

REV. COMB. AC3, 3KW/400V AC230V,
50/60 HZ, 3-POLE,
SZ S00 SCREW TERMINAL ELECTR. AND MECH.
INTERLOCK

General technical data:

product brand name		SIRIUS
product designation		reversing contactor assembly 3RA23
Product function		reversing contactor
Size of the contactor		S00
Protection class IP / on the front		IP20
Degree of pollution		3
Insulation voltage / with degree of pollution 3 / rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during transport	°C	-55 ... +80
• during storage	°C	-55 ... +80
• during operating	°C	-25 ... +60
Resistance against shock		9.8g / 5 ms and 5.9g / 10 ms
Impulse voltage resistance / rated value	kV	6
Active power loss / per conductor / typical	W	0.4
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		K
• according to DIN EN 61346-2		Q

Manufacturer article number		
• 1 / of the contactor included in the scope of supply		3RT2015-1AP02
• 2 / of the contactor included in the scope of supply		3RT2015-1AP02
• of the RS applied assembly kit		3RA2913-2AA1
Mechanical operating cycles as operating time		
• of the main contacts / typical		10,000,000
• of the auxiliary contacts / typical		10,000,000
• of the contactor / typical		10,000,000
• of the contactor with added auxiliary switch block / typical		10,000,000

Communication:

Product function		
• bus-communication		No
• control circuit interface with IO link		No
Protocol / will be supported / AS interface protocol		No

Main circuit:

Number of poles / for main current circuit		3
Number of NC contacts / for main contacts		0
Number of NO contacts / for main contacts		3
Operating voltage / at AC-3 / rated value / maximum	V	690
Operational 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
• at AC-2 / at 400 V / rated value	A	7
• at AC-3 / at 400 V / rated value	A	7
• at AC-4 / at 400 V / rated value	A	6.5
• with 1 current path / at DC-1		
• at 24 V / rated value	A	15
• at 110 V / rated value	A	1.5
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	A	15
• at 110 V / rated value	A	8.4
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	A	15
• at 110 V / rated value	A	15
• 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

<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 at 110 V / rated value with 3 current paths in series / at DC-3 / at DC-5 <ul style="list-style-type: none"> at 24 V / rated value at 110 V / rated value 	A	15
	A	0.25
	A	15
	A	15
Service power		
<ul style="list-style-type: none"> at AC-2 / at 400 V / rated value 	kW	3
<ul style="list-style-type: none"> at AC-3 <ul style="list-style-type: none"> at 400 V / rated value at 500 V / rated value at 690 V / rated value at AC-4 / at 400 V / rated value 	kW	3
	kW	3.5
	kW	4
	kW	1.15
Off-load operating frequency	1/h	15
Frequency of operation		
<ul style="list-style-type: none"> at AC-1 / according to IEC 60947-6-2 / maximum 	1/h	1,000
<ul style="list-style-type: none"> at AC-2 / according to IEC 60947-6-2 / maximum 	1/h	750
<ul style="list-style-type: none"> at AC-3 / according to IEC 60947-6-2 / maximum 	1/h	750
<ul style="list-style-type: none"> at AC-4 / according to IEC 60947-6-2 / maximum 	1/h	250

Control circuit:		
Design of activation		conventional
Type of voltage / of the controlled supply voltage		AC
Control supply voltage frequency		
<ul style="list-style-type: none"> 1 / rated value 	Hz	50
<ul style="list-style-type: none"> 2 / rated value 	Hz	60
Control supply voltage / 1		
<ul style="list-style-type: none"> at 50 Hz / for AC / rated value 	V	230
<ul style="list-style-type: none"> at 60 Hz / for AC / rated value 	V	230
Operating range factor control supply voltage rated value / of the magnet coil		
<ul style="list-style-type: none"> at 50 Hz / for AC 		0.8 ... 1.1
<ul style="list-style-type: none"> 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

Auxiliary circuit:		
Product extension / auxiliary switch		Yes

Contact reliability / of the auxiliary contacts		< 1 error per 100 million operating cycles
Number of NC contacts / for auxiliary contacts		
• per direction of rotation		0
• instantaneous switching		0
• lagging switching		0
Number of NO contacts / for auxiliary contacts		
• per direction of rotation		0
• instantaneous switching		0
• leading switching		0
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	A	10
• at AC-15		
• at 230 V	A	6
• at 400 V	A	3
• at DC-12		
• at 48 V	A	6
• at 60 V	A	6
• at 110 V	A	3
• at 220 V	A	1
• at DC-13		
• at 24 V	A	10
• at 48 V	A	2
• at 60 V	A	2
• at 110 V	A	1
• at 220 V	A	0.3

Short-circuit:

Design of the fuse link

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

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A

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

fuse gL/gG: 10 A

Installation/mounting/dimensions:

mounting position		any
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	90
Height	mm	68
Depth	mm	73





