## 3RA2110-1FA15-1AK6

**Data sheet** 



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S00 3.50...5.00 A 110/120 V AC, 50/60 Hz screw terminal for installation on standard mounting rail Type of coordination 1, Iq = 150 kA 1 NO (contactor)

product brand name	SIRIUS
product designation	non-fused load feeders 3RA2
design of the product	direct starter
manufacturer's article number	
<ul> <li>of the supplied contactor</li> </ul>	3RT2015-1AK61
<ul> <li>of the supplied circuit-breakers</li> </ul>	3RV2011-1FA10
<ul> <li>of the supplied link module</li> </ul>	3RA1921-1DA00
General technical data	
size of the circuit-breaker	S00
size of load feeder	S00
product extension auxiliary switch	Yes
insulation voltage with degree of pollution 3 at AC rated value	690 V
degree of pollution	3
surge voltage resistance rated value	6 kV
shock resistance acc. to IEC 60068-2-27	6g / 11 ms
mechanical service life (switching cycles) of contactor typical	30 000 000
type of assignment	1
Substance Prohibitance (Date)	01.10.2009 00:00:00
Ambient conditions	
<ul> <li>ambient temperature during operation</li> </ul>	-20 +60 °C
<ul> <li>ambient temperature during storage</li> </ul>	-50 +80 °C
<ul> <li>ambient temperature during transport</li> </ul>	-50 +80 °C
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	3.5 5 A
operating voltage rated value	690 V
<ul> <li>operating voltage at AC-3 rated value maximum</li> </ul>	690 V
operating frequency rated value	50 60 Hz
operational current at AC-3 at 400 V rated value	3.6 A
operating power at AC-3	
<ul> <li>at 400 V rated value</li> </ul>	1 500 W
<ul> <li>at 500 V rated value</li> </ul>	2 200 W
<ul><li>at 690 V rated value</li></ul>	3 000 W
Control circuit/ Control	

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control supply voltage at AC	
<ul> <li>at 50 Hz rated value</li> </ul>	110 V
at 60 Hz rated value	120 V
apparent holding power of magnet coil at AC	4.2 V·A
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	65 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	4.8 A
• at 600 V rated value	4.55 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	0.17 hp
— at 230 V rated value	0.5 hp
• for 3-phase AC motor	5.5 np
— at 200/208 V rated value	1 hp
— at 200/208 V rated value  — at 220/230 V rated value	1 hp
— at 220/230 V rated value  — at 460/480 V rated value	1 hp
	3 hp
— at 575/600 V rated value	3 hp
Short-circuit protection	V
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (Iq)	
• at 690 V acc. to IEC 60947-4-1 rated value	4 000 A
<ul> <li>at 400 V acc. to IEC 60947-4-1 rated value</li> </ul>	153 000 A
• at 500 V acc. to IEC 60947-4-1 rated value	100 000 A
Installation/ mounting/ dimensions	
mounting position	vertical
mounting position fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
mounting position fastening method height	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm
mounting position fastening method height width	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm
mounting position fastening method height width depth	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm
mounting position fastening method height width depth required spacing	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm
mounting position fastening method height width depth required spacing • for grounded parts	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm
mounting position fastening method height width depth required spacing • for grounded parts — forwards	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm 97.1 mm
mounting position fastening method height width depth required spacing • for grounded parts	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm 97.1 mm
mounting position fastening method height width depth required spacing • for grounded parts — forwards	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm 97.1 mm
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm 97.1 mm
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm
mounting position 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 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm
mounting position 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 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm
mounting position 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 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm
mounting position 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 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — upwards — upwards — upwards	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 10 mm 0 mm 10 mm
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — downwards • for wards — forwards — backwards — backwards — backwards — upwards — downwards	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 10 mm
mounting position 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 • for live parts — forwards — backwards — backwards — backwards — upwards — downwards — at the side	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 10 mm
mounting position 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 — downwards — torwards — backwards — backwards — at the side — downwards — at the side Connections/ Terminals	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 10 mm 0 mm 10 mm 0 mm 9 mm 10 mm 9 mm
mounting position 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 — downwards • for live 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 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 10 mm 0 mm 10 mm 0 mm 9 mm 10 mm 9 mm
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — to rive parts — forwards — backwards — backwards — upwards — at the side  Connections/ Terminals  type of electrical connection for main current circuit type of connectable conductor cross-sections	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 0 mm 20 mm 9 mm screw-type terminals
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — to downwards • for live parts — forwards — backwards — upwards — at the side  Connections/ Terminals  type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded	screw and snap-on mounting onto 35 mm standard mounting rail 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 0 mm comm comm comm comm comm comm comm c
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — a the side — downwards — to a the side — downwards — backwards — upwards — at the side  Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts • connectable conductor cross-section for main	screw and snap-on mounting onto 35 mm standard mounting rail  167.2 mm  45 mm  97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 mm 9 mm  screw-type terminals  0.5 4 mm², 2x (0.75 2.5 mm²) 2x (20 16), only for contactor 2x (18 14), 2x 12
mounting position 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  Connections/ Terminals  type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts • connectable conductor cross-section for main contacts finely stranded with core end processing	screw and snap-on mounting onto 35 mm standard mounting rail  167.2 mm  45 mm  97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 mm 9 mm  screw-type terminals  0.5 4 mm², 2x (0.75 2.5 mm²) 2x (20 16), only for contactor 2x (18 14), 2x 12

