3RA2110-4AH18-1AP0

Data sheet



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S00 10...16 A 230 V AC Spring-type terminal for 60 mm busbar systems Type of coordination 1, Iq = 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	
 of the supplied contactor 	3RT2018-2AP01
 of the supplied circuit-breakers 	3RV2011-4AA20
 of the supplied busbar adapter 	<u>8US1251-5DT11</u>
 of the supplied link module 	3RA2911-2AA00
General technical data	
size of the circuit-breaker	S00
size of load feeder	S00
power loss [W] for rated value of the current	
 at AC in hot operating state per pole 	4.1 W
without load current share typical	5.7 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	1
reference code according to IEC 81346-2:2019	Q
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1
Weight	1.149 kg
Ambient conditions	
ambient temperature	
 during operation 	-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	10 16 A
operating voltage	
• rated value	690 V
• at AC-3 rated value maximum	690 V

# 14.6-3e rated value maximum 600 V preservations for control support value 950 90 Hz poperations current 1		2001/		
aparating power	at AC-3e rated value maximum	690 V		
		50 60 Hz		
• al AC-3e al 600 V reled value 7500 W - al 400 V reled value 7500 W - al 400 V reled value 7500 W - al 400 V rated value 230 V - al 50 ltz rated value 230 V - al 50 ltz rated value 230 V - al 50 ltz rated value 230 V - al 60 ltz - al 50 ltz rated value 230 V - al 60 ltz - al 60 ltz - al 50 lt	•			
Operating power				
		16 A		
	operating power			
- at 400 V rated value	• at AC-3			
The control credit Control	— at 400 V rated value	7 500 W		
Control circuit/ Control Type of voltage of the control supply voltage of the voltage of the control supply voltage of 150 Hz rated value apparent holding power of magnet coil at AC of 150 Hz	• at AC-3e			
type of voltage of the control supply voltage at 60 Hz rated value 230 V at 60 Hz rated value 230 V apparent holding power of magnet coil at AC 5.7 VA at 60 Hz at 60 Hz at 60 Hz 4.4 VA inductive power factor with the holding power of the coil 2.5 VA 4.5		7 500 W		
South Supply voltage at AC	Control circuit/ Control			
a at 50 Hz rated value	type of voltage of the control supply voltage	AC		
e at 60 Hz rated value	control supply voltage at AC			
apparent holding power of magnet coil at AC	 at 50 Hz rated value 	230 V		
• at 50 Hz 4 vis 0 Hz 4 vis 0 Hz 50 Hz 50 Hz 50 Hz 60	at 60 Hz rated value	230 V		
* at 60 Hz inductive power factor with the holding power of the coil * at 50 Hz * at 60 Hz * at 60 Hz Auxillary circuit product extension auxiliary switch Yes Protective and monitoring functions trip class CLASS 10 design of the overload release response value current of instantaneous short-circuit trip unit ULCSA ratings full-load current (FLA) for 3-phase AC motor * at 480 V rated value * at 600 V rated value * at 230 V rated value * at 200 V rated value * at 800 V rated value * at 400 V according to IEC 6047-4-1 rated value * at 400 V according to IEC 6047-4-1 rated value * at 400 V according to IEC 6047-4-1 rated value * at 400 V according to IEC 6047-4-1 rated value * for snapping onto 60 mm busbar systems * height * according menthod * for snapping onto 60 mm busbar systems * height * according onto 60 mm * for grounded parts * for live parts * for live parts * for wards * for live parts * for live part	apparent holding power of magnet coil at AC	5.7 VA		
Inductive power factor with the holding power of the coil at 50 Hz at 60 Hz O.25 Auxillary circuit product extension auxiliary switch Protective and monitoring functions trip class CLASS 10 design of the overload release response value current of instantaneous short-circuit trip unit ULCSA ratings Intill-load current (FLA) for 3-phase AC motor at 600 V rated value 14 A at 600 V rated value 11 A yielded mechanical performance (hp) for single-phase AC motor — at 1101/20 V rated value 1 hp — at 230 V rated value 1 hp — at 200/208 V rated value 5 hp — at 200/208 V rated value 1 hp — at 200/208 V rated value 1 hp — at 200/208 V rated value 1 hp — at 460/480 V rated value 1 hp — at 446/480 V rated value 1 hp — at 446/480 V rated value 1 hp — at 4400 V according to EC 60947-4-1 rated value Indicate truncing of the short-circuit trip conditional short-circuit current (tq) at 400 V according to EC 60947-4-1 rated value Installation mounting dimensions mounting position vertical for snapping onto 60 mm busbar systems height vertical spacing for grounded parts — forwards — backwards — upwards 50 mm at the side 20 mm ownwards for live parts — forwards for live parts	● at 50 Hz	5.7 VA		
• alt 50 Hz	• at 60 Hz	4.4 VA		
• alt 50 Hz	inductive power factor with the holding power of the coil	0.25		
Auxiliary circuit product extension auxiliary switch Protective and monitoring functions trip class		0.25		
Auxiliary circuit product extension auxiliary switch Protective and monitoring functions trip class	• at 60 Hz	0.25		
