

2NO+2NC CONTACTOR,
AC3: 5.5KW DC 48V 4-POLE, 2NO+2NC,
SZ: S00,
SPRING-LOADED TERMINAL W/ INTEGRATED DIODE

General technical data:

product brand name		SIRIUS
Size of the contactor		S00
Product extension		Yes
• auxiliary switch		No
• 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		
• during storage	°C	-55 ... +80
• during operating	°C	-25 ... +60
Shock resistance		
• at rectangular impulse		
• at DC		7.3g / 5 ms, 4.7g / 10 ms
• at sine pulse		
• at DC		11,4g / 5 ms, 7,3g / 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	12
• 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	20
• per NC contact / rated value	A	20
• 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		
• at 24 V		
• per NO contact / rated value	A	20
• per NC contact / rated value	A	20
• at 110 V		
• per NO contact / rated value	A	0.35
• per NC contact / rated value	A	0.175
Operating performance		
• at AC-1		
• at 230 V / rated value	kW	7.5
• at 400 V / rated value	kW	13
• at AC-2 / at AC-3		

• at 230 V • per NO contact / rated value • per NC contact / rated value • at 400 V • per NO contact / rated value • per NC contact / rated value	kW	3
	kW	2.2
	kW	5.5
	kW	4
Active power loss / at AC-3 / at 400 V / with rated Operating current value / per conductor	W	1.2
Off-load operating frequency		
• at AC	1/h	10,000
• at DC	1/h	10,000
Frequency of operation		
• with AC-1 / maximum	1/h	1,000
• at AC-2 / at AC-3 / maximum	1/h	1,000

Control circuit/ Control:		
Design of the surge suppressor		with diode assemblies
Voltage type / of control feed voltage		DC
Control supply voltage		
• for DC / rated value	V	48
operating range factor control supply voltage rated value / of the magnet coil		
• 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		
• at DC	ms	30 ... 100
Opening delay		
• at DC	ms	7 ... 13
Arcing time	ms	10 ... 15
Residual current / of electronics / for control with signal <0>		
• at 230 V / with AC / maximum permissible	A	0.0040

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		0
Operating current		
• at AC-12 / maximum	A	10
• at AC-15 / at 230 V / rated value	A	10

• at AC-15 / at 400 V / rated value	A	3
Operating current / at DC-12		
• at 48 V / rated value	A	6
• at 60 V / rated value	A	6
• at 110 V / rated value	A	3
• at 125 V / rated value	A	2
• at 220 V / rated value	A	1
• at 440 V / rated value	A	0.3
• at 600 V / rated value	A	0.15
Operating current / at DC-13		
• at 24 V / rated value	A	10
• at 48 V / rated value	A	2
• at 60 V / rated value	A	2
• at 110 V / rated value	A	1
• at 220 V / rated value	A	0.3
• 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	hp	0.5
• at 230 V / rated value	hp	2
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		fuse gL/gG: 10 A
• for short-circuit protection of the main circuit		
• with type of assignment 1 / required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
• 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
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Connections/ terminals:		
Design of the electrical connection		
• for main current circuit • for auxiliary and control current circuit		spring-loaded terminals spring-loaded terminals
Type of the connectable conductor cross-section		
• for main contacts • solid • finely stranded • with conductor end processing • without conductor final cutting • for AWG conductors / for main contacts • for auxiliary contacts • solid • finely stranded • with conductor end processing • without conductor final cutting • for AWG conductors / for auxiliary contacts		2x (0.5 ... 4 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (20 ... 12) 2x (0.5 ... 4 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (20 ... 12)

Safety related data:		
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] / 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

Certificates/ approvals:		
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General Product Approval			Functional Safety / Safety of Machinery	Declaration of Conformity
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CCC



CSA



UL

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VERITAS



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Shipping Approval

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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/3RT2517-2FW40/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2517-2FW40

last change:

Jul 28, 2014