

CONTACTOR, AC-3, 3KW/400V, 1NO, AC 24V,
50/60 HZ, 3-POLE, SZ S00 SCREW TERMINAL

General technical data:		
product brand name		SIRIUS
Size of the contactor		S00
Product extension		Yes No
<ul style="list-style-type: none"> • auxiliary switch • function module for communication 		
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		
<ul style="list-style-type: none"> • during storage • during operating 	°C	-55 ... +80 -25 ... +60
Shock resistance		
<ul style="list-style-type: none"> • at rectangular impulse • at AC • at sine pulse • at AC 		6,7g / 5 ms, 4,2g / 10 ms 10,5g / 5 ms, 6,6g / 10 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690
Maximum permissible voltage for protective separation / between coil and main contacts / in accordance with EN 60947-1	V	400
Mechanical operating cycles as operating time		
<ul style="list-style-type: none"> • of the contactor / typical • of the contactor with added auxiliary switch block / typical • of the contactor with added electronics-compatible auxiliary switch block / typical 		30,000,000 10,000,000 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		
<ul style="list-style-type: none"> • at 40 °C ambient temperature / rated value • at 60 °C ambient temperature / rated value 	A	18 16

Connectable conductor cross-section / in main circuit		
• at AC-1		
• at 40 °C / minimum permissible	m ²	2.5
• at 60 °C / minimum permissible	m ²	2.5
Operational current		
• at AC-2		
• at 400 V / rated value	A	7
• at AC-3		
• at 400 V / rated value	A	7
• at 500 V / rated value	A	6
• at 690 V / rated value	A	4.9
• at AC-4		
• at 400 V / rated value	A	6.5
Operational current		
• with 1 current path / at DC-1		
• at 24 V / rated value	A	15
• at 110 V / rated value	A	1.5
• at 220 V / rated value	A	0.6
• at 440 V / rated value	A	0.42
• at 600 V / rated value	A	0.42
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	A	15
• at 110 V / rated value	A	8.4
• at 220 V / rated value	A	1.2
• at 440 V / rated value	A	0.6
• at 600 V / rated value	A	0.5
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	A	15
• at 110 V / rated value	A	15
• at 220 V / rated value	A	15
• at 440 V / rated value	A	0.9
• at 600 V / rated value	A	0.7
Operational current		
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	A	15
• at 110 V / rated value	A	0.1
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	15
• at 110 V / rated value	A	0.25
• with 3 current paths in series / at DC-3 / at DC-5		

• at 24 V / rated value	A	15
• at 110 V / rated value	A	15
• at 220 V / rated value	A	1.2
• at 440 V / rated value	A	0.14
• at 600 V / rated value	A	0.14
Service power		
• at AC-1		
• at 230 V / rated value	kW	6.3
• at 400 V / rated value	kW	11
• at 690 V / rated value	kW	19
• at AC-2		
• at 400 V / rated value	kW	3
• at AC-3		
• at 230 V / rated value	kW	1.5
• at 400 V / rated value	kW	3
• at 690 V / rated value	kW	4
• at AC-4		
• at 400 V / rated value	kW	3
Thermal short-time current / restricted to 10 s		
	A	56
Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductor		
	W	0.4
Off-load operating frequency		
• at AC	1/h	10,000
Frequency of operation		
• at AC-1 / according to IEC 60947-6-2	1/h	1,000
• at AC-2 / according to IEC 60947-6-2	1/h	750
• at AC-3 / according to IEC 60947-6-2	1/h	750
• at AC-4 / according to IEC 60947-6-2	1/h	250
Control circuit:		
Type of voltage / of the controlled supply voltage		AC
Control supply voltage		
• at 50 Hz / at AC / rated value	V	24
• at 60 Hz / at AC / rated value	V	24
operating range factor control supply voltage rated value / of the magnet coil		
• at 50 Hz / for AC		0.8 ... 1.1
• at 60 Hz / for AC		0.85 ... 1.1
Apparent pull-in power / of the solenoid / for AC		
	V·A	27
Apparent holding power / of the solenoid / for AC		
	V·A	4.2
Inductive power factor		

