## 3RA2110-1BD15-1AP0

## **Data sheet**



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S00 1.40...2.00 A 230 V AC screw terminal for 60 mm busbar systems (also fulfills type of coordination 1) Type of coordination 2, lq = 150 kA 1 NO (contactor)

product brand name	SIRIUS			
product designation	Direct (on-line) starter			
design of the product	for 60 mm busbars			
product type designation	3RA21			
manufacturer's article number				
<ul> <li>of the supplied contactor</li> </ul>	3RT2015-1AP01			
<ul> <li>of the supplied circuit-breakers</li> </ul>	3RV2011-1BA10			
<ul> <li>of the supplied busbar adapter</li> </ul>	<u>8US1251-5DS10</u>			
<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			
power loss [W] for rated value of the current				
<ul> <li>at AC in hot operating state per pole</li> </ul>	2.6 W			
<ul> <li>without load current share typical</li> </ul>	4.2 W			
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 (operating 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			
reference code according to IEC 81346-2:2019	Q			
Substance Prohibitance (Date)	10/01/2009			
SVHC substance name	Blei - 7439-92-1			
Ambient conditions				
ambient temperature				
<ul> <li>during operation</li> </ul>	-20 +60 °C			
during storage	-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	1.4 2 A			
operating voltage				
rated value	690 V			

<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V			
at AC-3e rated value maximum	690 V			
operating frequency rated value	50 60 Hz			
operational current				
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	2 A			
at AC-3e at 400 V rated value	2 A			
operating power				
• at AC-3				
— at 400 V rated value	750 W			
• at AC-3e				
— at 400 V rated value	750 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			
● at 50 Hz	4.2 VA			
• at 60 Hz	3.3 VA			
inductive power factor with the holding power of the coil	0.25			
• at 50 Hz	0.25			
• at 60 Hz	0.25			
Auxiliary circuit				
product extension auxiliary switch	Yes			
Protective and monitoring functions				
trip class	CLASS 10			
design of the overload release	thermal (bimetallic)			
response value current of instantaneous short-circuit trip unit	26 A			
UL/CSA ratings				
UL/CSA ratings full-load current (FLA) for 3-phase AC motor				
	2 A			
full-load current (FLA) for 3-phase AC motor	2 A 2 A			
full-load current (FLA) for 3-phase AC motor • at 480 V rated value				
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value				
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]				
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor	2 A			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value	2 A			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor	2 A 0.16 hp			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value	2 A  0.16 hp  0.5 hp			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value	2 A  0.16 hp  0.5 hp 1 hp			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value	2 A  0.16 hp  0.5 hp 1 hp			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit current (Iq)	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit current (lq)  • at 400 V according to IEC 60947-4-1 rated value	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  conditional short-circuit current (Iq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic  150 000 A			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection design of the short-circuit trip  conditional short-circuit current (lq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions mounting position	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic  150 000 A			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  conditional short-circuit current (Iq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic  150 000 A  vertical for snapping onto 60 mm busbar systems			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  conditional short-circuit current (Iq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic  150 000 A  vertical for snapping onto 60 mm busbar systems 203 mm			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  conditional short-circuit current (lq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic  150 000 A  vertical for snapping onto 60 mm busbar systems 203 mm 45 mm			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  conditional short-circuit current (Iq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic  150 000 A  vertical for snapping onto 60 mm busbar systems 203 mm 45 mm			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection design of the short-circuit trip  conditional short-circuit current (lq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic  150 000 A  vertical for snapping onto 60 mm busbar systems 203 mm 45 mm			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  conditional short-circuit current (Iq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • for grounded parts	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic  150 000 A  vertical for snapping onto 60 mm busbar systems 203 mm 45 mm 155 mm			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit current (Iq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • for grounded parts  — forwards	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic  150 000 A  vertical for snapping onto 60 mm busbar systems 203 mm 45 mm 155 mm			
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  conditional short-circuit current (Iq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • for grounded parts  — forwards  — backwards	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic  150 000 A  vertical for snapping onto 60 mm busbar systems 203 mm 45 mm 155 mm  20 mm 0 mm			
full-load current (FLA) for 3-phase AC motor  at 480 V rated value  at 600 V rated value  yielded mechanical performance [hp]  for single-phase AC motor  at 230 V rated value  for 3-phase AC motor  at 220/230 V rated value  at 460/480 V rated value  at 575/600 V rated value  short-circuit protection  product function short circuit protection  design of the short-circuit trip  conditional short-circuit current (Iq)  at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  for grounded parts  forwards  backwards  upwards	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic  150 000 A  vertical for snapping onto 60 mm busbar systems 203 mm 45 mm 155 mm  20 mm 0 mm 50 mm			
full-load current (FLA) for 3-phase AC motor  at 480 V rated value  at 600 V rated value  yielded mechanical performance [hp]  for single-phase AC motor  at 230 V rated value  for 3-phase AC motor  at 220/230 V rated value  at 460/480 V rated value  at 575/600 V rated value  short-circuit protection  product function short circuit protection  design of the short-circuit trip  conditional short-circuit current (lq)  at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  for grounded parts  forwards  backwards  upwards  at the side	2 A  0.16 hp  0.5 hp 1 hp 1.5 hp  Yes magnetic  150 000 A  vertical for snapping onto 60 mm busbar systems 203 mm 45 mm 155 mm  20 mm 0 mm 50 mm 20 mm			

