



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	
<ul style="list-style-type: none"> • of the supplied contactor • of the supplied circuit-breakers • of the supplied link module 	3RT2027-1AK60 3RV2021-4DA15 3RA2921-1AA00
General technical data	
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	6 g / 11 ms
mechanical service life (operating cycles) of contactor typical	10 000 000
type of coordination	2
Net Weight	0.76 kg
Ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport 	-20 ... +60 °C -50 ... +80 °C -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	20 ... 25 A
operating voltage	
<ul style="list-style-type: none"> • rated value • at AC-3 rated value maximum 	690 V 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	
<ul style="list-style-type: none"> • at 400 V rated value • at 500 V rated value 	11 000 W 15 000 W
Control circuit/ Control	
control supply voltage at AC	
<ul style="list-style-type: none"> • at 50 Hz rated value 	110 V

<ul style="list-style-type: none"> • at 50 Hz rated value 	88 ... 121 V
<ul style="list-style-type: none"> • at 60 Hz rated value 	120 V
<ul style="list-style-type: none"> • at 60 Hz rated value 	96 ... 132 V
apparent holding power of magnet coil at AC	9.4 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	325 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
<ul style="list-style-type: none"> • at 480 V rated value 	22.2 A
<ul style="list-style-type: none"> • at 600 V rated value 	21.9 A
yielded mechanical performance [hp]	
<ul style="list-style-type: none"> • for single-phase AC motor <ul style="list-style-type: none"> — at 110/120 V rated value 	2 hp
<ul style="list-style-type: none"> — at 230 V rated value 	3 hp
<ul style="list-style-type: none"> • for 3-phase AC motor <ul style="list-style-type: none"> — at 200/208 V rated value 	5 hp
<ul style="list-style-type: none"> — at 220/230 V rated value 	7.5 hp
<ul style="list-style-type: none"> — at 460/480 V rated value 	15 hp
<ul style="list-style-type: none"> — at 575/600 V rated value 	20 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (I_q)	
<ul style="list-style-type: none"> • at 400 V according to IEC 60947-4-1 rated value 	153 000 A
<ul style="list-style-type: none"> • 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
height	193 mm
width	45 mm
depth	97 mm
required spacing	
<ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — forwards 	10 mm
<ul style="list-style-type: none"> — backwards 	0 mm
<ul style="list-style-type: none"> — upwards 	30 mm
<ul style="list-style-type: none"> — at the side 	9 mm
<ul style="list-style-type: none"> — downwards 	10 mm
<ul style="list-style-type: none"> • for live parts <ul style="list-style-type: none"> — forwards 	10 mm
<ul style="list-style-type: none"> — backwards 	0 mm
<ul style="list-style-type: none"> — upwards 	30 mm
<ul style="list-style-type: none"> — downwards 	10 mm
<ul style="list-style-type: none"> — at the side 	9 mm
Connections/ Terminals	
type of electrical connection for main current circuit	screw-type terminals
type of connectable conductor cross-sections for main contacts stranded	1 ... 10 mm ² , 2x (2.5 ... 6 mm ²)
connectable conductor cross-section for main contacts finely stranded with core end processing	1 ... 6 mm ²
Safety related data	
proportion of dangerous failures with high demand rate according to SN 31920	73 %

B10 value with high demand rate according to SN 31920	1 000 000
Electrical Safety	
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

Approvals Certificates

Environment	General Product Approval	For use in hazardous locations
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[Environmental Confirmations](#)



Test Certificates

Maritime application

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Maritime application

other



[Confirmation](#)

[Confirmation](#)



Railway

[Special Test Certificate](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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>

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, ...)

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-4DA27-0AK6&lang=en

Cax online generator

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

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)



