SIEMENS

Data sheet

3RA2220-1KD24-0AP6



Fuseless motor starter Reversing operation 600VAC Size S0 9-12.5 Amp 220/240VAC 50/60HZ screw connection For snapping onto 60 mm busbar systems Type of coordination 2 IQ = 150 KA Also full fills type Of coordination 1 1NO+1NC (per contactor)

product brand name	SIRIUS
product designation	non-fused motor starter 3RA2
design of the product	reversing starter
manufacturer's article number	
 of the supplied contactor 	<u>3RT2024-1AP60</u>
 of the supplied circuit-breakers 	<u>3RV2011-1KA10</u>
 of the supplied RS assembly kit 	<u>3RA2923-1DB1</u>
 of the supplied busbar adapter 	8US1251-5NT10
 of the supplied link module 	<u>3RA2921-1AA00</u>
General technical data	
size of the circuit-breaker	S00
size of load feeder	SO
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 (operating cycles) of contactor typical	10 000 000
type of assignment	2
Substance Prohibitance (Date)	03/01/2017
mbient conditions	
ambient temperature	
 during operation 	-20 +60 °C
 during storage 	-50 +80 °C
during transport	-55 +80 °C
lain 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	9 12.5 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	11.5 A
operating power at AC-3	
• at 400 V rated value	5 500 W
• at 500 V rated value	7 500 W
Control circuit/ Control	

• at 50 Hz rated value	220 V
• at 50 Hz rated value	176 242 V
• at 60 Hz rated value	240 V
at 60 Hz rated value	192 264 V
apparent holding power of magnet coil at AC	7.2 VA
inductive power factor with the holding power of the coil	0.28
Auxiliary circuit	
number of NC contacts for auxiliary contacts	2
number of NO contacts for auxiliary contacts	2
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	162.5 A
UL/CSA 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	0.5 hp
— at 230 V rated value	2 hp
• for 3-phase AC motor	
— at 200/208 V rated value	3 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	7.5 hp
— at 575/600 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 	153 000 A
at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions	153 000 A
č	153 000 A vertical
Installation/ mounting/ dimensions	
Installation/ mounting/ dimensions mounting position	vertical
Installation/ mounting/ dimensions mounting position fastening method	vertical for snapping onto 60 mm busbar systems
Installation/ mounting/ dimensions mounting position fastening method height	vertical for snapping onto 60 mm busbar systems 260 mm
Installation/ mounting/ dimensions mounting position fastening method height width	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm
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 for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm
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	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm
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 — downwards • for live parts — forwards — backwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm
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	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 30 mm 30 mm
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 — downwards — backwards — downwards — backwards — downwards — backwards — downwards — backwards — downwards — backwards — upwards — backwards — backwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 10 mm
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 — oforwards — downwards — backwards — upwards — at the side — downwards — the side — upwards — upwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 10 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — backwards — at the side — downwards • for live parts — forwards — forwards — forwards — downwards — downwards — at the side — downwards — at the side	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 9 mm 10 mm 9 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — upwards — downwards — the side — downwards — at the side — downwards — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections for main contacts finely stranded with core end processing	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 10 mm 9 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — backwards — at the side — downwards • for live parts — forwards — backwards — backwards — backwards — upwards — downwards — the side — downwards — at the side — downwards — at the side — downwards — the side — the side <u>Connections/ Terminals</u> type of electrical connection for main current circuit type of connectable conductor cross-sections for main contacts finely	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 9 mm 10 mm 10 mm 9 mm 10 mm 20 mm 10 mm 10 mm 10 mm 10 mm 20 mm 10 mm 20
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — upwards — downwards — the side — downwards — at the side — downwards — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections for main contacts finely stranded with core end processing	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 9 mm 10 mm 10 mm 9 mm 10 mm 20 mm 10 mm 10 mm 10 mm 10 mm 20
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 — upwards — downwards — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections for main contacts stranded connectable conductor cross-section for main contacts finely stranded with core end processing Safety related data	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 0 mm 30 mm 9 mm 10 mm 9 mm 10 mm 9 mm 10 mm 9 mm 10 mm 9 mm screw-type terminals 1 10 mm², 2x (2.5 6 mm²) 1 6 mm²

touch protection on the front according to IEC 60529			finger-safe, for vertical contact from the front				
Certificates/ approvals							
General Product Appr	oval		For use in hazard- ous locations	Declaration of Conform	nity		
<u>Confirmation</u>		EHC	K ATEX	CE EG-Konf.	UK CA		
Test Certificates		Marine / Shipping					
Special Test Certific- ate	Type Test Certific- ates/Test Report	ABS	BUREAU VERITAS	Lloyd's Kegister uts	PRS		
Marine / Shipping			other	Railway			
RINA	RMRS		<u>Confirmation</u>	Vibration and Shock			

Further information

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

https://press.sjemens.com/global/en/pressrelease/sjemens-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=3RA2220-1KD24-0AP6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-1KD24-0AP6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1KD24-0AP6

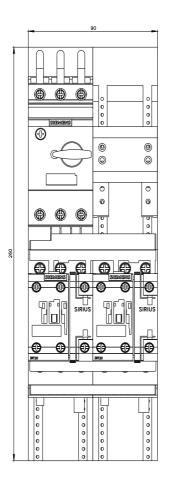
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

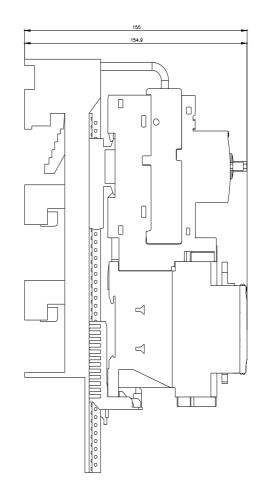
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2220-1KD24-0AP6&lang=en

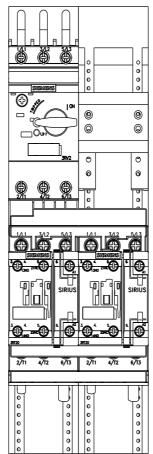
Characteristic: Tripping characteristics, I2t, Let-through current

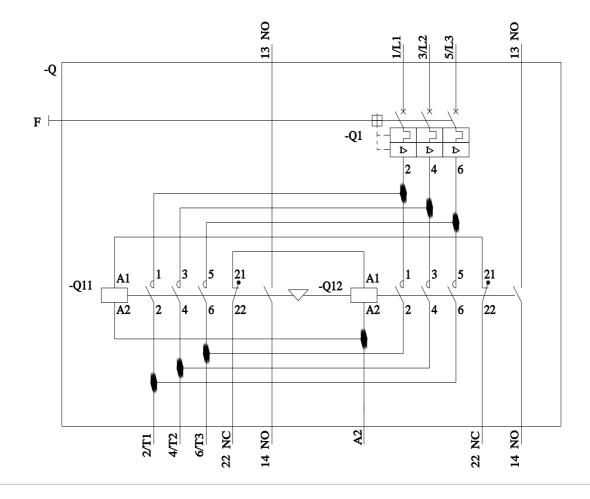
https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1KD24-0AP6/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2220-1KD24-0AP6&objecttype=14&gridview=view1









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