



CONTACTOR, AC-3, 5.5KW/400V, 1NO+1NC,
AC(50-60HZ)/DC ACTUAT. , UC 95...130V,
3-POLE, SZ S0 SCREW TERMINAL

General technical data:

product brand name		SIRIUS
Size of the contactor		S0
Product extension / auxiliary switch		Yes
Protection class IP / on the front		IP20
Protection against electrical shock		finger-safe
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-55 ... +80
• during operating	°C	-25 ... +60
Shock resistance		
• at rectangular impulse		
• at AC		7,5g / 5 ms, 4,7g / 10 ms
• at DC		10g / 5 ms, 7,5g / 10 ms
• at sine pulse		
• at AC		11,8g / 5 ms, 7,4g / 10 ms
• at DC		15g / 5 ms, 10g / 10 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690

Mechanical operating cycles as operating time		
• of the contactor / typical		10,000,000
• of the contactor with added auxiliary switch block / typical		10,000,000
• of the contactor with added electronics-compatible auxiliary switch block / typical		5,000,000
Main circuit:		
Number of NC contacts / for main contacts		0
Number of NO contacts / for main contacts		3
Operating current		
• at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	A	40
• at 60 °C ambient temperature / rated value	A	35
• at AC-2 / at 400 V / rated value	A	12
• at AC-3 / at 400 V / rated value	A	12
• at AC-4 / at 400 V / rated value	A	12.5
Operating current		
• with 1 current path / at DC-1		
• at 24 V / rated value	A	35
• at 110 V / rated value	A	4.5
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	A	35
• at 110 V / rated value	A	35
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	A	35
• at 110 V / rated value	A	35
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	2.5
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	35
• at 110 V / rated value	A	15
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	35
• at 110 V / rated value	A	35
Service power		
• at AC-2 / at 400 V / rated value	kW	5.5
• at AC-3 / at 400 V / rated value	kW	5.5
• at AC-4 / at 400 V / rated value	kW	5.5
Active power loss / per conductor / typical	W	0.5

Off-load operating frequency		
• at AC	1/h	5,000
• at DC	1/h	1,500
Frequency of operation / at AC-1 / according to IEC 60947-6-2	1/h	1,000
Frequency of operation / at AC-2 / according to IEC 60947-6-2	1/h	1,000
Frequency of operation / at AC-3 / according to IEC 60947-6-2	1/h	1,000
Frequency of operation / at AC-4 / according to IEC 60947-6-2	1/h	300

Control circuit:

Design of the surge suppressor		with varistor
Type of voltage / of the controlled supply voltage		AC/DC
Operating range factor control supply voltage rated value / of the magnet coil		
• at 50 Hz / for AC		0.7 ... 1.3
• at 60 Hz / for AC		0.7 ... 1.3
• for DC		0.7 ... 1.3
Apparent pull-in power / of the solenoid / for AC	V·A	13.6
Apparent holding power / of the solenoid / for AC	V·A	1.9
Inductive power factor		
• with the pull-in power of the coil		0.98
• with the pull-in power of the coil		0.61
Pull-in power / of the solenoid / for DC	W	13.2
Holding power / of the solenoid / for DC	W	1.56
Closing delay		
• at AC	ms	50 ... 70
• at DC	ms	50 ... 70
Opening delay		
• at AC	ms	35 ... 45
• at DC	ms	35 ... 45
Arcing time	ms	10 ... 10

Auxiliary circuit:

Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching		1
Number of NO contacts / for auxiliary contacts / instantaneous switching		1
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	A	10
• at AC-15		
• at 230 V	A	10

- at 400 V
- at DC-12
 - at 48 V
 - at 60 V
 - at 110 V
 - at 220 V
- at DC-13
 - at 24 V
 - at 48 V
 - at 60 V
 - at 110 V
 - at 220 V

A	3
A	6
A	6
A	3
A	1
A	10
A	2
A	2
A	1
A	0.3

Short-circuit:

Design of the fuse link

- for short-circuit protection of the auxiliary switch / required
- for short-circuit protection of the main circuit
 - with type of assignment 1 / required
 - at type of coordination 2 / required

fuse gL/gG: 10 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25A

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

Type of mounting

screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022

Type of fixing/fixation / series installation

Yes

Width

mm 45

Height

mm 85

Depth

mm 107

Distance, to be maintained, to the ranks assembly / sideways

mm 0

Distance, to be maintained, to earthed part / sideways

mm 6

Connections:

Design of the electrical connection

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals

screw-type terminals

Type of the connectable conductor cross-section

- for main contacts
 - solid
 - finely stranded

2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²)

- with conductor end processing
- for AWG conductors / for main contacts
- for auxiliary contacts
 - solid
 - finely stranded
 - with conductor end processing
- for AWG conductors / for auxiliary contacts

2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²
 2x (16 ... 12), 2x (14 ... 8)

 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)

Certificates/approvals:

General Product Approval

EMC

Functional Safety / Safety of Machinery



[Type Examination](#)

Declaration of Conformity

Test Certificates



[other](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Shipping Approval



Shipping Approval

other



[Confirmation](#)



