3RA2210-4AD18-2AP0

Data sheet



Load feeder fuseless, Reversing duty 400 V AC, Size S00 10.0...16.0 A 230 V AC screw terminal for 60 mm busbar systems Type of coordination 1, Iq = 150 kA 1 NC (contactor)

product brand name	SIRIUS
product designation	Reversing starter
design of the product	for 60 mm busbars
product type designation	3RA22
manufacturer's article number	
of the supplied contactor	3RT2018-1AP02
of the supplied circuit-breakers	3RV2011-4AA10
 of the supplied RS assembly kit 	3RA2913-1DB1
of the supplied link module	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	
 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
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
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

operating frequency rated value 50 60 Hz operational current		2001/
spent Separate S	at AC-3e rated value maximum	690 V
ea th AC-3 at 400 V rated value 16 A	operating frequency rated value	50 60 Hz
### ### ### ### ### ### ### ### ### ##	operational current	
Separation power	• at AC-3 at 400 V rated value	16 A
• alt AC-3		16 A
at 400 V rated value	operating power	
# all AC-3e	• at AC-3	
	— at 400 V rated value	7 500 W
Control circuit/ Control Control supply voltage at AC a 150 Hz rated value 230 V a 150 Hz rated value 230 - 230 V a 150 Hz rated value 230 - 230 V a 160 Hz rated value 230 - 230 V a 160 Hz rated value 230 - 230 V a 160 Hz rated value 230 - 230 V a 160 Hz rated value 230 - 230 V a 160 Hz 4 K VA inductive power factor with the holding power of the coil 25 a 160 Hz 4 K VA inductive power factor with the holding power of the coil 0.25 a 160 Hz 0.25 Abunitary circuit Ves Product extension auxiliary switch Yes Productive and monitoring junctions Implication junctions trip class CLSS 10 design of the overload release thermal (bimetallic) response value current of instantaneous short-circuit trip of value 14 A a 1600 V raled value <t< td=""><td>• at AC-3e</td><td></td></t<>	• at AC-3e	
type of voltage of the control supply voltage at AC AC at 50 Hz rated value 230 V at 60 Hz rated value 57 VA at 60 Hz at 60 Hz 44 VA at 60 Hz 0.25 Abuillary circuit Ves Protective and montoring functions trip class trip class CLASS 10 design of the overload release thermal (bimetallic) response value current of instantaneous short-circuit rip unit 14 A ULCSA ratings If In A full-load current (FLA) for 3-phase AC motor <	— at 400 V rated value	7 500 kW
Control supply voltage at AC	Control circuit/ Control	
■ at 50 Hz rated value ■ at 50 Hz rated value ■ at 60 Hz rated value ■ at 50 Hz ■ at 60 Hz	type of voltage of the control supply voltage	AC
	control supply voltage at AC	
+ at 80 Hz rated value 230 V 230	• at 50 Hz rated value	230 V
	• at 50 Hz rated value	230 230 V
apparent holding power of magnet coil at AC	 at 60 Hz rated value 	230 V
	at 60 Hz rated value	230 230 V
• at 60 Hz	apparent holding power of magnet coil at AC	5.7 VA
150 Hz	• at 50 Hz	5.7 VA
	• at 60 Hz	4.4 VA
	inductive power factor with the holding power of the coil	0.25
Auxiliary 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 UCSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 800 V rated value • at 800 V rated value • for single-phase AC motor — at 101/20 V rated value • for 3-phase AC motor — at 101/20 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 • 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 • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 460/480 V rated value • for 3-phase AC motor — at 400/480 V rated value • for 3-phase AC motor — at 400/480 V rated value • for 9-poduct function short circuit protection product function short circuit protection yes design of the short-circuit trip • at 400 V according to IEC 60947-4-1 rated value 150 000 A Installation/ mounting/ dimensions mounting position • or snapping onto 60 mm busbar systems height vertical fastening method for snapping onto 60 mm busbar systems 150 mm elepth • for grounded parts — forwards — backwards — backwards — upwards — at the side — ot mm 10 mm 10 mm 10 mm	• at 50 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 UUCSA 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 • for single-phase AC motor • at 110/120 V rated value • for single-phase AC motor • at 110/120 V rated value • at 200 V rated value • for single-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 220/230 V rated value • 5 hp • at 260/480 V rated value • 5 hp • at 460/480 V rated value • 5 hp conditional short-circuit trip magnetic conditional short-circuit trip magnetic conditional short-circuit trip • at 400 V according to IEC 60947-4-1 rated value fastening method fastening method for snapping onto 60 mm busbar systems height • for grounded parts	• 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 UUCSA 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 • for single-phase AC motor • at 110/120 V rated value • for single-phase AC motor • at 110/120 V rated value • at 200 V rated value • for single-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 220/230 V rated value • 5 hp • at 260/480 V rated value • 5 hp • at 460/480 V rated value • 5 hp conditional short-circuit trip magnetic conditional short-circuit trip magnetic conditional short-circuit trip • at 400 V according to IEC 60947-4-1 rated value fastening method fastening method for snapping onto 60 mm busbar systems height • for grounded parts	Auxiliary circuit	
