## SIEMENS

## **Product data sheet**

## 3RA2110-0CE15-1BB4



LOAD FEEDER FUSELESS DIRECT START, AC 400V, SZ S00 0.18. . .0.25A, DC 24V 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
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	_	
• of the circuit-breakers included in the scope of supply		3RV2011-0CA20
<ul> <li>of the contactor included in the scope of supply</li> </ul>		<u>3RT2015-2BB41</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	_	
<ul> <li>of the current-dependent overload release</li> </ul>	А	0.18 0.25
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

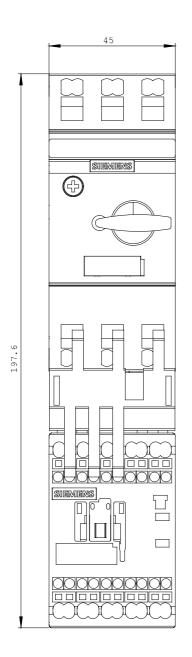
Number of poles / for main current circuitI3Number of NC contacts / for main contacts00Number of NO contacts / for main contacts33Operating voltage / at AC-3 / rated value / maximumV690Operating currentII• at AC-1 / at 400 V / rated valueA0.25• at AC-2 / at 400 V / rated valueA0.2• at AC-3 / at 400 V / rated valueA0.2• at AC-4 / at 400 V / rated valueA0.2• at AC-4 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueW60• at AC-3W60• at 400 V / rated valueW60• at 400 V / rated valueM	Main circuit:		
Number of NO contacts / for main contactsImage: Second	Number of poles / for main current circuit		3
Operating voltage / at AC-3 / rated value / maximumV690Operating currentV690• at AC-1 / at 400 V / rated valueA0.25• at AC-2 / at 400 V / rated valueAA0.2• at AC-3 / at 400 V / rated valueAA0.2• at AC-3 / at 400 V / rated valueAA0.2• at AC-4 / at 400 V / rated valueAA0.2• at AC-4 / at 400 V / rated valueAA0.2• at AC-2 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueW60• at AC-3W60• at 400 V / rated valueW60• at 600 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-1 / according to IEC 60947-6-2 / maximum1/h1,000 <th>Number of NC contacts / for main contacts</th> <th></th> <th>0</th>	Number of NC contacts / for main contacts		0
Operating currentA0.25• at AC-1 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueA0.2• at AC-3 / at 400 V / rated valueA0.2• at AC-4 / at 400 V / rated valueA0.2• at AC-4 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueA0.2• at AC-3 / at 400 V / rated valueW60• at AC-3 / at 400 V / rated valueW60• at AC-3 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at 600 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueM60• at AC-1 / according to IEC 60947-6-2 / maximum1/h1,000	Number of NO contacts / for main contacts		3
• at AC-1 / at 400 V / rated valueA0.25• at AC-2 / at 400 V / rated valueA0.2• at AC-3 / at 400 V / rated valueA0.2• at AC-4 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueW60• at AC-2 / at 400 V / rated valueW60• at AC-3W60• at AC-3W60• at AC-4 / at 400 V / rated valueW60• at 600 V / rated valueW60• at 630 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated value1/h1,000	Operating voltage / at AC-3 / rated value / maximum	V	690
• at AC-2 / at 400 V / rated valueA0.2• at AC-3 / at 400 V / rated valueA0.2• at AC-4 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueA60• at AC-2 / at 400 V / rated valueW60• at AC-3W60• at AC-3W60• at 400 V / rated valueW60• at 690 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM10,000• at AC-1 / according to IEC 60947-6-2 / maximum1/h1,000	Operating current		
• at AC-3 / at 400 V / rated valueA0.2• at AC-4 / at 400 V / rated valueA0.2• at AC-2 / at 400 V / rated valueW60• at AC-3W60• at 400 V / rated valueW60• at 400 V / rated valueW60• at 400 V / rated valueW60• at 690 V / rated valueW90• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-1 / according to IEC 60947-6-2 / maximum1/h1,000	• at AC-1 / at 400 V / rated value	А	0.25
• at AC-4 / at 400 V / rated valueA0.2Service powerA0.2• at AC-2 / at 400 V / rated valueW60• at AC-3W60• at 400 V / rated valueW60• at 500 V / rated valueW60• at 690 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueM10,000Frequency of operation • at AC-1 / according to IEC 60947-6-2 / maximum1/h1,000	• at AC-2 / at 400 V / rated value	А	0.2
Service powerN• at AC-2 / at 400 V / rated valueW• at AC-360• at 400 V / rated valueW• at 500 V / rated valueW• at 690 V / rated valueW• at 690 V / rated valueW• at AC-4 / at 400 V / rated valueW• at AC-4 / at 400 V / rated valueW• at AC-4 / at 400 V / rated valueW• at AC-4 / at 400 V / rated valueW• at AC-4 / at 400 V / rated valueW• at AC-4 / at 400 V / rated valueW• at AC-4 / at 400 V / rated valueW• at AC-4 / at 400 V / rated valueW• at AC-4 / at 400 V / rated value1/h• at AC-1 / according to IEC 60947-6-2 / maximum1/h	• at AC-3 / at 400 V / rated value	А	0.2
• at AC-2 / at 400 V / rated valueW60• at AC-3W60• at 400 V / rated valueW60• at 500 V / rated valueW60• at 690 V / rated valueW90• at AC-4 / at 400 V / rated valueW60• at AC-4 / at 400 V / rated valueW90• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM60• at AC-4 / at 400 V / rated valueM10,000	• at AC-4 / at 400 V / rated value	А	0.2
• at AC-3W60• at 400 V / rated valueW60• at 500 V / rated valueW60• at 690 V / rated valueW90• at AC-4 / at 400 V / rated valueW60• off-load operating frequencyW60Frequency of operation • at AC-1 / according to IEC 60947-6-2 / maximum1/h1,000	Service power		
<ul> <li>• at 400 V / rated value</li> <li>• at 500 V / rated value</li> <li>• at 690 V / rated value</li> <li>• at 690 V / rated value</li> <li>• at AC-4 / at 400 V / rated value</li> <li>• of 400 V / rated value</li> <li>• at AC-4 / at 400 V / rated value</li> <li>• at AC-4 / at 400 V / rated value</li> <li>• at AC-4 / at 400 V / rated value</li> <li>• at AC-4 / at 400 V / rated value</li> <li>• at AC-4 / at 400 V / rated value</li> <li>• at AC-1 / according to IEC 60947-6-2 / maximum</li> <li>• at AC-1 / according to IEC 60947-6-2 / maximum</li> </ul>	• at AC-2 / at 400 V / rated value	W	60
<ul> <li>at 500 V / rated value</li> <li>at 690 V / rated value</li> <li>wW</li> <li>90</li> <li>at AC-4 / at 400 V / rated value</li> <li>WW</li> <li>60</li> <li>MOff-load operating frequency</li> <li>1/h</li> <li>1,000</li> </ul>	• at AC-3		
• at 690 V / rated valueW90• at AC-4 / at 400 V / rated valueW60Off-load operating frequency1/h10,000Frequency of operation • at AC-1 / according to IEC 60947-6-2 / maximum1/h1,000	• at 400 V / rated value	W	60
• at AC-4 / at 400 V / rated valueW60Off-load operating frequency1/h10,000Frequency of operation • at AC-1 / according to IEC 60947-6-2 / maximum1/h1,000	• at 500 V / rated value	W	60
Off-load operating frequency     1/h     10,000       Frequency of operation     1/h     1,000       • at AC-1 / according to IEC 60947-6-2 / maximum     1/h     1,000	• at 690 V / rated value	W	90
Frequency of operation     1/h     1,000	• at AC-4 / at 400 V / rated value	W	60
• at AC-1 / according to IEC 60947-6-2 / maximum 1/h 1,000	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-2 / according to IEC 60947-6-2 / maximum	1/h	750

