SIEMENS

Data sheet

3RA2210-1JA16-2AP0



Load feeder fuseless, Reversing duty 400 V AC, Size S00 7.00...10.0 A 230 V AC screw terminal for installation on standard mounting rail Type of coordination 1, lq = 150 kA 1 NC (contactor)

product brand name	SIRIUS
product designation	Reversing starter
design of the product	for standard rail or screw mounting
product type designation	3RA22
manufacturer's article number	
 of the supplied contactor 	3RT2016-1AP02
 of the supplied circuit-breakers 	3RV2011-1JA10
 of the supplied link module 	3RA1921-1DA00
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	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
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	7 10 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	8.5 A
operating power at AC-3	
• at 400 V rated value	4 000 W
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
at 50 Hz rated value	230 V
 at 50 Hz rated value 	230 230 V
 at 60 Hz rated value 	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	7.6 A
yielded mechanical performance [hp]	I.VI
• for 3-phase AC motor	
— at 200/208 V rated value	2 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	5 hp
— at 575/600 V rated value	7.5 hp
	7.5 Hp
Short-circuit protection	Vec
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (Iq)	
` "	150,000 A
• at 400 V according to IEC 60947-4-1 rated value	150 000 A
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions	
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position	vertical
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method	vertical screw and snap-on mounting onto 35 mm standard mounting rail
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm
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	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm
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	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm
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	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm
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	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm
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	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm
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 upwards at the side downwards	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm
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 — downwards • for live parts	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm
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 downwards for live parts forwards forwards	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm
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 — downwards for live parts — forwards — backwards — backwards — backwards	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 10 mm 10 mm 10 mm 0 mm
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 downwards for live parts forwards backwards upwards upwards for live parts forwards backwards upwards upwards upwards upwards	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 0 mm
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing at for grounded parts forwards backwards upwards at the side downwards for live parts forwards backwards upwards downwards for live parts backwards upwards downwards	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 50 mm 10 mm
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing at for grounded parts backwards upwards at the side downwards for live parts forwards upwards backwards downwards at the side downwards backwards downwards at the side downwards at the side downwards at the side downwards at the side	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 0 mm
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 — downwards • for live parts — forwards — backwards — upwards — to rowards — to rowards — to rowards — downwards — at the side — downwards — at the side — downwards — at the side Connections/ Terminals	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 50 mm 10 mm
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 — downwards • for live parts — forwards — backwards — upwards — at the side — downwards — torwards — backwards — at the side — downwards — torwards — backwards — upwards — at the side Connections/ Terminals type of electrical connection	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing at for grounded parts forwards backwards upwards at the side downwards for live parts forwards backwards upwards at the side downwards at the side downwards at the side connections/ Terminals type of electrical connection for main current circuit	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 10 mm 50 mm 10 mm 50 mm 10 mm 50 mm
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing at for grounded parts backwards backwards upwards at the side downwards for live parts forwards upwards at the side downwards at the side for auxiliary and control circuit at 400 V according to IEC 60947-4-1 rated value Installation at 4-1 rated value at 4-1 r	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm
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 downwards for live parts forwards upwards at the side downwards at the side for live parts forwards at the side connections/ Terminals type of electrical connection for auxiliary and control circuit Safety related data	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 10 mm 50 mm 10 mm 50 mm 50 mm 50 mm 50 mm
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 — downwards • for live parts — forwards — backwards — upwards — at the side — downwards — torwards — backwards — upwards — torwards — torwards — 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	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 10 mm 50 mm 10 mm 50 mm 10 mm 50 mm
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 50 mm 10 mm 50 mm 10 mm 10 mm 10 mm 10 mm 10 mm
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 — downwards • for live parts — forwards — backwards — upwards — 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	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 50 mm 10 mm 50 mm 10 mm 50 mm 10 mm 10 mm 10 mm
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	vertical screw and snap-on mounting onto 35 mm standard mounting rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 50 mm 10 mm 50 mm 10 mm 10 mm 10 mm 10 mm 10 mm

protocol is supported • PROFINET IO protocol • PROFIsafe protocol • PROFIsafe protocol protocol is supported AS-Interface protocol No

Certificates/ approvals

General Product Approval

For use in hazardous locations Declaration of Conformity



Confirmation



EAC





Declaration of Conformity

Test Certificates

Marine / Shipping



Type Test Certificates/Test Report

Special Test Certificate







Marine / Shipping

other Railway









<u>Confirmation</u>

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=3RA2210-1JA16-2AP0

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA2210-1JA16-2AP0}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2210-1JA16-2AP0

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2210-1JA16-2AP0&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2210-1JA16-2AP0/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2210-1JA16-2AP0&objecttype=14&gridview=view1

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