



FUSELESS MOTOR STARTER DIRECT START 600V AC SZ S0 20-25A  
110/120V AC 50/60HZ SCREW CONNECTION FOR SCREW MOUNTING OR 35  
MM RAIL-MOUNTING TYPE OF COORDINATION 2 IQ = 150 KA ALSO  
FULFILLS 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	<a href="#">3RT2027-1AK60</a>
• of the supplied circuit-breakers	<a href="#">3RV2021-4DA15</a>
• of the supplied link module	<a href="#">3RA2921-1AA00</a>
<b>General technical data</b>	
size of the circuit-breaker	S0
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 (operating cycles) of contactor typical	10 000 000
type of assignment	2
Weight	0.76 kg
<b>Ambient conditions</b>	
ambient temperature	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-55 ... +80 °C
<b>Main circuit</b>	
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	20 ... 25 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	22 A
operating power at AC-3	
• at 400 V rated value	11 000 W
• at 500 V rated value	15 000 W
<b>Control circuit/ Control</b>	
control supply voltage at AC	
• at 50 Hz rated value	110 V
• at 50 Hz rated value	88 ... 121 V

• at 60 Hz rated value	120 V
• at 60 Hz rated value	96 ... 132 V
<b>apparent holding power of magnet coil at AC</b>	9.4 VA
<b>inductive power factor with the holding power of the coil</b>	0.28
<b>Auxiliary circuit</b>	
<b>number of NC contacts for auxiliary contacts</b>	2
<b>number of NO contacts for auxiliary contacts</b>	2
<b>Protective and monitoring functions</b>	
<b>trip class</b>	CLASS 10
<b>design of the overload release</b>	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	325 A
<b>UL/CSA ratings</b>	
<b>full-load current (FLA) for 3-phase AC motor</b>	
• at 480 V rated value	22.2 A
• at 600 V rated value	21.9 A
<b>yielded mechanical performance [hp]</b>	
• for single-phase AC motor	
— at 110/120 V rated value	2 hp
— at 230 V rated value	3 hp
• for 3-phase AC motor	
— at 200/208 V rated value	5 hp
— at 220/230 V rated value	7.5 hp
— at 460/480 V rated value	15 hp
— at 575/600 V rated value	20 hp
<b>Short-circuit protection</b>	
<b>product function short circuit protection</b>	Yes
<b>design of the short-circuit trip</b>	magnetic
<b>conditional short-circuit current (I<sub>q</sub>)</b>	
• 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
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	vertical
<b>fastening method</b>	Snap-mounted to DIN rail or screw-mounted with additional push-in lug
<b>height</b>	193.1 mm
<b>width</b>	45 mm
<b>depth</b>	97.1 mm
<b>required spacing</b>	
• for grounded parts	
— forwards	10 mm
— backwards	0 mm
— upwards	30 mm
— at the side	9 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— backwards	0 mm
— upwards	30 mm
— downwards	10 mm
— at the side	9 mm
<b>Connections/ Terminals</b>	
type of electrical connection for main current circuit	screw-type terminals
type of connectable conductor cross-sections for main contacts stranded	1 ... 10 mm <sup>2</sup> , 2x (2.5 ... 6 mm <sup>2</sup> )
connectable conductor cross-section for main contacts finely stranded with core end processing	1 ... 6 mm <sup>2</sup>
<b>Safety related data</b>	
proportion of dangerous failures with high demand rate according to SN 31920	73 %
<b>B10 value with high demand rate according to SN 31920</b>	1 000 000
<b>Electrical Safety</b>	
<b>protection class IP on the front according to IEC 60529</b>	IP20

touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
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#### Approvals Certificates

General Product Approval	For use in hazardous locations	Test Certificates
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[Special Test Certificate](#)

Test Certificates	Marine / Shipping
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[Type Test Certificates/Test Report](#)



Marine / Shipping	other	Railway	Environment
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[Confirmation](#)

[Special Test Certificate](#)

[Environmental Confirmations](#)

#### Further information

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=3RA2125-4DA27-0AK6>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-4DA27-0AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4DA27-0AK6>

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

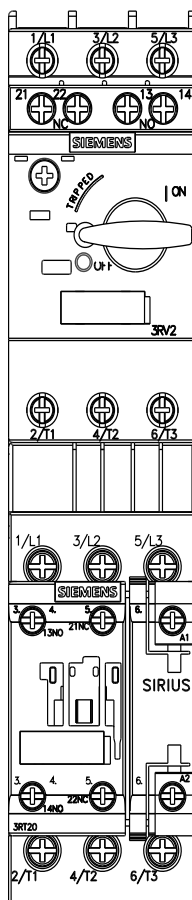
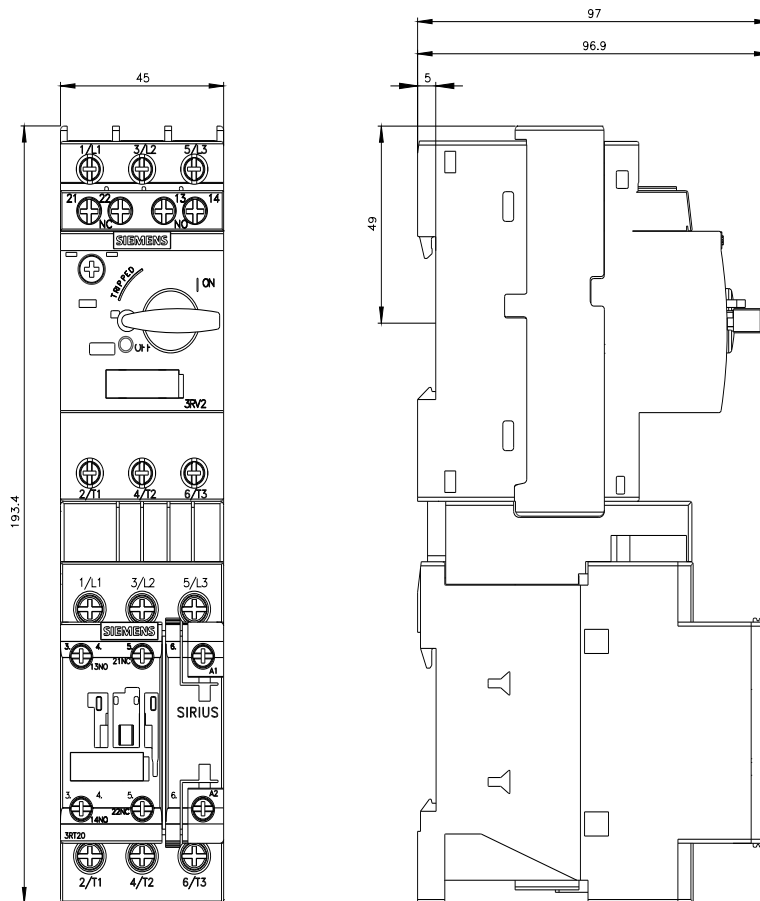
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2125-4DA27-0AK6&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-4DA27-0AK6&lang=en)

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4DA27-0AK6/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-4DA27-0AK6&objecttype=14&gridview=view1>





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