SIEMENS

Data sheet

3RA2115-1BA15-1AK6



Fuseless motor starter Direct start 600VAC Size S00 1.4-2A 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 (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 	3RT2015-1AK61
 of the supplied circuit-breakers 	3RV2011-1BA15
 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	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	

-t 50 H=tdl	440.1/
at 50 Hz rated value	110 V
at 50 Hz rated value	93.5 121 V
at 60 Hz rated value	120 V
• at 60 Hz rated value	96 132 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	1
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 690 V according to IEC 60947-4-1 rated value 	100 000 A
 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	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm
fastening method height width	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm
fastening method height width depth	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm
fastening method height width depth required spacing	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm
fastening method height width depth required spacing • for grounded parts	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm
fastening method height width depth required spacing • for grounded parts — forwards	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm
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 167.2 mm 45 mm 97.1 mm 0 mm 0 mm
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 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm
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 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 mm
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 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm
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 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 mm 10 mm
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 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 9 mm 10 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards	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
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — upwards	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 20 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — downwards — downwards — forwards — backwards — backwards — upwards — upwards — upwards — downwards	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
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 — at the side — downwards — forwards — backwards — backwards — upwards — at the side	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 20 mm
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 — forwards — forwards — backwards — backwards — upwards — at the side Connections/ Terminals	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 9 mm 10 mm 9 mm 10 mm 9 mm
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	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
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — to downwards • for live parts — forwards — backwards — 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 167.2 mm 45 mm 97.1 mm 0 mm 0 mm 20 mm 10 mm 0 mm 0 mm 20 mm 9 mm 10 mm 20 mm 20 mm 50 mm 50 mm 50 mm 50 mm 50 mm 60 mm 60 mm 70 mm 70 mm 80 mm 80 mm 80 mm 90 mm 90 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — torwards — torwards — backwards — backwards — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded	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 0 mm comm comm comm comm comm comm comm c
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — backwards — towards — backwards — 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	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 20 mm 20 mm 10 mm 20 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — upwards — 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	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 0 mm comm comm comm comm comm comm comm c
fastening method 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 — downwards — 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 • at AWG cables for main contacts connectable conductor cross-section for main contacts finely stranded with core end processing	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 20 mm 20 mm 10 mm 20 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — upwards — 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	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 20 mm 20 mm 10 mm 20 mm

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



Type Test Certificates/Test Report

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





other



Marine / Shipping





Confirmation

Vibration and Shock

Railway

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=3RA2115-1BA15-1AK6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2115-1BA15-1AK6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2115-1BA15-1AK6

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2115-1BA15-1AK6&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2115-1BA15-1AK6/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2115-1BA15-1AK6&objecttype=14&qridview=view1

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