— forwards	20 mm					
— backwards	0 mm					
— upwards	50 mm					
— downwards	10 mm					
— at the side	20 mm					
Connections/ Terminals						
type of electrical connection						
<ul> <li>for main current circuit</li> </ul>	screw-type terminals					
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals					
Safety related data						
proportion of dangerous failures						
<ul> <li>with high demand rate according to SN 31920</li> </ul>	73 %					
B10 value with high demand rate according to SN 31920	1 000 000					
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front					
Communication/ Protocol						
protocol is supported						
<ul> <li>PROFINET IO protocol</li> </ul>	No					
PROFIsafe protocol	No					
protocol is supported AS-Interface protocol	No					
Approvals Certificates						
Ganaral Product Approval		For use in hazard-	Declaration of Conformity			

Confirmation

**General Product Approval** 







ous locations



**Declaration of Conformity** 



**Test Certificates** 

Marine / Shipping

Special Test Certificate Type Test Certificates/Test Report









Marine / Shipping







Confirmation

other

Vibration and Shock

Railway

## Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RA2110-1BD15-1AP0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2110-1BD15-1AP0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1BD15-1AP0

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

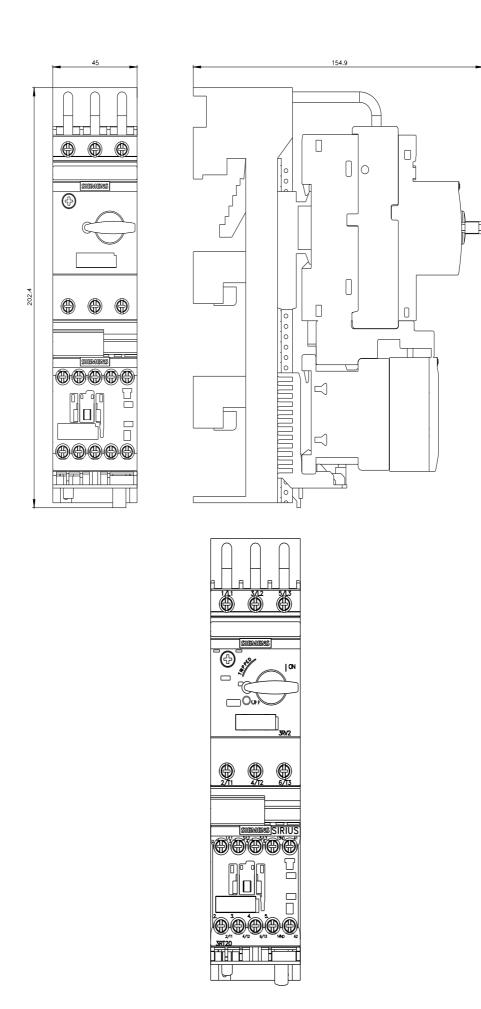
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2110-1BD15-1AP0&lang=en

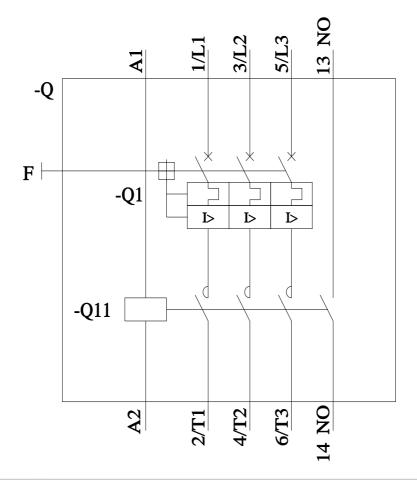
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1BD15-1AP0/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2110-1BD15-1AP0&objecttype=14&gridview=view1





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