SIEMENS

Product data sheet 3RA2110-1JA16-1AP0

LOAD FEEDER FUSELESS DIRECT START,
AC 400V, SZ S00 7. . .10A,
AC 230V SCREW CONNECTION FOR RAIL-MOUNTING,
TYPE OF COORDINATION 1,
IQ = 150KA 1NO (CONTACTOR)

General technical data:		
Product brand name		SIRIUS
product designation		non-fused load feeders 3RA2
Design of the product		direct 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	3.5
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		3RV2011-1JA10
• of the contactor included in the scope of supply		3RT2016-1AP01
• of the link module included in the scope of supply		3RA1921-1DA00
Design of the switching contact		mechanical
Type of the motor protection		bimetal
Adjustable response current		
• of the current-dependent overload release	A	7 … 10

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	A	10
• at AC-2 / at 400 V / rated value	A	8.5
• at AC-3 / at 400 V / rated value	A	8.5
• at AC-4 / at 400 V / rated value	A	8.5
Service power		
• at AC-2 / at 400 V / rated value	W	4,000
• at AC-3		
• at 400 V / rated value	W	4,000
• at 500 V / rated value	W	5,500
• at 690 V / rated value	W	7,500
• at AC-4 / at 400 V / rated value	W	4,000
Off-load operating frequency	1/h	10,000
Frequency of operation		
• at AC-1 / according to IEC 60947-6-2 / maximum	1/h	1,000
• at AC-2 / according to IEC 60947-6-2 / maximum	1/h	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		
• 1 / rated value	Hz	50
Control supply voltage / 1		
• 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	4.2
Inductive power factor / with the pull-in power of the coil		0.25

Auxiliary circuit:		
Product extension / auxiliary switch		Yes
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		1
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)		
• at 400 V / rated value	A	100,000
• at 500 V / rated value	A	42,000
• at 690 V / rated value	A	4,000

Installation/mounting/dimensions:		
Built in orientation		vertical
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	45
Height	mm	167.2
Depth	mm	97.1
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	20
• downwards	mm	30

• 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	screw-type terminals
• for auxiliary and control current circuit	screw-type terminals
Type of the connectable conductor cross-section	
• for main contacts	
• solid	2x (0.75 ... 2.5 mm²), 2x 4 mm²
• stranded	2x (0.75 ... 2.5 mm2), 2x 4 mm2
• finely stranded	
• with conductor end processing	2x (0.75 ... 2.5 mm²)
• for AWG conductors / for main contacts	2x (18 ... 14), 2x 12
• for auxiliary contacts	
• solid	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²
• finely stranded	
• with conductor end processing	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
• for AWG conductors / for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14), 2x 12

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

General Product Approval	For use in hazardous locations	Test Certificates
ROSTEST  UL	DEKRA EXAM, DMT	Manufacturer

Shipping Approval			other	
 ABS	 PRS	 RINA	Manufacturer	other

UL/CSA ratings		
yielded mechanical performance (hp)		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.333
• 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

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	150
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	a	10
Protection against electrical shock		finger-safe

Further information:

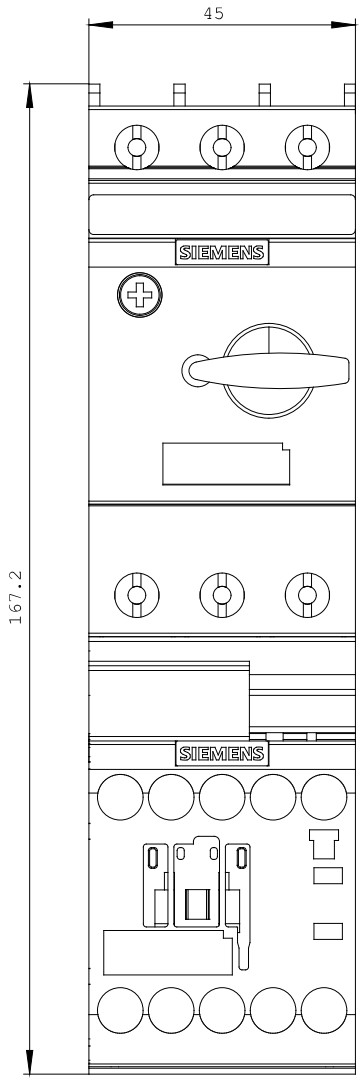
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

