# SIEMENS

## **Product data sheet**

### 3RA2110-1FA15-1AP0



LOAD FEEDER FUSELESS DIRECT START, AC 400V, SZ S00 3.5. . .5A, 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	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		1

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>3RV2011-1FA10</u>
<ul> <li>of the contactor included in the scope of supply</li> </ul>		<u>3RT2015-1AP01</u>
• 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		
<ul> <li>of the current-dependent overload release</li> </ul>	А	3.5 5
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	А	5
• at AC-2 / at 400 V / rated value	А	3.6
• at AC-3 / at 400 V / rated value	А	3.6
• at AC-4 / at 400 V / rated value	А	3.6
Service power		
• at AC-2 / at 400 V / rated value	W	1,500
• at AC-3		
• at 400 V / rated value	W	1,500
• at 500 V / rated value	W	2,200
• at 690 V / rated value	W	3,000
• at AC-4 / at 400 V / rated value	W	1,500
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	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 (lcu)		
• at 400 V / rated value		
	А	100,000
• at 500 V / rated value	A A	100,000 100,000
<ul> <li>at 500 V / rated value</li> <li>at 690 V / rated value</li> </ul>		
	А	100,000
• at 690 V / rated value	А	100,000
• at 690 V / rated value Installation/mounting/dimensions:	А	100,000 4,000
• at 690 V / rated value Installation/mounting/dimensions: Built in orientation	А	100,000 4,000 vertical screw and snap-on mounting onto 35 mm standard
• at 690 V / rated value Installation/mounting/dimensions: Built in orientation Type of mounting	A A	100,000 4,000 Vertical screw and snap-on mounting onto 35 mm standard mounting rail
• at 690 V / rated value Installation/mounting/dimensions: Built in orientation Type of mounting Width	A A mm	100,000 4,000 Vertical screw and snap-on mounting onto 35 mm standard mounting rail 45
• at 690 V / rated value Installation/mounting/dimensions: Built in orientation Type of mounting Width Height	A A mm mm	100,000 4,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 45 167.2
• at 690 V / rated value Installation/mounting/dimensions: Built in orientation Type of mounting Width Height Depth	A A mm mm	100,000 4,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 45 167.2
• 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 mm mm mm	100,000 4,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 45 167.2 97.1
• 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	A A M M M M M M M M M	100,000 4,000 vertical screw and snap-on mounting onto 35 mm standard mounting rail 45 167.2 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		

0	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	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	
<ul> <li>with conductor end processing</li> </ul>	2x (0.75 2.5 mm²)
for AWG conductors / for main contacts	2x (18 14), 2x 12
<ul> <li>for auxiliary contacts</li> </ul>	
• solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
finely stranded	
<ul> <li>with conductor end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>for AWG conductors / for auxiliary contacts</li> </ul>	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	DEKRA EXAM, DMT	Manufacture	ŗ
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 110/120 V / rated value		hp	0.167
• at 230 V / rated value		hp	0.5
<ul> <li>for three-phase squirrel cage motors</li> </ul>			
• at 200/208 V / rated value		hp	1
• at 220/230 V / rated value		hp	1
• at 460/480 V / rated value		hp	3
• at 575/600 V / rated value		hp	3
Operating current (FLA) / for three-phase sq	uirrel cage motors		
• at 480 V / rated value		А	4.8
• at 600 V / rated value		А	5
Contact rating designation / for auxiliary cor UL	ntacts / 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	te		
according to SN 31920		FIT	150
Proportion of dangerous failures			
with low demand rate / according to SN 319	920	%	40
with high demand rate / according to SN 31	920	%	75
T1 value / for proof test interval or service lif	e		
according to IEC 61508		а	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

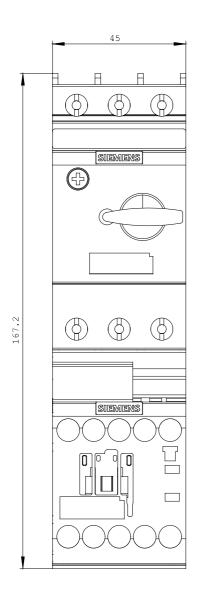
#### CAx-Online-Generator

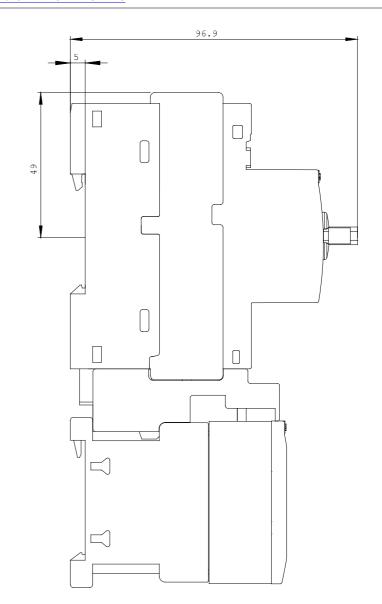
http://www.siemens.com/cax

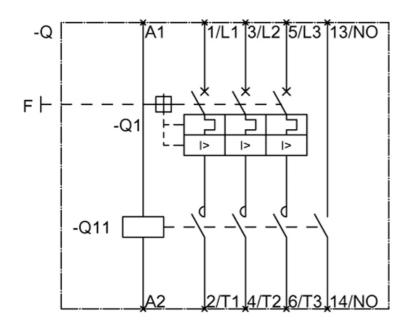
#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RA2110-1FA15-1AP0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA2110-1FA15-1AP0







last change:

Oct 24, 2011