



2NO+2NC CONTACTOR,
AC3: 4KW DC 125V 4-POLE, 2NO+2NC,
SZ: S00, SPRING-LOADED TERMINAL

General technical data:		
product brand name		SIRIUS
Size of the contactor		S00
Product extension		
• auxiliary switch		Yes
• function module for communication		No
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 DC		6,7g / 5 ms, 4,2g / 10 ms
• at sine pulse		
• at DC		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		
• of the contactor / typical		30,000,000
• 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		2
Number of NO contacts / for main contacts		2
Operational current / at AC-1 / up to 690 V		
• at 40 °C ambient temperature / rated value	A	22
• at 60 °C ambient temperature / rated value	A	20
Operating current / at AC-2 / at AC-3		
• at 400 V		
• per NO contact / rated value	A	9
• per NC contact / rated value	A	9
Operating current		
• with 1 current path / at DC-1		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	2.1
• at 220 V / rated value	A	0.8
• at 440 V / rated value	A	0.6
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	12
• at 220 V / rated value	A	1.6
• at 440 V / rated value	A	0.8
Operating current		
• with 1 current path / at DC-3 / at DC-5		
• at 24 V		
• per NO contact / rated value	A	16
• per NC contact / rated value	A	16
• at 110 V		
• per NO contact / rated value	A	0.15
• per NC contact / rated value	A	0.075
• at 220 V		
• per NO contact / rated value	A	0.75
• per NC contact / rated value	A	0.375
• with 2 current paths in series / at DC-3 / at DC-5		

<ul style="list-style-type: none"> • at 24 V <ul style="list-style-type: none"> • per NO contact / rated value • per NC contact / rated value • at 110 V <ul style="list-style-type: none"> • per NO contact / rated value • per NC contact / rated value 	A	16
	A	16
	A	0.35
	A	0.175
Operating performance		
<ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> • at 230 V / rated value • at 400 V / rated value • at AC-2 / at AC-3 <ul style="list-style-type: none"> • at 230 V <ul style="list-style-type: none"> • per NO contact / rated value • per NC contact / rated value • at 400 V <ul style="list-style-type: none"> • per NO contact / rated value • per NC contact / rated value 	kW	6.5
	kW	11
	kW	2.2
	kW	2.2
	kW	4
	kW	4
Active power loss / at AC-3 / at 400 V / with rated Operating current value / per conductor	W	0.7
Off-load operating frequency		
<ul style="list-style-type: none"> • at AC • at DC 	1/h	10,000
	1/h	10,000
Frequency of operation		
<ul style="list-style-type: none"> • with AC-1 / maximum • at AC-2 / at AC-3 / maximum 	1/h	1,000
	1/h	1,000

Control circuit/ Control:		
Voltage type / of control feed voltage		DC
Control supply voltage		
<ul style="list-style-type: none"> • for DC / rated value 	V	125
operating range factor control supply voltage rated value / of the magnet coil		
<ul style="list-style-type: none"> • for DC 		0.8 ... 1.1
Pull-in power / of the solenoid / for DC	W	4
Holding power / of the solenoid / for DC	W	4
Closing delay		
<ul style="list-style-type: none"> • at DC 	ms	30 ... 100
Opening delay		
<ul style="list-style-type: none"> • at DC 	ms	7 ... 13
Arcing time	ms	10 ... 15
Residual current / of electronics / for control with signal <0>		

- at 24 V / with DC / maximum permissible

A	0.01
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Auxiliary circuit:

Contact reliability / of the auxiliary contacts

	1 faulty switching per 100 million (17 V, 1 mA)
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Number of NC contacts / for auxiliary contacts / instantaneous switching

	0
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Number of NO contacts / for auxiliary contacts / instantaneous switching

	0
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Operating current

- at AC-12 / maximum
- at AC-15 / at 230 V / rated value
- at AC-15 / at 400 V / rated value

A	10
A	10
A	3

Operating current / at DC-12

- at 48 V / rated value
- at 60 V / rated value
- at 110 V / rated value
- at 125 V / rated value
- at 220 V / rated value
- at 440 V / rated value
- at 600 V / rated value

A	6
A	6
A	3
A	2
A	1
A	0.3
A	0.15

Operating current / at DC-13

- at 24 V / rated value
- at 48 V / rated value
- at 60 V / rated value
- at 110 V / rated value
- at 220 V / rated value
- at 600 V / rated value

A	10
A	2
A	2
A	1
A	0.3
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

hp	0.33
hp	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

fuse gL/gG: 10 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
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- at type of coordination 2 / required

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 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
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Mounting type / series installation		Yes
Width	mm	45
Height	mm	70
Depth	mm	73

Connections/ terminals:

