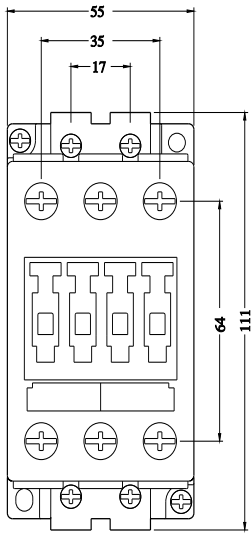
[Confirmation](#)

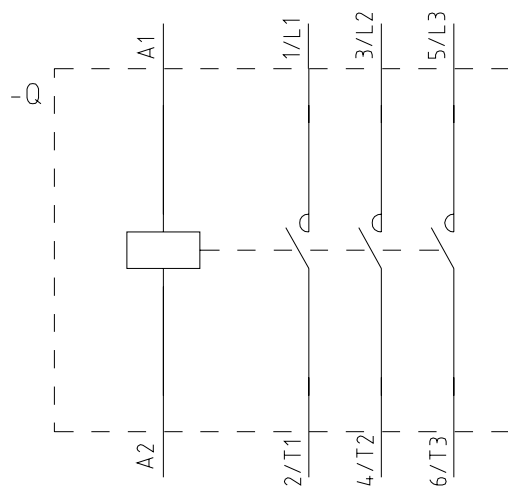
[Confirmation](#)

[Environmental Confirmations](#)

Further information

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/products?pnid=16027&lc=en-CN>





last modified:

8/1/2024 