## 3RA2110-1AE15-1AP0

**Data sheet** 



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S00 1.10...1.60 A 230 V AC Spring-type terminal for installation on standard mounting rail (also fulfills type of coordination 1) Type of coordination 2, Iq = 150 kA 1 NO (contactor)

product brand name	SIRIUS
product designation	Direct (on-line) starter
design of the product	for standard rail or screw mounting
product type designation	3RA21
manufacturer's article number	
<ul> <li>of the supplied contactor</li> </ul>	3RT2015-2AP01
<ul> <li>of the supplied circuit-breakers</li> </ul>	3RV2011-1AA20
<ul> <li>of the supplied link module</li> </ul>	3RA2911-2AA00
General technical data	
size of the circuit-breaker	S00
size of load feeder	S00
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
degree of protection NEMA rating	other
shock resistance according to IEC 60068-2-27	6g / 11 ms
mechanical service life (switching cycles) of contactor typical	30 000 000
type of assignment	2
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-20 +60 °C
<ul> <li>during storage</li> </ul>	-50 +80 °C
during transport	-50 +80 °C
temperature compensation	-20 +60 °C
relative humidity during operation	10 95 %
Main circuit	
number of poles for main current circuit	3
design of the switching contact	electromechanical
adjustable current response value current of the current-dependent overload release	1.1 1.6 A
operating voltage	
rated value	690 V
• at AC-3 rated value maximum	690 V
operating frequency rated value	50 60 Hz

