Data sheet

3RA2125-1BA23-0AP6



Fuseless motor starter Direct start 600VAC Size S0 1.4-2A 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 	3RT2023-1AP60
 of the supplied circuit-breakers 	3RV2011-1BA15
 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	1.4 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	1.9 A
operating power at AC-3	
at 400 V rated value	750 W
● at 500 V rated value	750 W
at 690 V rated value	1 100 W
Control circuit/ Control	
control supply voltage at AC	

 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	26 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
● at 480 V rated value	1.63 A
at 600 V rated value	1.72 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 230 V rated value	0.13 hp
• for 3-phase AC motor	
— at 460/480 V rated value	0.75 hp
— at 575/600 V rated value	1 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
Installation/ mounting/ dimensions	
	vertical
Installation/ mounting/ dimensions mounting position fastening method	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug
mounting position	
mounting position fastening method	Snap-mounted to DIN rail or screw-mounted with additional push-in lug
mounting position fastening method height	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm
mounting position fastening method height width	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm
mounting position fastening method height width depth	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm
mounting position fastening method height width depth required spacing	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm
mounting position fastening method height width depth required spacing • for grounded parts	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm
mounting position fastening method height width depth required spacing • for grounded parts — forwards	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards	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
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards	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
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side	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
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards	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
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts	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
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards	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
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards	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
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 — for live parts — forwards — backwards — backwards — upwards — at the side	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
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 — downwards • for lowe parts — forwards — backwards — backwards — backwards — upwards — upwards — downwards	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
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 — for live parts — forwards — backwards — backwards — upwards — at the side	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
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — at the side — downwards — torwards — torwards — backwards — backwards — backwards — at the side Connections/ Terminals	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 9 mm 10 mm 9 mm 10 mm 9 mm 10 mm
mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — at the side — downwards • for live parts — forwards — backwards — upwards — at the side Connections/ Terminals type of electrical connection for main current circuit	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 9 mm 10 mm 9 mm 10 mm 9 mm 10 mm
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 • for live parts — forwards — backwards — upwards — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections	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 0 mm 30 mm 9 mm 10 mm screw-type terminals
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 — a the side — downwards • for live parts — forwards — backwards — upwards — a 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	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 0 mm 30 mm 10 mm screw-type terminals 1 10 mm², 2x (2.5 6 mm²)
mounting position fastening method height width depth required spacing	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 somm 10 mm 10 mm 10 mm 20 mm 30 mm 30 mm 10 mm 20 mm 30 mm 30 mm 30 mm 30 mm 30 mm 10 mm 20 mm
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 — a the side — downwards — towards — backwards — 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 connectable conductor cross-section for main contacts finely stranded with core end processing Safety related data	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 0 mm 30 mm 9 mm 10 mm 2 mm 30 mm 10 mm
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 — a the side — downwards — towards — backwards — 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 connectable conductor cross-section for main contacts finely stranded with core end processing Safety related data B10 value with high demand rate according to SN 31920	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 0 mm 30 mm 9 mm 10 mm 20 mm 30 mm 10 mm
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 — a the side — downwards — towards — backwards — 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 connectable conductor cross-section for main contacts finely stranded with core end processing Safety related data	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 0 mm 30 mm 9 mm 10 mm 2 mm 30 mm 10 mm

IP20 protection class IP on the front according to IEC 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

other

Confirmation







Confirmation

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=3RA2125-1BA23-0AP6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-1BA23-0AP6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1BA23-0AP6

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-1BA23-0AP6&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1BA23-0AP6/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-1BA23-0AP6&objecttype=14&gridview=view1

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