SIEMENS

Data sheet

3RA2110-1GA15-1AP6



Fuseless motor starter Direct start 600VAC Size S00 4.5-6.3A 220/240VAC 50/60HZ screw connection For screw mounting Or 35 mm rail-mounting Type of coordination 1 1NO (contactor)

product brand name	SIRIUS
product designation	non-fused motor starter 3RA2
design of the product	direct starter
manufacturer's article number	
 of the supplied contactor 	3RT2015-1AP61
 of the supplied circuit-breakers 	3RV2011-1GA10
 of the supplied link module 	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 according to IEC 60068-2-27	6g / 11 ms
mechanical service life (switching cycles) of contactor typical	30 000 000
type of assignment	1
Ambient conditions	
ambient temperature	
 during operation 	-20 +60 °C
 during storage 	-50 +80 °C
 during transport 	-55 +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	4.5 6.3 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	4.9 A
operating power at AC-3	
 at 400 V rated value 	2 200 W
at 500 V rated value	3 000 W
Control circuit/ Control	
control supply voltage at AC	
 at 50 Hz rated value 	220 V

- of EO III wated walks	107 242 \/
at 50 Hz rated value	187 242 V
at 60 Hz rated value	240 V
• at 60 Hz rated value	192 264 V
apparent holding power of magnet coil at AC	4.8 VA
inductive power factor with the holding power of the coil	0.25
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	1
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	81.9 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	6.1 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	0.25 hp
— at 230 V rated value	0.5 hp
for 3-phase AC motor	
 — at 200/208 V rated value 	1 hp
— at 220/230 V rated value	1.5 hp
— at 460/480 V rated value	3 hp
— at 575/600 V rated value	5 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (Iq)	
conditional short on our carrent (14)	
• at 400 V according to IEC 60947-4-1 rated value	153 000 A
	153 000 A
• at 400 V according to IEC 60947-4-1 rated value	153 000 A vertical
• 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 Snap-mounted to DIN rail or screw-mounted with additional push-in lug
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 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 Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 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	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 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	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 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	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 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 Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing ofor grounded parts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 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 forwards for live parts forwards	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 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 backwards at the side downwards for live parts backwards backwards backwards backwards	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 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 - upwards - upwards - upwards - upwards - forwards - upwards - upwards	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 10 mm 10 mm 0 mm 20 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 backwards upwards downwards	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 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 for live parts downwards upwards downwards at the side downwards at the side downwards at the side downwards at the side	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 10 mm 10 mm 0 mm 20 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 backwards upwards at the side downwards backwards upwards at the side downwards at the side downwards at the side connections/ Terminals	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 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 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 Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 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 — backwards — backwards — torwards — backwards — upwards — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 mm 9 mm 10 mm screw-type terminals
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 — backwards — upwards — torwards — torwards	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 mm 9 mm 10 mm 20 mm 5 mm 20 mm 9 mm 10 mm 10 mm 9 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 — backwards — upwards — torwards — torwards — torwards — torwards — torwards — of or main contacts type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 mm 9 mm 10 mm 20 mm 20 mm 10 mm 20 mm 10 mm 9 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 — backwards — upwards — torwards — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 mm 9 mm 10 mm 20 mm 5 mm 20 mm 9 mm 10 mm 10 mm 9 mm
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proportion of dangerous failures with high demand rate 73 % according to SN 31920 protection class IP on the front according to IEC IP20 60529 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front

Certificates/ approvals

General Product Approval

For use in hazardous locations

Declaration of Conformity



Confirmation









Declaration of Conformity

Test Certificates

Marine / Shipping



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

Type Test Certificates/Test Report







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=3RA2110-1GA15-1AP6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2110-1GA15-1AP6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1GA15-1AP6

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2110-1GA15-1AP6&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1GA15-1AP6/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2110-1GA15-1AP6&objecttype=14&gridview=view1

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