SIEMENS

Data sheet

3RA2125-1DA23-0AP6



Fuseless motor starter Direct start 600VAC Size S0 2.2-3.2A 220/240VAC 50/60HZ screw connection For screw mounting Or 35 mm rail-mounting Type of coordination 2 IQ = 150 KA Also full fills type Of coordination 1 1NO+1NC (MSP) 1NO+1NC (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 	<u>3RT2023-1AP60</u>		
 of the supplied circuit-breakers 	3RV2011-1DA15		
 of the supplied link module 	3RA2921-1AA00		
General technical data			
size of the circuit-breaker	S00		
size of load feeder	S0		
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	10 000 000		
type of assignment	2		
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	2.2 3.2 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	2.7 A		
operating power at AC-3			
 at 400 V rated value 	1 100 W		
at 500 V rated value	1 500 W		
	1 500 W		
• at 500 V rated value	1 500 W		

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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	41.6 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	2.8 A
 at 600 V rated value 	3.16 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	0.1 hp
— at 230 V rated value	0.25 hp
• for 3-phase AC motor	
— at 200/208 V rated value	0.5 hp
— at 220/230 V rated value	0.75 hp
— at 460/480 V rated value	1.5 hp
— at 575/600 V rated value	2 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (Iq)	magnetic
 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
Installation/ mounting/ dimensions	
Installation/ mounting/ dimensions mounting position	vertical
Installation/ mounting/ dimensions mounting position fastening method	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug
Installation/ mounting/ dimensions mounting position fastening method height	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm
Installation/ mounting/ dimensions mounting position fastening method height width	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm
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 193.1 mm 45 mm 97.1 mm
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 193.1 mm 45 mm 97.1 mm
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 193.1 mm 45 mm 97.1 mm 10 mm 0 mm
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 193.1 mm 45 mm 97.1 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 Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 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 Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 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 — downwards • for live parts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 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 Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 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 — downwards • for live parts — backwards — backwards — backwards	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 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 Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 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 — backwards — upwards — downwards — downwards — downwards — upwards — upwards — downwards	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 10 mm 10 mm 10 mm 10 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 — backwards — downwards — backwards — at the side — downwards — at the side — a downwards — backwards — upwards — at the side — at the side	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 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 — oforwards — oforwards — downwards — the side — downwards — at the side — downwards — backwards — upwards — at the side — downwards — at the side	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 9 mm 10 mm 9 mm 10 mm 9 mm 10 mm 9 mm 10 mm 9 mm 10 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 — forwards — backwards — backwards — upwards — downwards — at the side — 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 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 10 mm 10 mm 10 mm 10 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 — backwards — backwards — upwards — downwards — at the side — downwards — at the side — downwards — 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 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 9 mm 10 mm 9 mm 10 mm 9 mm 10 mm 9 mm 10 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 — forwards — backwards — backwards — upwards — at the side — downwards — at the side — downwards — a the side — downwards — a the side — downwards — a the side — of the side — the side — of the side — the side — the side — at the side — of the side — the sid	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 10 mm 30 mm 10 mm 30 mm 10 mm 2 x (2.5 6 mm ²)
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 — 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 stranded • at AWG cables for main contacts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 10 mm 9 mm 10 mm 2 mm 30 mm 10 mm 10 mm 2 mm 30 mm 10 mm 2 mm 30 mm 10 mm 2 (2.5 6 mm ²) 2 x (16 12), 2x (14 8)
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 — oforwards — 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 • at AWG cables for main contacts finely stranded with core end processing	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 10 mm 30 mm 10 mm 30 mm 10 mm 2 x (2.5 6 mm ²)
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 — 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 stranded • at AWG cables for main contacts connectable conductor cross-section for main contacts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 10 mm 9 mm 10 mm 2 mm 30 mm 10 mm 10 mm 2 mm 30 mm 10 mm 2 mm 30 mm 10 mm 2 (2.5 6 mm ²) 2 x (16 12), 2x (14 8)
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 — oforwards — upwards — upwards — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts finely stranded with core end processing	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 10 mm 9 mm 10 mm 2 mm 30 mm 10 mm 10 mm 2 mm 10 mm 2 mm 10 mm 2 (2.5 6 mm ²) 2 x (16 12), 2x (14 8)

proportion of dangerous failures with high demand rate according to SN 31920			73 %			
protection class IP on the front according to IEC 60529		IP20				
touch protection on the front according to IEC 60529		finger-safe, for vertical contact from the front				
Certificates/ approvals						
General Product Ap	proval	For use in ha		Declaration of Conformity	other	
Confirmation	EAC	(Ex)		CE EG-Konf.	Confirmation	

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=3RA2125-1DA23-0AP6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-1DA23-0AP6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1DA23-0AP6

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-1DA23-0AP6&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1DA23-0AP6/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-1DA23-0AP6&objecttype=14&gridview=view1

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