<ul style="list-style-type: none"> • with the pull-in power of the coil 		0.8
<ul style="list-style-type: none"> • with the pull-in power of the coil 		0.25
Closing delay		
<ul style="list-style-type: none"> • at AC 	ms	9 ... 35
Opening delay		
<ul style="list-style-type: none"> • at AC 	ms	3.5 ... 14
Arcing time	ms	10 ... 15
Residual current / of electronics / for control with signal <0>		
<ul style="list-style-type: none"> • at 230 V / with AC / maximum permissible 	mA	3
<ul style="list-style-type: none"> • at 24 V / with DC / maximum permissible 	mA	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		0
Number of NO contacts / for auxiliary contacts / instantaneous switching		1
Operating current		
<ul style="list-style-type: none"> • at AC-12 / maximum 	A	10
<ul style="list-style-type: none"> • at AC-15 		
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 230 V / rated value 	A	10
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 400 V / rated value 	A	3
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 500 V / rated value 	A	2
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 690 V / rated value 	A	1
Operating current / at DC-12		
<ul style="list-style-type: none"> • at 24 V / rated value 	A	10
<ul style="list-style-type: none"> • at 48 V / rated value 	A	6
<ul style="list-style-type: none"> • at 60 V / rated value 	A	6
<ul style="list-style-type: none"> • at 110 V / rated value 	A	3
<ul style="list-style-type: none"> • at 125 V / rated value 	A	2
<ul style="list-style-type: none"> • at 220 V / rated value 	A	1
<ul style="list-style-type: none"> • at 440 V / rated value 	A	0.3
<ul style="list-style-type: none"> • at 600 V / rated value 	A	0.15
Operating current / at DC-13		
<ul style="list-style-type: none"> • at 24 V / rated value 	A	10
<ul style="list-style-type: none"> • at 48 V / rated value 	A	2
<ul style="list-style-type: none"> • at 60 V / rated value 	A	2
<ul style="list-style-type: none"> • at 110 V / rated value 	A	1
<ul style="list-style-type: none"> • at 125 V / rated value 	A	0.9
<ul style="list-style-type: none"> • at 220 V / rated value 	A	0.3
<ul style="list-style-type: none"> • at 440 V / rated value 	A	0.14

- at 600 V / rated value

A 0.1

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	0.25
hp	0.75
hp	1.5
hp	2
hp	3
hp	5

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

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

A	4.8
A	6.1

Contact rating designation / for auxiliary contacts / according to UL

A600 / Q600

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: 35 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20A

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 57.5

Depth

mm 73

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

mm 0

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 <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> • solid • finely stranded <ul style="list-style-type: none"> • with conductor end processing • for AWG conductors / for main contacts • for auxiliary contacts <ul style="list-style-type: none"> • solid • finely stranded <ul style="list-style-type: none"> • with conductor end processing • for AWG conductors / for auxiliary contacts 		2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), 2x 4 mm ² 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14), 2x 12 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), 2x 4 mm ² 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14), 2x 12
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Sicherheitsrelevante Kenngrößen:

B10 value / with high demand rate <ul style="list-style-type: none"> • according to SN 31920 		1,000,000
T1 value / for proof test interval or service life <ul style="list-style-type: none"> • according to IEC 61508 	a	20
Proportion of dangerous failures <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • according to SN 31920 	FIT	100
Product function <ul style="list-style-type: none"> • mirror contact to IEC 60947-4-1 <ul style="list-style-type: none"> • comment • positively driven operation to IEC 60947-5-1 		Yes with 3RH29 No

Certificates/approvals:

General Product Approval**Functional Safety /
Safety of
Machinery****Declaration of
Conformity**

CCC



CSA



GOST



UL

[Type Examination](#)

EG-Konf.