product extension auxiliary switch Protective and monitoring functions trip class design of the overload release response value current of instantaneous short-circuit trip unit U/LCSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value - at 11/10/20 V rated value • for single-phase AC motor - at 11/10/20 V rated value • for 3-phase AC motor - at 11/10/20 V rated value • for 3-phase AC motor - at 120/2020 V rated value • for 3-phase AC motor - at 200/208 V rated value • for 3-phase AC motor - at 200/208 V rated value • for 3-phase AC motor - at 200/208 V rated value • 5 hp - at 460/480 V rated value • 5 hp - at 460/480 V rated value • 10 hp Short-circuit protection product function short circuit protection design of the short-circuit current (q) • at 400 V according to IEC 60947-4-1 rated value fastening method for snapping onto 60 mm busbar systems height • for grounded parts - forwards - backwards - downwards - at the side - downwards • for live parts - forwards - forwards - for live parts - forwards - forwa				
trip class CLASS 10 design of the overload release thermal (bimetallic) response value current of instantaneous short-circuit trip unit ULCSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value 11 A • at 600 V rated value 11 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 2 hp • for 3-phase AC motor — at 200/208 V rated value 3 hp — at 200/208 V rated value 5 hp — at 200/208 V rated value 9 hp • for single-phase AC motor — at 400/408 V rated value 9 hp — at 200/208 V rated value 9 hp — at 480/408 V rated value 10 hp Short-circuit protection product function short circuit protection Yes design of the short-circuit trip magnetic conditional short-circuit current (q) • at 400 V according to IEC 60947-4-1 rated value 150 000 A Installation/mounting/dimensions mounting position vertical fastening method for snapping onto 60 mm busbar systems height 45 mm depth 155 mm required spacing • for grounded parts — forwards 0 mm • or grounded parts — forwards 5 mm — at the side 0 mm • at the side 0 mm • or grounded parts — forwards 5 mm — downwards 10 mm • for live parts — forwards — at the side 0 mm • for live parts — forwards — forwards — ownwards • for live parts — forwards		Yes		
Trip class CLASS 10				
design of the overload release response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value • of or single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 200/208 V rated value • 10 hp Short-circuit protection product function short circuit protection design of the short-circuit trip magnetic conditional short-circuit trip conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value fastening method for snapping onto 60 mm busbar systems height vertical vertical for grounded parts — forwards — upwards — at the side — downwards — upwards — of grounded — downwards — of prowards — of orwards — of ownwards — of ownwards — of orwards — of orwards — of orwards — of ownwards — of orwards — of orwards — of ownwards — of orwards — of ownwards — of orwards — o	-	CLASS 10		
response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor	•			
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 14 A • at 800 V rated value 11 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 1 hp — at 230 V rated value 2 hp • for 3-phase AC motor 3 hp — at 220/230 V rated value 5 hp — at 460/480 V rated value 10 hp Short-circuit protection Yes design of the short-circuit trip magnetic conditional short-circuit trip magnetic conditional short-circuit trunt 150 000 A Installation/ mounting dimensions wertical fastening method for snapping onto 60 mm busbar systems height 260 mm width 45 mm depth 155 mm required spacing • for grounded parls — forwards 0 mm — backwards 0 mm — at the side 20 mm — downwards 10 mm • for live parts — forwards 20 mm		200 A		
	-			
• at 600 V rated value		44.0		
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 1 hp — at 230 V rated value 2 hp • for 3-phase AC motor — at 200/208 V rated value 3 hp — at 200/208 V rated value 5 hp — at 460/480 V rated value 10 hp Short-circuit protection product function short circuit protection Yes design of the short-circuit current (q) • at 400 V according to IEC 60947-4-1 rated value 150 000 A Installation/ mounting/ dimensions mounting position vertical fastening method for snapping onto 60 mm busbar systems height 260 mm width 45 mm depth 155 mm required spacing • for grounded parts — forwards 20 mm — backwards 0 mm — upwards — at the side 20 mm — downwards • for live parts — forwards 20 mm • for live parts — forwards 20 mm				
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- at 110/120 V rated value				
- at 230 V rated value 2 hp • for 3-phase AC motor - at 220/230 V rated value 5 hp - at 460/480 V rated value 10 hp Short-circuit protection product function short circuit protection Yes design of the short-circuit trip magnetic conditional short-circuit current (lq) • at 400 V according to IEC 60947-4-1 rated value 150 000 A matallation/ mounting/ dimensions mounting position vertical fastening method for snapping onto 60 mm busbar systems height 260 mm width 45 mm depth 155 mm required spacing • for grounded parts - forwards 20 mm - at the side - downwards 50 mm • for live parts - forwards - forwards 20 mm • for live parts - forwards - forwards 20 mm				
for 3-phase AC motor — at 220/208 V rated value				
- at 200/208 V rated value 5 hp - at 220/230 V rated value 10 hp Short-circuit protection product function short circuit protection 4 design of the short-circuit trip 5 magnetic 5 magnetic 5 magnetic 6 magnetic 7 magne		2 hp		