Distance, to be maintained, to the ranks assembly		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6
Distance, to be maintained, to earthed part		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6
Distance, to be maintained, conductive elements		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6

Connections:

Design of the electrical connection	
• for main current circuit	screw-type terminals
• for auxiliary and control current circuit	screw-type terminals
Type of the connectable conductor cross-section	
• for main contacts	
• solid	2 x (0.5 ... 1.5 mm ²), 2 x (0.75 ... 2.5 mm ²), 2 x (0.5 ... 4 mm ²)
• stranded	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), 2x (0.5 ... 4 mm ²)
• finely stranded	
• with conductor end processing	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG conductors / for main contacts	2x (20 ... 16), 2x (18 ... 14)
• for auxiliary contacts	
• solid	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• finely stranded	
• with conductor end processing	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG conductors / for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14)

Certificates/approvals:

Verification of suitability	CE / UL / CSA / CCC
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General Product Approval			Declaration of Conformity	Test Certificates	
 CSA	 GOST	 UL	 EG-Konf.	Special Test Certificate	Type Test Certificates/Test Report

Shipping Approval					
 ABS	 BUREAU VERITAS	 DNV	 GL	 LRS	 PRS

Shipping Approval		other
 RINA	 RMRS	other

UL/CSA ratings

yielded mechanical performance (hp)		
<ul style="list-style-type: none"> for single-phase squirrel cage motors <ul style="list-style-type: none"> at 110/120 V / rated value at 230 V / rated value for three-phase squirrel cage motors <ul style="list-style-type: none"> 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		
<ul style="list-style-type: none"> 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

Safety:

B10 value / with high demand rate		
<ul style="list-style-type: none"> according to SN 31920 		1,000,000
Failure rate (FIT value) / with low demand rate		
<ul style="list-style-type: none"> according to SN 31920 	FIT	100
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
	%	75
T1 value / for proof test interval or service life		
<ul style="list-style-type: none"> according to IEC 61508 	a	20
Protection against electrical shock		finger-safe

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

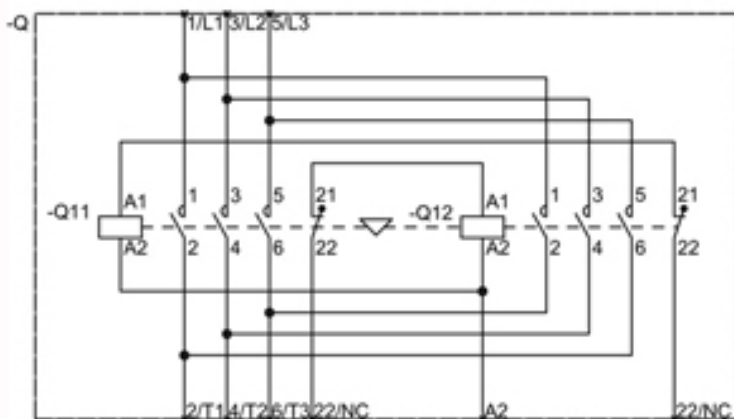
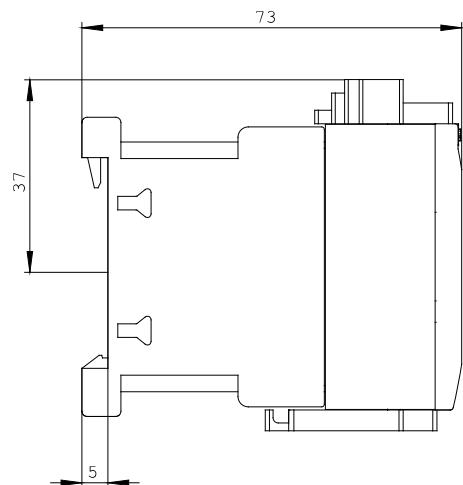
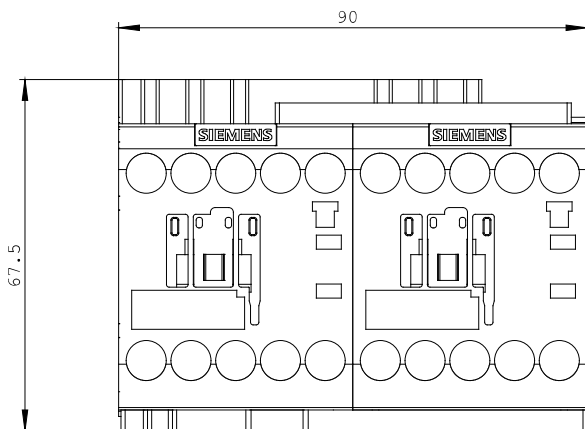
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RA2315-8XB30-1AP0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2315-8XB30-1AP0



last change:

Feb 4, 2013