Product data sheet



LOAD FEEDER FUSELESS REVERSING DUTY, AC 400V, SZ S00, 11...16A, AC 230V SPRING-LOADED CONNECTION FOR RAIL-MOUNTING, TYPE OF COORDINATION 1, IQ = 150KA 1NC (CONTACTOR)

General technical data:		
Product brand name		SIRIUS
product designation		non-fused load feeders 3RA2
Design of the product		reversing starter
Size of the load feeder		S00
Protection class IP / on the front		IP20
Degree of pollution		3
Insulation voltage / 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	-20 60
Impulse voltage resistance / rated value	kV	6
Active power loss / per conductor / typical	W	4.3
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		Q
• according to DIN EN 61346-2		Q
Type of assignement		1

Mechanical operating cycles as operating time / of the contactor		
• typical		10,000,000
Manufacturer article number		
• of the circuit-breakers included in the scope of supply		3RV2011-4AA20
• of the contactor included in the scope of supply		3RT2018-2AP02
• of the link module included in the scope of supply		3RA2911-2AA00
Design of the switching contact		mechanical
Type of the motor protection		bimetal
Adjustable response current		
of the current-dependent overload release	А	11 16
Communication:		
Product function / bus-communication		No
Protocol / will be supported		
AS interface protocol		No
PROFIBUS DP protocol		No
PROFINET protocol		No
Product extension / function module for communication		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
Operating current		
• at AC-1 / at 400 V / rated value	Α	16
• at AC-2 / at 400 V / rated value	Α	15.5
• at AC-3 / at 400 V / rated value	Α	15.5
• at AC-4 / at 400 V / rated value	Α	15.5
Service power		
• at AC-2 / at 400 V / rated value	W	7,500
• at AC-3		
• at 400 V / rated value	W	7,500

• at 500 V / rated value

• at 690 V / rated value

Off-load operating frequency

Frequency of operation

• at AC-4 / at 400 V / rated value

• at AC-1 / according to IEC 60947-6-2 / maximum

• at AC-2 / according to IEC 60947-6-2 / maximum

W

W

W

1/h

1/h

1/h

7,500

11,000

7,500

10,000

1,000

750

• at AC-3 / according to IEC 60947-6-2 / maximum	1/h	750
• at AC-4 / according to IEC 60947-6-2 / maximum	1/h	250
Control circuit:		
Type of voltage / of the controlled supply voltage		AC
Control supply voltage frequency		AC
• 1 / rated value	Hz	50
Control supply voltage / 1	- 112	
• at 50 Hz / for AC / rated value	V	230
• at 60 Hz / for AC / rated value	V	230
Apparent holding power / of the solenoid / for AC	V.A	5.7
Inductive power factor / with the pull-in power of the coil	_	0.28
Auxiliary circuit:		
Product extension / auxiliary switch		Yes
Number of NC contacts / for auxiliary contacts		1
Number of NO contacts / for auxiliary contacts		0
Number of change-over switches / for auxiliary contacts		0
	_	
Inputs/ Outputs:		
Number of digital inputs		0
Short-circuit:		
Product function / short circuit protection		Yes
Design of the short-circuit protection		circuit-breakers
Breaking capacity limit short-circuit current (Icu)		
a at 400 V / rated value		
• at 400 V / rated value	А	30,000
at 400 V / rated value at 500 V / rated value	A A	30,000 5,000
• at 500 V / rated value	Α	5,000
at 500 V / rated valueat 690 V / rated value	Α	5,000
 at 500 V / rated value at 690 V / rated value Installation/mounting/dimensions:	Α	5,000 4,000
at 500 V / rated value at 690 V / rated value Installation/mounting/dimensions: Built in orientation	Α	5,000 4,000 vertical screw and snap-on mounting onto 35 mm standard
at 500 V / rated value at 690 V / rated value Installation/mounting/dimensions: Built in orientation Type of mounting Width	A	5,000 4,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail
at 500 V / rated value at 690 V / rated value Installation/mounting/dimensions: Built in orientation Type of mounting Width Height	A A	5,000 4,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 90
at 500 V / rated value at 690 V / rated value Installation/mounting/dimensions: Built in orientation Type of mounting Width Height Depth	A A	5,000 4,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 90 204
at 500 V / rated value at 690 V / rated value Installation/mounting/dimensions: Built in orientation Type of mounting Width Height Depth	A A	5,000 4,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 90 204
at 500 V / rated value at 690 V / rated value Installation/mounting/dimensions: Built in orientation Type of mounting Width Height Depth Distance, to be maintained, to the ranks assembly	A A	5,000 4,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 90 204 97.1
at 500 V / rated value at 690 V / rated value Installation/mounting/dimensions: Built in orientation Type of mounting Width Height Depth Distance, to be maintained, to the ranks assembly forwards	MM mm mm	5,000 4,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 90 204 97.1