Test Certificates[Special Test
Certificate](#)**Shipping Approval**

ABS

BUREAU
VERITAS

DNV



GL



LRS



PRS

Shipping Approval

other



RINA

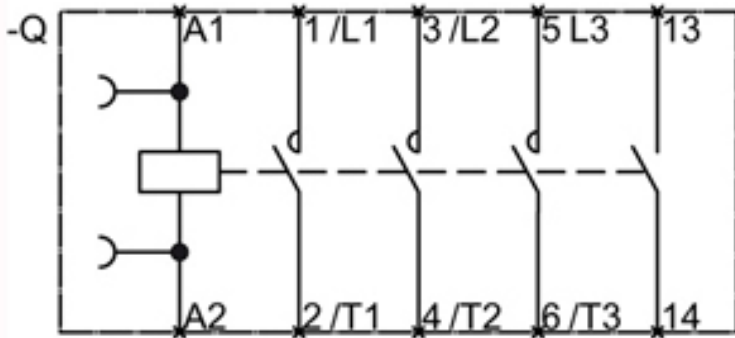
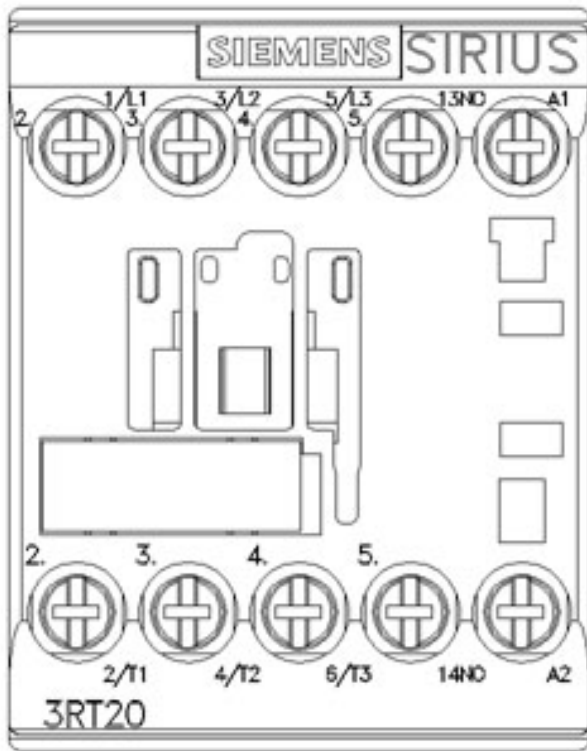
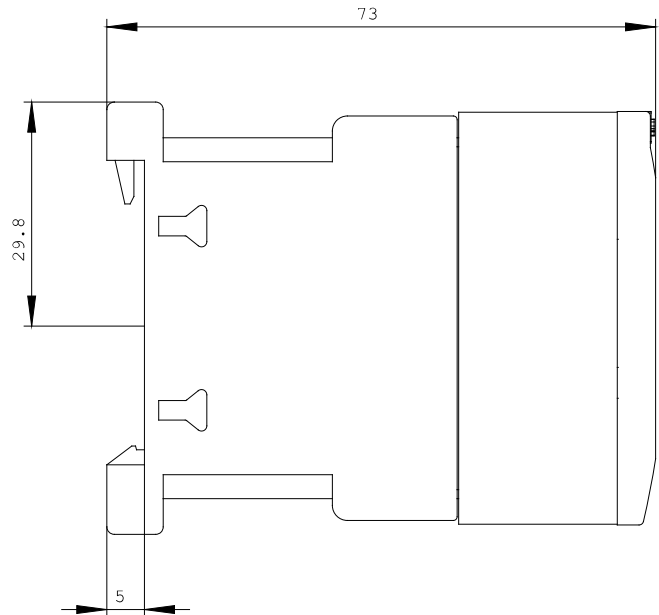
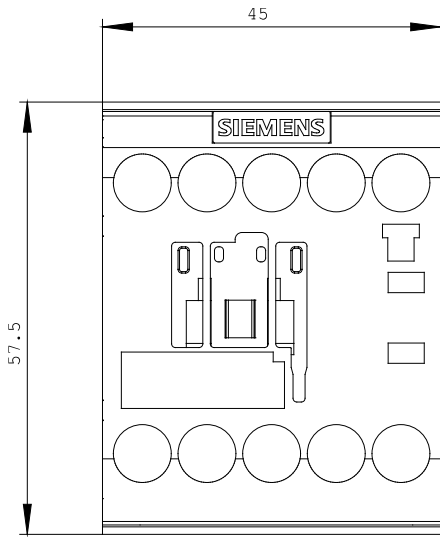


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[Confirmation](#)

VDE

Further information:**Information- and Downloadcenter (Catalogs, Brochures,...)**<http://www.siemens.com/industrial-controls/catalogs>**Industry Mall (Online ordering system)**<http://www.siemens.com/industrial-controls/mall>**Cax online generator**<http://www.siemens.com/cax>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<http://support.automation.siemens.com/WW/view/en/3RT2015-1AB01/all>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2015-1AB01



last change:

May 23, 2013