acc. to SN 31920

protection class IP on the front acc. to IEC 60529

touch protection on the front acc. to IEC 60529

IP20

finger-safe, for vertical contact from the front

Certificates/ approvals

**General Product Approval** 

For use in hazardous locations

**Declaration of Conformity** 









**Miscellaneous** 



**Test Certificates** 

Marine / Shipping

Type Test
Certificates/Test
Report

Special Test Certificate









Marine / Shipping

other Railway







Confirmation

Vibration and Shock

## **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=3RA2110-1FA15-1AK6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2110-1FA15-1AK6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1FA15-1AK6

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

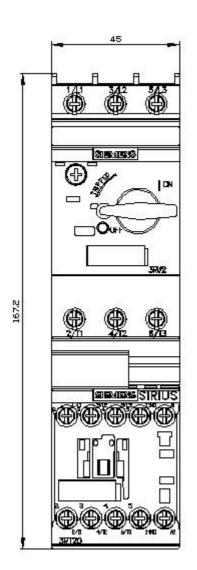
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2110-1FA15-1AK6&lang=en

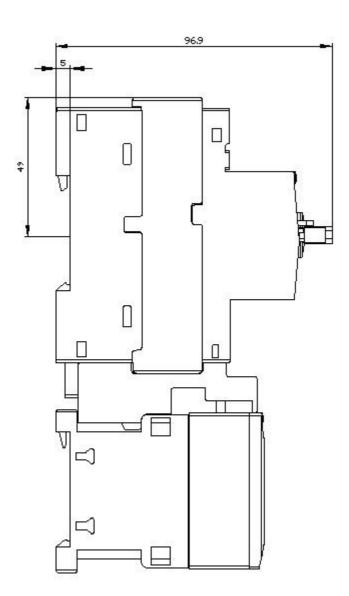
Characteristic: Tripping characteristics, I²t, Let-through current

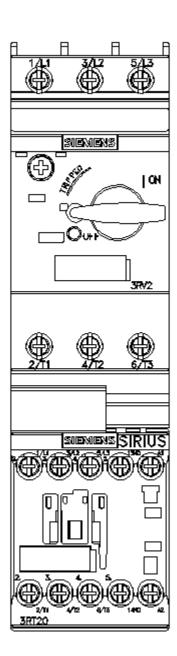
https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1FA15-1AK6/char

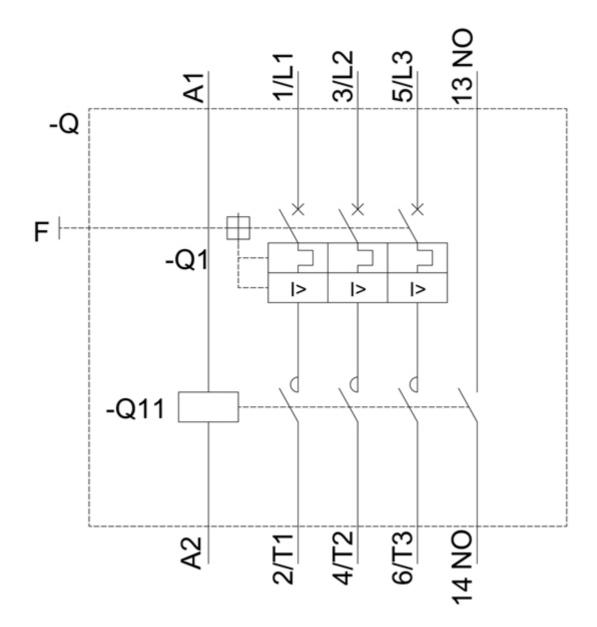
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2110-1FA15-1AK6&objecttype=14&gridview=view1









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