# SIEMENS

# Product data sheet

## 3RA2110-1AE15-1AP0



LOAD FEEDER FUSELESS DIRECT START, AC 400V, SZ S00 1.1...1.6A, AC 230V SPRING-LOADED CONNECTION FOR RAIL-MOUNTING, TYPE OF COORDINATION 2, IQ = 150KA (ALSO FULFILLS TYPE OF COORDINATION 1) 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	2.3
Item designation		
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		Q
according to DIN EN 61346-2		Q
Type of assignement		2

Mechanical operating cycles as operating time / of the contactor		
• typical		10,000,000
Manufacturer article number	_	
<ul> <li>of the circuit-breakers included in the scope of supply</li> </ul>		<u>3RV2011-1AA20</u>
<ul> <li>of the contactor included in the scope of supply</li> </ul>		<u>3RT2015-2AP01</u>
<ul> <li>of the link module included in the scope of supply</li> </ul>		3RA2911-2AA00
Design of the switching contact		mechanical
Type of the motor protection	_	bimetal
Adjustable response current	_	
of the current-dependent overload release	А	1.1 1.6
Communication:		
Product function / bus-communication		No
Protocol / will be supported	_	
AS interface protocol		No
		No
PROFIBUS DP protocol		
PROFIBUS DP protocol     PROFINET protocol		No
		No 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	А	1.6
• at AC-2 / at 400 V / rated value	А	1.5
• at AC-3 / at 400 V / rated value	А	1.5
• at AC-4 / at 400 V / rated value	А	1.5
Service power		
• at AC-2 / at 400 V / rated value	W	550
• at AC-3		
• at 400 V / rated value	W	550
• at 500 V / rated value	W	750
• at 690 V / rated value	W	1,100
• at AC-4 / at 400 V / rated value	W	550
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

<ul> <li>at AC-3 / according to IEC 60947-6-2 / maximum</li> </ul>	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	٧·٨	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 (lcu)	_	
• at 400 V / rated value	А	100,000
• at 500 V / rated value		
	А	100,000
• at 690 V / rated value	A A	100,000
at 690 V / rated value Installation/mounting/dimensions:		
Installation/mounting/dimensions:		100,000
Installation/mounting/dimensions: Built in orientation		100,000 vertical screw and snap-on mounting onto 35 mm standard
Installation/mounting/dimensions: Built in orientation Type of mounting	A	100,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail
Installation/mounting/dimensions: Built in orientation Type of mounting Width	A	100,000         vertical         screw and snap-on mounting onto 35 mm standard mounting rail         45
Installation/mounting/dimensions: Built in orientation Type of mounting Width Height	A mm mm	100,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 45 197.6
Installation/mounting/dimensions: Built in orientation Type of mounting Width Height Depth	A mm mm	100,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 45 197.6
Installation/mounting/dimensions: Built in orientation Type of mounting Width Height Depth Distance, to be maintained, to the ranks assembly	A mm mm mm	100,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 45 197.6 97.1
Installation/mounting/dimensions: Built in orientation Type of mounting Width Height Depth Distance, to be maintained, to the ranks assembly • forwards	A mm mm mm	100,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 45 197.6 97.1 0

• 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

#### Design of the electrical connection spring-loaded terminals · for main current circuit • for auxiliary and control current circuit spring-loaded terminals Type of the connectable conductor cross-section • for main contacts solid 2x (0.5 ... 4 mm<sup>2</sup>) stranded 2x (0.5 ... 4 mm2) finely stranded • with conductor end processing 2x (0.5 ... 2.5 mm<sup>2</sup>) 2x (0.5 ... 2.5 mm<sup>2</sup>) • without conductor final cutting • for AWG conductors / for main contacts 2x (20 ... 12) · for auxiliary contacts solid 2x (0.5 ... 4 mm<sup>2</sup>) finely stranded • with conductor end processing 2x (0.5 ... 2.5 mm<sup>2</sup>) • without conductor final cutting 2x (0.5 ... 2.5 mm<sup>2</sup>) • for AWG conductors / for auxiliary contacts 2x (20 ... 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	
	DEKRA EXAM, DMT	Manufacturer	
Shipping Approval		other	
ABS PRS	RINA	Manufacture	<u>r</u> <u>other</u>
UL/CSA ratings			
yielded mechanical performance (hp)			
<ul> <li>for single-phase squirrel cage motors</li> </ul>			
• at 230 V / rated value		hp	0.1
<ul> <li>for three-phase squirrel cage motors</li> </ul>			
• at 460/480 V / rated value		hp	0.75
• at 575/600 V / rated value		hp	0.75
Operating current (FLA) / for three-phase sq	uirrel cage motors		
• at 480 V / rated value		А	1.6
• at 600 V / rated value		А	1.6
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 ra	te		
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 31	920	%	75
T1 value / for proof test interval or service life			
according to IEC 61508	according to IEC 61508		10
Protection against electrical shock			finger-safe
Further information:			
Information- and Downloadcenter (Catalogs, Brochures)			

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

### Industry Mall (Online ordering system)

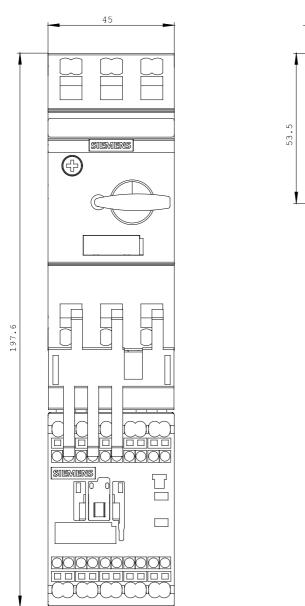
http://www.siemens.com/industrial-controls/mall

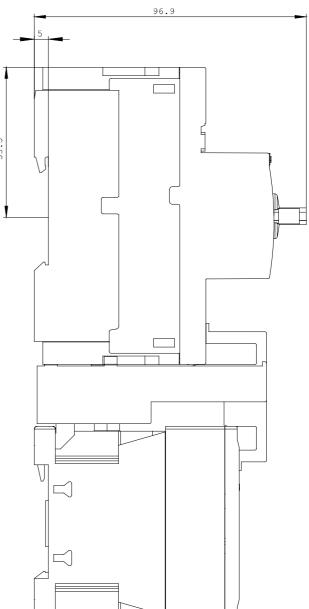
## CAx-Online-Generator

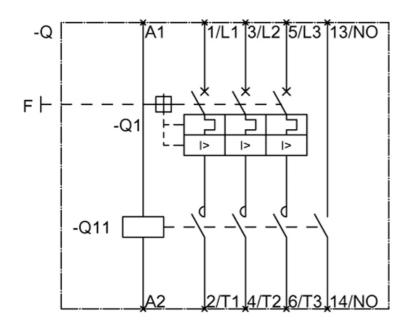
http://www.siemens.com/cax

#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA2110-1AE15-1AP0/all

#### Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA2110-1AE15-1AP0







last change:

Oct 24, 2011