UL/CSA ratings:

yielded mechanical performance (hp)

- for single-phase squirrel cage motors
 - at 110/120 V / rated value
 - at 230 V / rated value
- for three-phase squirrel cage motors
 - at 200/208 V / rated value
 - at 220/230 V / rated value
 - at 460/480 V / rated value
 - at 575/600 V / rated value

hp	1
hp	2
hp	3
hp	3
hp	7.5
hp	10

Operating current (FLA) / for three-phase squirrel cage motors

- at 480 V / rated value
- at 600 V / rated value

A	11
A	11

Contact rating designation / for auxiliary contacts / according to UL		A600 / Q600
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Sicherheitsrelevante Kenngrößen:

B10 value / with high demand rate • according to SN 31920		1,000,000
T1 value / for proof test interval or service life • according to IEC 61508	a	20
Proportion of dangerous failures • with low demand rate / according to SN 31920 • with high demand rate / according to SN 31920	% %	40 73
Failure rate (FIT value) / with low demand rate • according to SN 31920	FIT	100
Product function • mirror contact to IEC 60947-4-1 • comment • positively driven operation to IEC 60947-5-1		Yes with 3RH29 No

Further information:

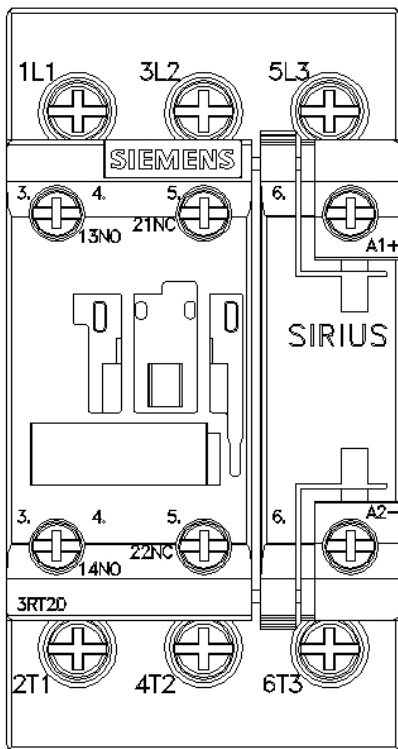
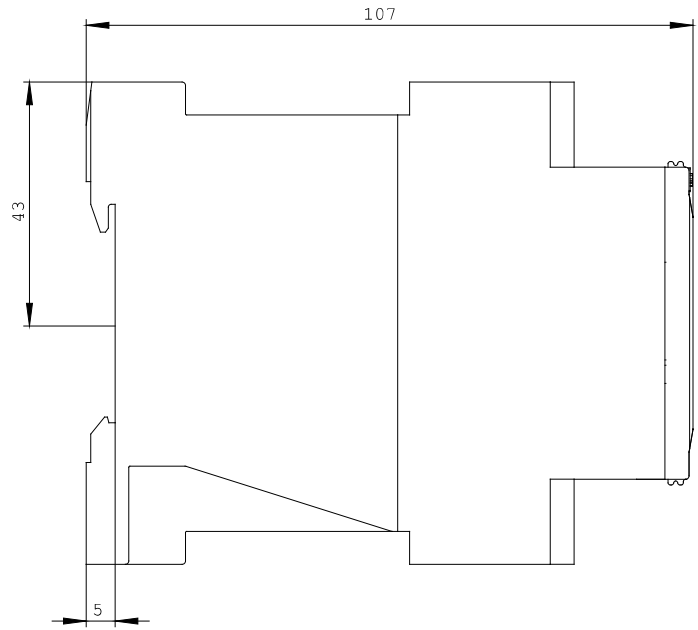
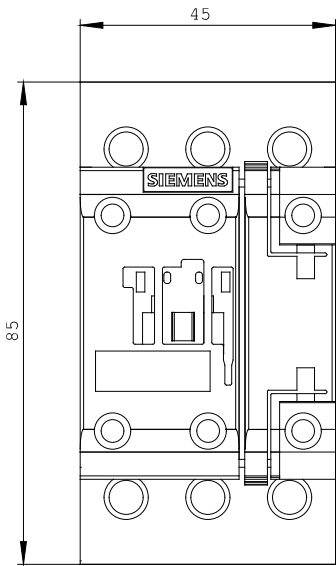
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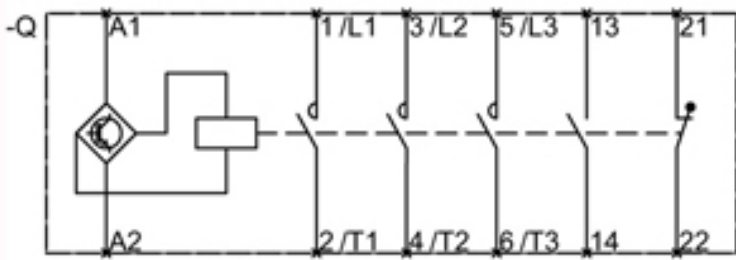
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<http://support.automation.siemens.com/WW/view/en/3RT2024-1NF30/all>

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last change:

Nov 14, 2012