• sidewards	mm	0
Distance, to be maintained, to earthed part		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	20
• downwards	mm	10
• sidewards	mm	9
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	20
• downwards	mm	10
• sidewards	mm	9

Connections:	
Design of the electrical connection	
for main current circuit	spring-loaded terminals
for auxiliary and control current circuit	spring-loaded terminals
Type of the connectable conductor cross-section	
• for main contacts	
• solid	2x (0.5 4 mm²)
• stranded	2x (0.5 4 mm2)
• finely stranded	
 with conductor end processing 	2x (0.5 2.5 mm²)
 without conductor final cutting 	2x (0.5 2.5 mm²)
• for AWG conductors / for main contacts	2x (20 12)
for auxiliary contacts	
• solid	2x (0.5 4 mm²)
• finely stranded	
 with conductor end processing 	2x (0.5 2.5 mm²)
 without conductor final cutting 	2x (0.5 2.5 mm²)
• for AWG conductors / for auxiliary contacts	2x (20 12)

Certificates/approvals:		
Verification of suitability	CE / U	JL / CSA / CCC
Varification of suitability / ATEX	No	

General Product Approval

For use in hazardous locations

Test Certificates

ROSTEST



 $\frac{\mathsf{DEKRA}\;\mathsf{EXAM,}}{\mathsf{DMT}}$

Manufacturer

Shipping Approval

other



UL





Manufacturer

other

UL/CSA ratings		
yielded mechanical performance (hp)		
 for single-phase squirrel cage motors 		
• at 110/120 V / rated value	hp	1
• at 230 V / rated value	hp	2
for three-phase squirrel cage motors		
• at 220/230 V / rated value	hp	5
• at 460/480 V / rated value	hp	10
• at 575/600 V / rated value	hp	10
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	Α	14
• at 600 V / rated value	Α	11
Contact rating designation / for auxiliary contacts / according to		A600 / Q600

Safety:		
B10 value / with high demand rate		
• according to SN 31920		1,000,000
Failure rate (FIT value) / with low demand rate		
• according to SN 31920	FIT	250
Proportion of dangerous failures		
 with low demand rate / according to SN 31920 	%	40
 with high demand rate / according to SN 31920 	%	75
T1 value / for proof test interval or service life		
according to IEC 61508	а	10
Protection against electrical shock		finger-safe

Further information:

Information- and Download center (Catalogs, Brochures,...)

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

CAx-Online-Generator

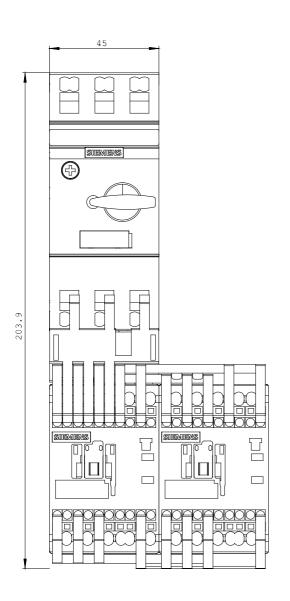
http://www.siemens.com/cax

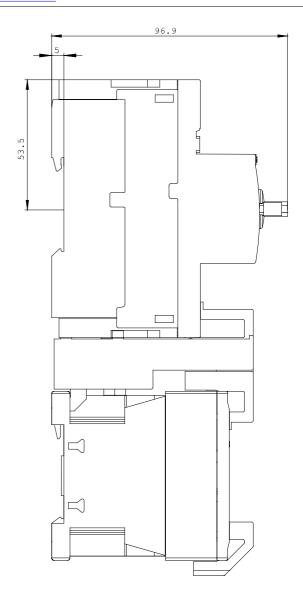
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

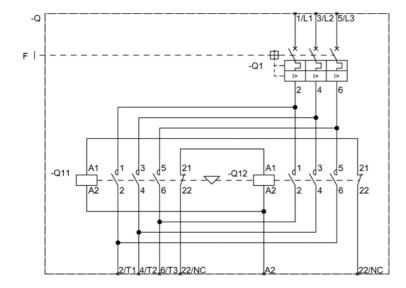
http://support.automation.siemens.com/WW/view/en/3RA2210-4AE18-2AP0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2210-4AE18-2AP0







last change: Oct 24, 2011