



4NO CONTACTOR, AC1: 18A DC 24V 4-POLE,
4NO, SZ: S00, SCREW TERMINAL

General technical data:

product brand name		SIRIUS
Size of the contactor		S00
Product extension / auxiliary switch		Yes
Product extension / 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		0
Number of NO contacts / for main contacts		4
Operating current / at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	A	18
• at 60 °C ambient temperature / rated value	A	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	9
• at AC-3		
• at 400 V / rated value	A	9
• at AC-4 / at 400 V / rated value	A	8.5
Operational 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
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	20
• at 220 V / rated value	A	16
• at 440 V / rated value	A	1.3
Operational current		
• with 1 current path / at DC-3 / at DC-5		

<ul style="list-style-type: none"> • at 24 V / rated value 	A	20
<ul style="list-style-type: none"> • at 110 V / rated value 	A	0.1
<ul style="list-style-type: none"> • with 2 current paths in series / at DC-3 / at DC-5 		
<ul style="list-style-type: none"> • at 24 V / rated value 	A	20
<ul style="list-style-type: none"> • at 110 V / rated value 	A	0.35
<ul style="list-style-type: none"> • with 3 current paths in series / at DC-3 / at DC-5 		
<ul style="list-style-type: none"> • at 24 V / rated value 	A	20
<ul style="list-style-type: none"> • at 110 V / rated value 	A	20
<ul style="list-style-type: none"> • at 220 V / rated value 	A	1.5
<ul style="list-style-type: none"> • at 440 V / rated value 	A	0.2
Service power		
<ul style="list-style-type: none"> • at AC-1 		
<ul style="list-style-type: none"> • at 230 V / rated value 	kW	6.5
<ul style="list-style-type: none"> • at 400 V / rated value 	kW	11
<ul style="list-style-type: none"> • at AC-2 / at 400 V / rated value 	kW	4
<ul style="list-style-type: none"> • at AC-3 		
<ul style="list-style-type: none"> • at 230 V / rated value 	kW	2.2
<ul style="list-style-type: none"> • at 400 V / rated value 	kW	4
<ul style="list-style-type: none"> • at AC-4 / at 400 V / rated value 	kW	4
Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductor		
	W	0.7
Off-load operating frequency		
<ul style="list-style-type: none"> • at AC 	1/h	10,000
<ul style="list-style-type: none"> • at DC 	1/h	10,000
Frequency of operation		
<ul style="list-style-type: none"> • at AC-1 / according to IEC 60947-6-2 	1/h	1,000
<ul style="list-style-type: none"> • at AC-2 / according to IEC 60947-6-2 	1/h	750
<ul style="list-style-type: none"> • at AC-3 / according to IEC 60947-6-2 	1/h	750
<ul style="list-style-type: none"> • at AC-4 / according to IEC 60947-6-2 	1/h	250
Control circuit:		
Type of voltage / of the controlled supply voltage		
		DC
Control supply voltage		
<ul style="list-style-type: none"> • for DC / rated value 	V	24
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		
• at DC	ms	7 ... 13
Arcing time	ms	10 ... 15

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

UL/CSA ratings:

yielded mechanical performance (hp)		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.33
• at 230 V / rated value	hp	1
• for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	2
• at 220/230 V / rated value	hp	3
• at 460/480 V / rated value	hp	5
• at 575/600 V / rated value	hp	7.5
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	A	7.6
• at 600 V / rated value	A	9
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: 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		
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 		<p>screw-type terminals</p> <p>screw-type 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 • 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 		<p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14), 2x 12</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14), 2x 12</p>

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 		<p>Yes</p> <p>with 3RH29</p> <p>No</p>

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](#)[Type Test
Certificates/Test
Report](#)**Shipping Approval**

