3RA2125-1GA24-0AK6

Data sheet



Fuseless motor starter Direct start 600VAC Size S0 4.5-6.3A 110/120VAC 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 	3RT2024-1AK60
 of the supplied circuit-breakers 	3RV2011-1GA15
 of the supplied link module 	3RA2921-1AA00
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
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	5 A
operating power at AC-3	
aharami 9 harrar arriva a	
• at 400 V rated value	2 200 W
	2 200 W 3 000 W
at 400 V rated value	
at 400 V rated value at 500 V rated value	
at 400 V rated value at 500 V rated value Control circuit/ Control	
at 400 V rated value at 500 V rated value Control circuit/ Control control supply voltage at AC	3 000 W

a at CO Lie rated value	96 132 V
at 60 Hz rated value apparent holding power of magnet coil at AC	96 132 V 7.2 VA
apparent holding power of magnet coil at AC	
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	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	6.3 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)	
 at 400 V according to IEC 60947-4-1 rated value 	153 000 A
at 500 V according to IEC 60947-4-1 rated value	100 000 A
Installation/ mounting/ dimensions	
mounting position	vertical
fastening method	Snap-mounted to DIN rail or screw-mounted with additional push-in lug
fastening method height	193.1 mm
height	193.1 mm
height width	193.1 mm 45 mm
height width depth	193.1 mm 45 mm
height width depth required spacing	193.1 mm 45 mm
height width depth required spacing • for grounded parts	193.1 mm 45 mm 97.1 mm 10 mm 0 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — upwards	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — downwards • for love parts — forwards — backwards — backwards — upwards — downwards	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 10 mm
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 — backwards — upwards — downwards — at the side	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 10 mm
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 Connections/ Terminals	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 0 mm 9 mm 10 mm 9 mm 10 mm 9 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — torwards — backwards — backwards — backwards — upwards — at the side Connections/ Terminals type of electrical connection for main current circuit	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 0 mm 9 mm 10 mm 9 mm 10 mm 50 mm 10 mm 9 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — torwards — backwards — backwards — 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 connectable conductor cross-section for main contacts finely	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 0 mm 30 mm 10 mm 30 mm 10 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — backwards — upwards — 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 connectable conductor cross-section for main contacts finely stranded with core end processing	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 0 mm 30 mm 10 mm 30 mm 10 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — backwards — upwards — 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	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 9 mm 1 10 mm 9 mm 1 10 mm 9 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — backwards — upwards — 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 B10 value with high demand rate according to SN 31920 proportion of dangerous failures with high demand rate	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 screw-type terminals 1 10 mm², 2x (2.5 6 mm²) 1 6 mm²
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — 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 B10 value with high demand rate according to SN 31920 proportion of dangerous failures with high demand rate according to SN 31920	193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 9 mm 10 mm 9 mm
height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — 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 B10 value with high demand rate according to SN 31920 proportion of dangerous failures with high demand rate according to SN 31920 protection class IP on the front according to IEC 60529	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 9 mm

For use in hazardous locations

Declaration of Conformity

Confirmation











Test Certificates

Marine / Shipping

Special Test Certificate

Type Test Certificates/Test Report









Marine / Shipping

Railway







Confirmation

other

Vibration and Shock

Further information

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

https://press.siemens.com/global/en/pressrelease/siemens-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=3RA2125-1GA24-0AK6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-1GA24-0AK6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1GA24-0AK6

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

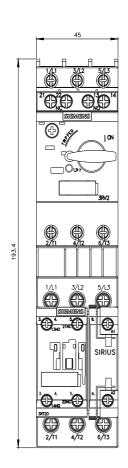
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-1GA24-0AK6&lang=en

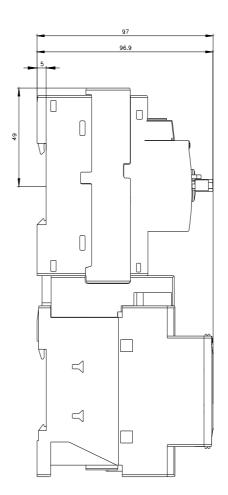
Characteristic: Tripping characteristics, I²t, Let-through current

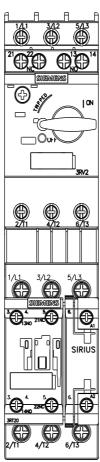
https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1GA24-0AK6/char

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RA2125-1GA24-0AK6\&objecttype=14\&gridview=view1}$







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