Design of the electrical connection		
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 		<p>spring-loaded terminals</p> <p>spring-loaded terminals</p>
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 • without conductor final cutting • 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 • without conductor final cutting • for AWG conductors / for auxiliary contacts 		<p>2x (0.5 ... 4 mm²)</p> <p>2x (0.5 ... 2.5 mm²)</p> <p>2x (0.5 ... 2.5 mm²)</p> <p>2x (20 ... 12)</p> <p>2x (0.5 ... 4 mm²)</p> <p>2x (0.5 ... 2.5 mm²)</p> <p>2x (0.5 ... 2.5 mm²)</p> <p>2x (20 ... 12)</p>

Safety related data:

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] / with low demand rate		
<ul style="list-style-type: none"> • 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

Certificates/ approvals:

General Product Approval

Functional Safety / Safety of Machinery

Declaration of Conformity



CCC



CSA



UL

[Type Examination](#)



EG-Konf.

Test Certificates

[Special Test
Certificate](#)

Shipping Approval



ABS



BUREAU
VERITAS



DNV



GL



LRS



PRS

Shipping Approval

other



RINA



RMRS

[Confirmation](#)



VDE

[Environmental
Confirmations](#)

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

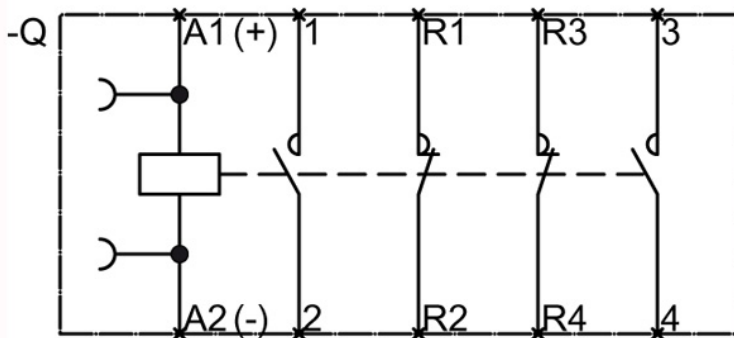
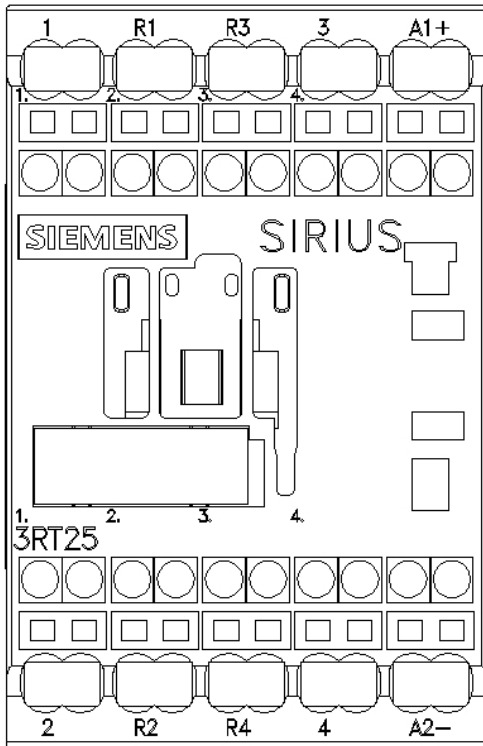
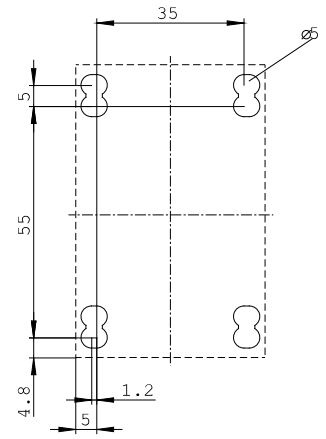
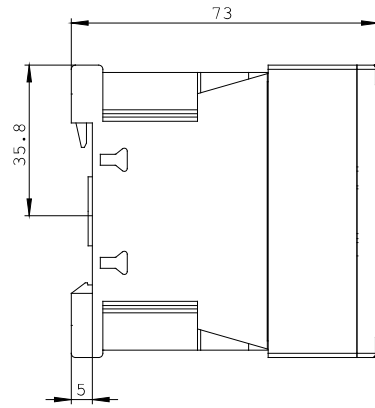
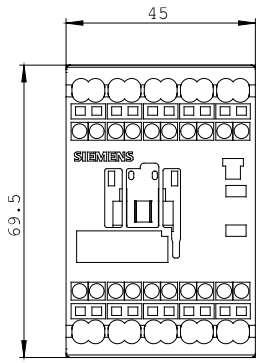
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RT2516-2BG40/all>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2516-2BG40



last change:

Aug 4, 2014