- at 220/230 V rated value 5 hp - at 460/480 V rated value 10 hp Short-circuit protection product function short circuit protection Yes design of the short-circuit trip magnetic conditional short-circuit current (lq) • at 400 V according to IEC 60947-4-1 rated value 150 000 A Installation/ mounting/ dimensions mounting position vertical fastening method for snapping onto 60 mm busbar systems height 260 mm width 45 mm depth 155 mm required spacing • for grounded parts - forwards 20 mm - upwards 50 mm - at the side 20 mm - downwards 10 mm • for live parts - forwards 20 mm • for live parts - forwards 20 mm				
- at 460/480 V rated value 10 hp Short-circuit protection product function short circuit protection Yes design of the short-circuit trip magnetic conditional short-circuit current (lq) • at 400 V according to IEC 60947-4-1 rated value 150 000 A Installation/ mounting/ dimensions mounting position vertical fastening method for snapping onto 60 mm busbar systems height 260 mm width 45 mm depth 155 mm required spacing • for grounded parts — forwards 20 mm — upwards 50 mm — at the side 20 mm — downwards 10 mm • for live parts — forwards 20 mm • for live parts — forwards 20 mm • for live parts — forwards 20 mm	— at 200/208 V rated value	3 hp		
Short-circuit protection Product function short circuit protection Yes	— at 220/230 V rated value	5 hp		
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 for snapping onto 60 mm busbar systems height 260 mm width 45 mm depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards • for live parts — forwards — forwards — forwards — forwards — downwards • for live parts — forwards — forwards — forwards — forwards — forwards — downwards — for live parts — forwards — fo	— at 460/480 V rated value	10 hp		
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 for snapping onto 60 mm busbar systems height 260 mm width 45 mm depth 155 mm required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — forwards • 20 mm	Short-circuit protection			
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position vertical fastening method for snapping onto 60 mm busbar systems height 260 mm width 45 mm depth 155 mm required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards — downwards • for live parts — forwards — forwards • for live parts — forwards — forwards — forwards — forwards — forwards — downwards — to mm 20 mm	product function short circuit protection	Yes		
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position vertical fastening method for snapping onto 60 mm busbar systems height 260 mm width 45 mm depth 155 mm required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards — downwards • for live parts — forwards — forwards • for live parts — forwards — forwards — forwards — forwards — forwards — downwards — to mm 20 mm	design of the short-circuit trip	magnetic		
 at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height 260 mm width 45 mm depth required spacing for grounded parts forwards backwards upwards at the side downwards for min for live parts for wards 20 mm downwards 10 mm for live parts forwards 20 mm 				
Installation/ mounting/ dimensions mounting position vertical fastening method for snapping onto 60 mm busbar systems height 260 mm width 45 mm depth 155 mm required spacing • for grounded parts — forwards 20 mm — backwards 0 mm — upwards 50 mm — at the side 20 mm — downwards 10 mm • for live parts — forwards • for live parts — forwards — forwards • for live parts — forwards 20 mm		150 000 A		
mounting positionverticalfastening methodfor snapping onto 60 mm busbar systemsheight260 mmwidth45 mmdepth155 mmrequired spacingFor grounded parts— for grounded parts20 mm— backwards0 mm— upwards50 mm— at the side20 mm— downwards10 mm• for live parts70 mm— forwards20 mm				
fastening method for snapping onto 60 mm busbar systems height 260 mm width 45 mm depth 155 mm required spacing • for grounded parts — forwards 20 mm — backwards 0 mm — upwards 50 mm — at the side 20 mm — downwards 10 mm • for live parts 20 mm — forwards 20 mm		vertical		
height 260 mm width 45 mm depth 155 mm required spacing • for grounded parts 20 mm — forwards 20 mm — backwards 0 mm — upwards 50 mm — at the side 20 mm — downwards 10 mm • for live parts 20 mm — forwards 20 mm				
width 45 mm depth 155 mm required spacing • for grounded parts — forwards 20 mm — backwards 0 mm — upwards 50 mm — at the side 20 mm — downwards 10 mm • for live parts 20 mm — forwards 20 mm				
depth 155 mm required spacing • for grounded parts — forwards 20 mm — backwards 0 mm — upwards 50 mm — at the side 20 mm — downwards 10 mm • for live parts 20 mm	•			
required spacing ● for grounded parts 20 mm — forwards 0 mm — backwards 0 mm — upwards 50 mm — at the side 20 mm — downwards 10 mm ● for live parts 20 mm				
 for grounded parts — forwards — backwards — upwards — at the side — downwards — for live parts — forwards — forwards — forwards — 20 mm — 20 mm — 20 mm — 20 mm — 10 mm	·	100 11111		
— forwards 20 mm — backwards 0 mm — upwards 50 mm — at the side 20 mm — downwards 10 mm ● for live parts 20 mm — forwards 20 mm				
— backwards 0 mm — upwards 50 mm — at the side 20 mm — downwards 10 mm ● for live parts 20 mm		20 mm		
— upwards 50 mm — at the side 20 mm — downwards 10 mm ● for live parts 20 mm				
 — at the side — downwards • for live parts — forwards 20 mm 10 mm 20 mm 				
 — downwards for live parts — forwards 20 mm 	·			
for live parts — forwards 20 mm				
— forwards 20 mm		10 mm		
— backwards 0 mm				
	— backwards	0 mm		