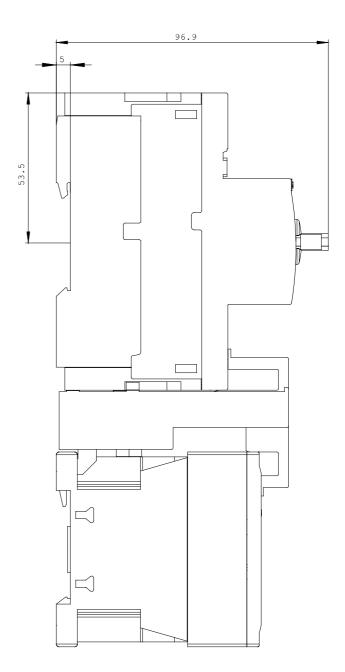
• at AC-3 / according to IEC 60947-6-2 / maximum	1/h	750
• at AC-4 / according to IEC 60947-6-2 / maximum	1/h	250
Control circuit:		
Type of voltage / of the controlled supply voltage		DC
Control supply voltage frequency	_	
• 1 / rated value	Hz	0
Control supply voltage / 1	_	
• for DC / rated value	V	24
Holding power / of the solenoid / for DC	W	4
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	А	100,000
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	197.6
Depth	mm	97.1
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
backwards	mm	0
• upwards	mm	20
	mm	30
downwards		
• downwards • sidewards	mm	0

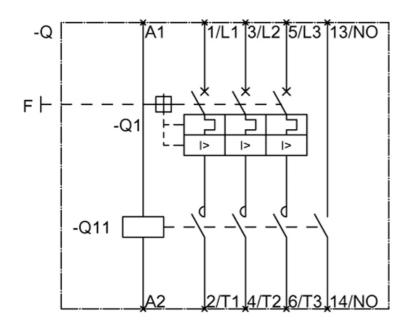
• forwards	mm	0
backwards	mm	0
• upwards	mm	20
downwards	mm	10
• sidewards	mm	9
Distance, to be maintained, conductive elements		
• forwards	mm	0
backwards	mm	0
• upwards	mm	20
• downwards	mm	10
• sidewards	mm	9

Design of the electrical connection	
• for main current circuit	spring-loaded terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	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	
<ul> <li>with conductor end processing</li> </ul>	2x (0.5 2.5 mm²)
without conductor final cutting	2x (0.5 2.5 mm²)
<ul> <li>for AWG conductors / for main contacts</li> </ul>	2x (20 12)
for auxiliary contacts	
• solid	2x (0.5 4 mm <sup>2</sup> )
finely stranded	
<ul> <li>with conductor end processing</li> </ul>	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 / UL / CSA / CCC
Varification of suitability / ATEX	No

General Product Approval	For use in hazardous locations	Test Certificates	
	DEKRA EXAM, DMT	Manufacture	Ī
Shipping Approval		other	
ABS PRS	RINA	Manufacture	<u>r</u> other
UL/CSA ratings			
Operating current (FLA) / for three-phase sq	uirrel cage motors		
• at 480 V / rated value		А	0.25
• at 600 V / rated value		А	0.25
Contact rating designation / for auxiliary con 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 ra	te		
according to SN 31920		FIT	150
Proportion of dangerous failures			
with low demand rate / according to SN 31	920	%	40
<ul> <li>with high demand rate / according to SN 3<sup>4</sup></li> </ul>	1920	%	75
T1 value / for proof test interval or service li	fe		
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/3RA2110-0CE15-1BB4/all			
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams,) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2110-0CE15-1BB4			







last change:

Oct 24, 2011