Trip class CLASS 10 design of the overload release thermal (bimetallic) response value current of instantaneous short-circuit trip unit 208 A ULCSI aratings full-da 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 1 hp — — at 230 V rated value 2 hp • for 3-phase AC motor — at 200/208 V rated value 2 hp • for 3-phase AC motor — at 200/208 V rated value 3 hp — at 2200/230 V rated value 5 hp — at 2200/230 V rated value 10 hp Short-circuit protection vector function short circuit protection vector function short circuit trip magnetic conditional short-circuit trip magnetic conditional short-circuit trip mounting joint on short-circuit vector function short-circuit rore function short-circuit function short-c		Yes
trip class design of the overload release response value current of instantaneous short-circuit trip unit 208 A UUCSA retings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value • for 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 • 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 • 10 hp Short-circuit protection product function short circuit trip magnetic conditional short-circuit trip • at 400 V according to IEC 60947-4-1 rated value • for snapping onto 60 mm busbar systems height • conditional mounting/ dimensions mounting position fastening method • for snapping onto 60 mm busbar systems height • for grounded parts • for g	Protective and monitoring functions	
design of the overload release thermal (bimetallic) response value current of instantaneous short-circuit trip unit 208 A UUCSA ratings Iuli-load current (FLA) for 3-phase AC motor • at 480 V rated value 11 A • at 600 V rated value 11 A vielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 1 hp — at 230 V rated value 2 pp • for 3-phase AC motor — at 200/208 V rated value 3 hp — at 220/230 V rated value 3 hp — at 220/230 V rated value 5 hp — at 460/480 V rated value 5 hp — at 460/480 V rated value 10 hp Short-circuit protection Yes design of the short-circuit protection Yes design of the short-circuit current (q) • at 400 V according to IEC 60947-4-1 rated value 5 50 000 A Installation/mounting/dimensions mounting position vertical fastening method for snapping onto 60 mm busbar systems height 204 mm depth 155 mm required spacing • for grounded parts — forwards 3 2 mm — backwards 0 mm — upwards 50 mm — at the side 10 mm — at the side 10 mm downwards 10 mm		CLASS 10
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for single-phase AC motor — at 110/120 V rated value		
- at 110/120 V rated value		
- at 230 V rated value • for 3-phase AC motor - at 220/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 460/480 V rated value To hip product function short circuit protection product function short circuit trip magnetic conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position for snapping onto 60 mm busbar systems height por mm depth for grounded parts - forwards - backwards - backwards - at the side - downwards 10 mm		1 hp
• for 3-phase AC motor — at 200/208 V rated value 3 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 (Iq) • 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 204 mm width 90 mm depth 155 mm required spacing • for grounded parts — for younded parts — backwards — backwards — upwards — at the side — downwards 10 mm		
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- 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 (Iq) • 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 204 mm width 90 mm depth 155 mm required spacing • for grounded parts - forwards 32 mm - backwards 0 mm - upwards 50 mm - at the side 10 mm - downwards 10 mm	•	3 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 (Iq) ■ 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 204 mm width 90 mm depth 155 mm required spacing ■ for grounded parts — forwards 32 mm — backwards 0 mm — upwards 50 mm — at the side 10 mm — downwards 10 mm		
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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 204 mm width 90 mm depth 155 mm required spacing for grounded parts		magnetio
mounting position vertical fastening method for snapping onto 60 mm busbar systems height 204 mm width 90 mm depth 155 mm required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards 10 mm	* **	150 000 A
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fastening methodfor snapping onto 60 mm busbar systemsheight204 mmwidth90 mmdepth155 mmrequired spacingFor grounded parts— for wards32 mm— backwards0 mm— upwards50 mm— at the side10 mm— downwards10 mm		vertical
height 204 mm width 90 mm depth 155 mm required spacing - for grounded parts — forwards 32 mm — backwards 0 mm — upwards 50 mm — at the side 10 mm — downwards 10 mm		
width 90 mm depth 155 mm required spacing For grounded parts — forwards 32 mm — backwards 0 mm — upwards 50 mm — at the side 10 mm — downwards 10 mm		
depth 155 mm required spacing For grounded parts — forwards 32 mm — backwards 0 mm — upwards 50 mm — at the side 10 mm — downwards 10 mm		
required spacing • for grounded parts — forwards — backwards — upwards — upwards — at the side — downwards 10 mm		
 for grounded parts forwards backwards upwards at the side downwards 10 mm mm 	·	100 11111
— forwards 32 mm — backwards 0 mm — upwards 50 mm — at the side 10 mm — downwards 10 mm		
 backwards upwards at the side downwards 0 mm 10 mm 10 mm 		20
 upwards at the side downwards 50 mm 10 mm 10 mm 		
— at the side— downwards10 mm10 mm		
— downwards 10 mm	upworde	
for live parts	— at the side	10 mm
	at the sidedownwards	10 mm