— upwards	50 mm				
— downwards	10 mm				
— at the side	20 mm				
Connections/ Terminals					
type of electrical connection					
for main current circuit	spring-loaded terminals				
 for auxiliary and control circuit 	spring-loaded terminals				
Safety related data					
product function suitable for safety function	Yes				
Electrical Safety					
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front				
Communication/ Protocol					
protocol is supported					
PROFINET IO protocol	No				
PROFIsafe protocol	No				
protocol is supported AS-Interface protocol	No				
Approvals Certificates					
General Product Approval		For use in hazard- ous locations	Test Certificates		











Special Test Certificate

Test Certificates

Marine / Shipping

Type Test Certificates/Test Report











Marine / Shipping

other

Railway

Environment





Confirmation

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

Environmental Confirmations

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=3RA2110-4AH18-1AP0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2110-4AH18-1AP0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-4AH18-1AP0

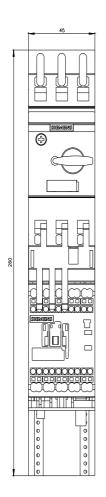
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

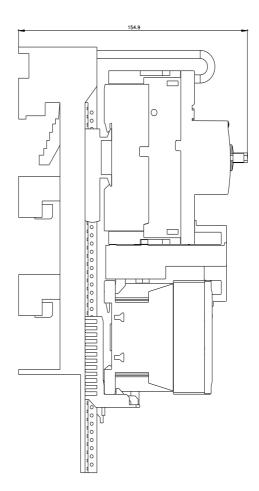
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2110-4AH18-1AP0&lang=en

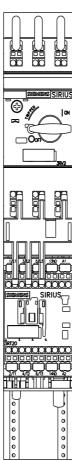
Characteristic: Tripping characteristics, I2t, Let-through current

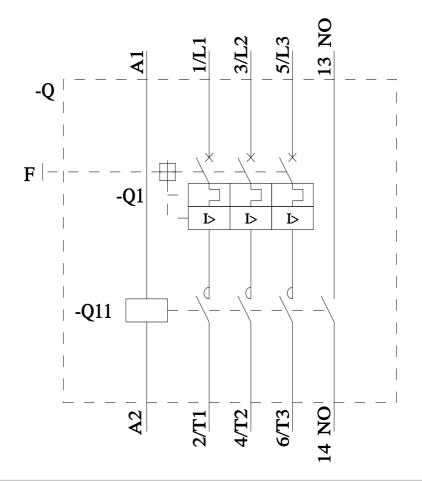
https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-4AH18-1AP0/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2110-4AH18-1AP0&objecttype=14&gridview=view1









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