operational current at AC-3 at 400 V rated value	1.5 A
operating power at AC-3	
<ul> <li>at 400 V rated value</li> </ul>	550 W
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
<ul> <li>at 50 Hz rated value</li> </ul>	230 V
<ul> <li>at 50 Hz rated value</li> </ul>	230 230 V
<ul> <li>at 60 Hz rated value</li> </ul>	230 V
at 60 Hz rated value	230 230 V
apparent holding power of magnet coil at AC	4.2 VA
Auxiliary circuit	
product extension auxiliary switch	Yes
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	1.6 A
yielded mechanical performance [hp]	
• for 3-phase AC motor	
— at 460/480 V rated value	0.75 hp
— at 575/600 V rated value	0.75 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (Iq)	ago.c
• at 400 V according to IEC 60947-4-1 rated value	150 000 A
Installation/ mounting/ dimensions	
-	e i
mounting position	Vertical
mounting position fastening method	vertical screw and snap-on mounting onto 35 mm standard mounting rail
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail  198 mm
	screw and snap-on mounting onto 35 mm standard mounting rail
fastening method height	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm
fastening method height width depth	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm
fastening method height width depth required spacing	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm
fastening method height width depth	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm
fastening method height width depth required spacing • for grounded parts	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm
fastening method height width depth required spacing  • for grounded parts — forwards	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm 20 mm 0 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm  20 mm 0 mm 50 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm  20 mm 0 mm 50 mm 20 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm  20 mm 0 mm 50 mm 20 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm  20 mm 0 mm 50 mm 20 mm 10 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm  20 mm 0 mm 50 mm 10 mm
fastening method height width depth required spacing	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm  20 mm 0 mm 50 mm 10 mm 10 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards  • for live parts — forwards — backwards — upwards — upwards	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm  20 mm 0 mm 50 mm 10 mm 0 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — downwards — forwards — forwards — downwards — backwards — backwards — upwards — downwards	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm  20 mm 0 mm 50 mm 10 mm  20 mm 0 mm 50 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards  • for live parts — forwards — backwards — at the side — downwards — torwards — forwards — backwards — backwards — backwards — at the side	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm  20 mm 0 mm 50 mm 10 mm  20 mm 0 mm 50 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — at the side — downwards — at the side — downwards — forwards — backwards — backwards — upwards — downwards — at the side  Connections/ Terminals	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm  20 mm 0 mm 50 mm 10 mm  20 mm 0 mm 50 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards  - at the side	screw and snap-on mounting onto 35 mm standard mounting rail 198 mm 45 mm 97 mm  20 mm 0 mm 50 mm 10 mm 0 mm 50 mm 0 mm 50 mm 20 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — to new parts — forwards — backwards — upwards — at the side Connections/ Terminals  type of electrical connection • for main current circuit	screw and snap-on mounting onto 35 mm standard mounting rail  198 mm  45 mm  97 mm  20 mm  0 mm  50 mm  10 mm  50 mm  0 mm  50 mm  20 mm  0 mm  50 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards  • for live parts — forwards — backwards — backwards — backwards — to parts — forwards — backwards — at the side  Connections/ Terminals  type of electrical connection  • for main current circuit • for auxiliary and control circuit  Safety related data	screw and snap-on mounting onto 35 mm standard mounting rail  198 mm  45 mm  97 mm  20 mm  0 mm  50 mm  10 mm  50 mm  0 mm  50 mm  20 mm  0 mm  50 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards  • for live parts — forwards — backwards — upwards — torwards — backwards — upwards — torwards — at the side Connections/ Terminals  type of electrical connection  • for main current circuit • for auxiliary and control circuit  Safety related data  B10 value with high demand rate according to SN 31920	screw and snap-on mounting onto 35 mm standard mounting rail  198 mm  45 mm  97 mm  20 mm  0 mm  50 mm  10 mm  20 mm  0 mm  5 mm  5 mm  5 mm  5 mm  5 mm  5 mm  6 mm  7 mm  7 mm  8 mm  9
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards  • for live parts — forwards — backwards — backwards — upwards — torwards — ownwards — at the side  Connections/ Terminals  type of electrical connection • for main current circuit • for auxiliary and control circuit  Safety related data  B10 value with high demand rate according to SN 31920 proportion of dangerous failures	screw and snap-on mounting onto 35 mm standard mounting rail  198 mm  45 mm  97 mm  20 mm  0 mm  50 mm  10 mm  20 mm  0 mm  5 mm  5 mm  5 mm  5 mm  5 mm  5 mm  6 mm  7 mm  7 mm  8 mm  9
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards  • for live parts — forwards — backwards — upwards — backwards — upwards — townwards — at the side  Connections/ Terminals  type of electrical connection  • for auxiliary and control circuit  Safety related data  B10 value with high demand rate according to SN 31920  proportion of dangerous failures • with high demand rate according to SN 31920	screw and snap-on mounting onto 35 mm standard mounting rail  198 mm  45 mm  97 mm  20 mm  0 mm  50 mm  10 mm  20 mm  0 mm  50 mm  10 mm  50 mm  10 mm  10 mm  10 mm  10 mm  20 mm
fastening method height width depth required spacing	screw and snap-on mounting onto 35 mm standard mounting rail  198 mm  45 mm  97 mm  20 mm  0 mm  50 mm  10 mm  20 mm  0 mm  5 mm  5 mm  10 mm
fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — townwards — backwards — upwards — at the side  Connections/ Terminals  type of electrical connection • for main current circuit • for auxiliary and control circuit  Safety related data  B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with high demand rate according to IEC 60529  Communication/ Protocol	screw and snap-on mounting onto 35 mm standard mounting rail  198 mm  45 mm  97 mm  20 mm  0 mm  50 mm  10 mm  20 mm  0 mm  50 mm  10 mm  50 mm  10 mm  10 mm  10 mm  10 mm  20 mm
fastening method height width depth required spacing	screw and snap-on mounting onto 35 mm standard mounting rail  198 mm  45 mm  97 mm  20 mm  0 mm  50 mm  10 mm  20 mm  0 mm  50 mm  10 mm  50 mm  10 mm  10 mm  10 mm  10 mm  10 mm  20 mm

PROFIsafe protocol

No No

protocol is supported AS-Interface protocol

Certificates/ approvals

## **General Product Approval**

For use in hazardous locations

**Declaration of** Conformity



Confirmation







**Declaration of** Conformity

**Test Certificates** 

Marine / Shipping



Type Test Certificates/Test Report

**Special Test Certific-**<u>ate</u>





other



Marine / Shipping





Confirmation

Vibration and Shock

Railway

## **Further information**

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2110-1AE15-1AP0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2110-1AE15-1AP0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1AE15-1AP0

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2110-1AE15-1AP0&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1AE15-1AP0/char

Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2110-1AE15-1AP0&objecttype=14&gridview=view1

last modified:

2/16/2022