General Product Approval	For use in hazard-
Certificates/ approvals	
protocol is supported AS-Interface protocol	No
PROFIsafe protocol	No
 PROFINET IO protocol 	No
protocol is supported	
Communication/ Protocol	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
with high demand rate according to SN 31920	73 %
proportion of dangerous failures	
B10 value with high demand rate according to SN 31920	1 000 000
Safety related data	
 for auxiliary and control circuit 	screw-type terminals
• for main current circuit	screw-type terminals
type of electrical connection	
Connections/ Terminals	
— at the side	10 mm
— downwards	10 mm
— upwards	50 mm
— backwards	0 mm
— forwards	32 mm

Confirmation

General Product Approval







ous locations



Declaration of Conformity



Test Certificates

Marine / Shipping

Type Test Certificates/Test Report

Special Test Certificate









Marine / Shipping

other

Railway







Confirmation

Vibration and Shock

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=3RA2210-4AD18-2AP0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2210-4AD18-2AP0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2210-4AD18-2AP0

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

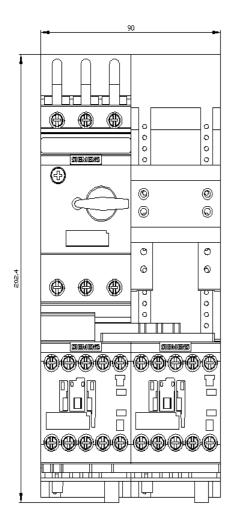
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2210-4AD18-2AP0&lang=en

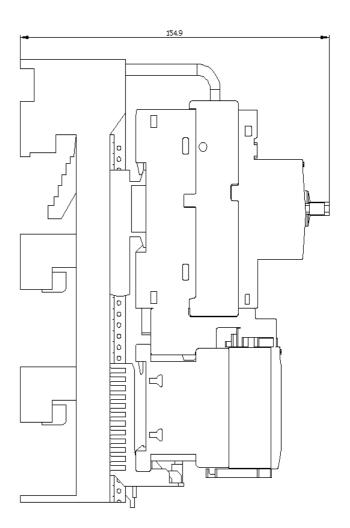
Characteristic: Tripping characteristics, I2t, Let-through current

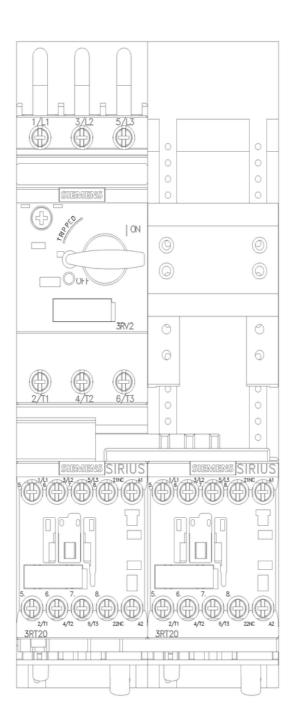
https://support.industry.siemens.com/cs/ww/en/ps/3RA2210-4AD18-2AP0/char

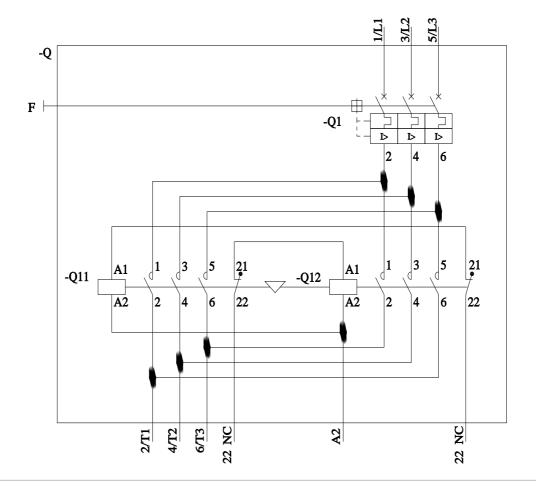
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2210-4AD18-2AP0&objecttype=14&gridview=view1









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