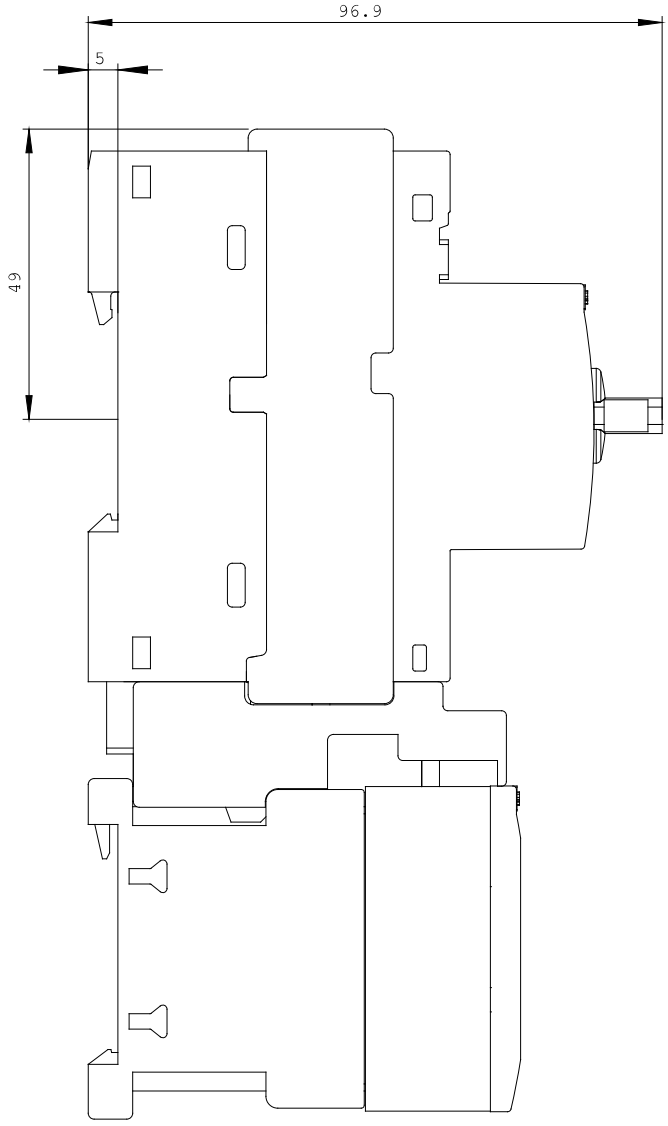
Industry Mall (Online ordering system)
http://www.siemens.com/industrial-controls/mall

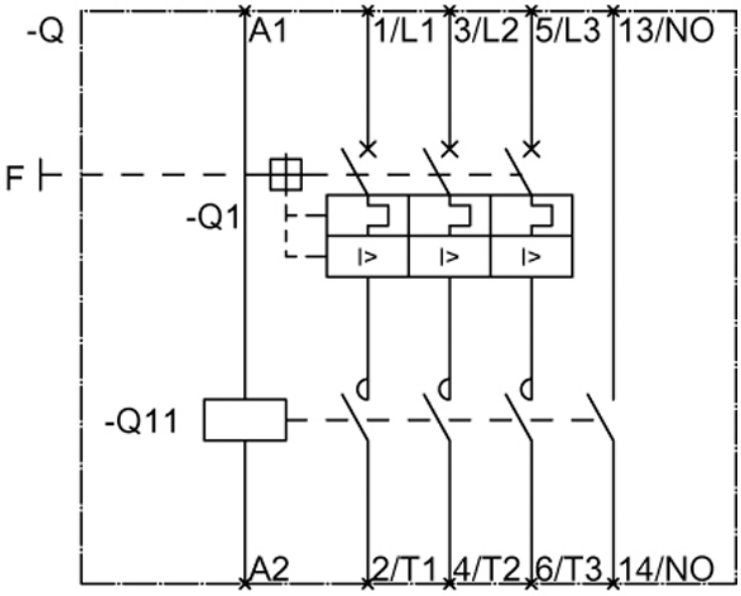
CAx-Online-Generator
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RA2110-1JA16-1AP0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2110-1JA16-1AP0







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