ABS

BUREAU
VERITAS

DNV



GL



LRS



PRS

Shipping Approval**other**

RINA

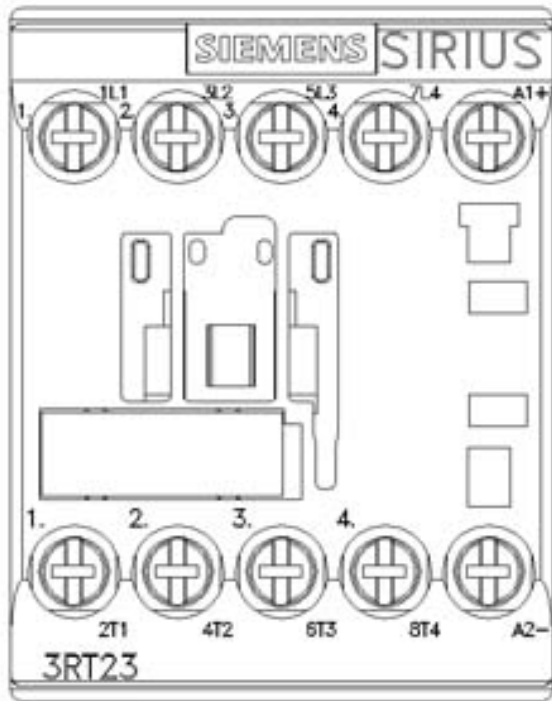
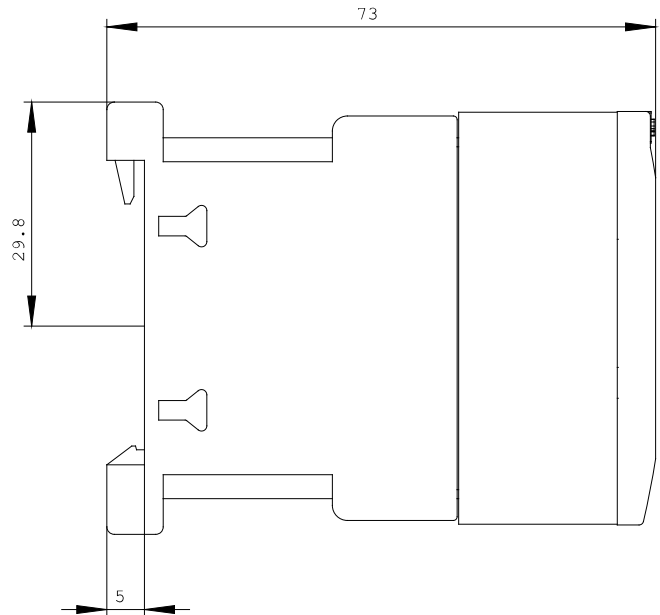
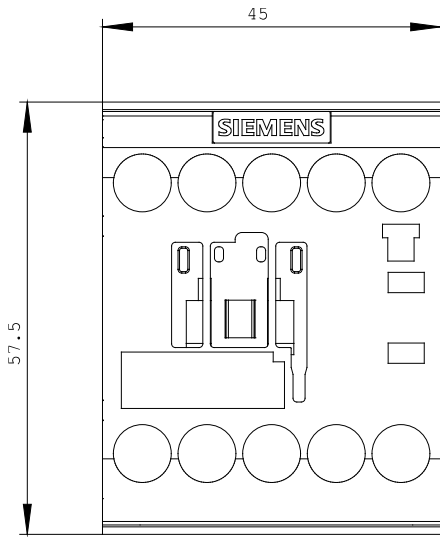


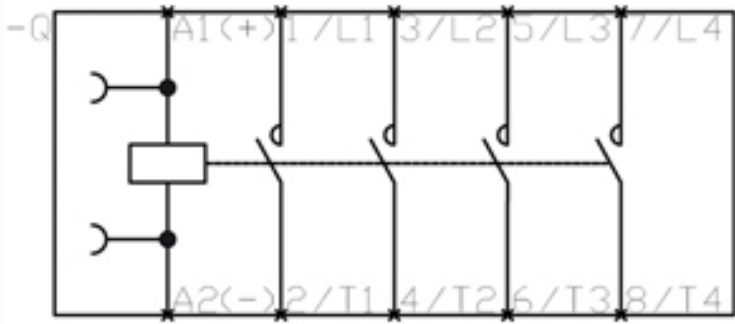
RMRS

[Confirmation](#)

VDE

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last change:

Feb 15, 2013