

FUSELESS MOTOR STARTER DIRECT START 600V AC SZ S0 9-12.5A
110/120V AC 50/60HZ SCREW CONNECTION FOR SNAPPING ONTO 60 MM
BUSBAR SYSTEMS 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	3RT2024-1AK60
• of the supplied circuit-breakers	3RV2011-1KA15
• of the supplied busbar adapter	8US1251-5NT10
• 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 (operating cycles) of contactor typical	10 000 000
type of coordination	2
Weight	1.06 kg
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	9 ... 12.5 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	11.5 A
operating power at AC-3	
• at 400 V rated value	5 500 W
• at 500 V rated value	7 500 W
Control circuit/ Control	
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
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	162.5 A	
UL/CSA ratings		
full-load current (FLA) for 3-phase AC motor - at 480 V rated value - at 600 V rated value	11 A 11 A	
yielded mechanical performance [hp] - for single-phase AC motor - at 110/120 V rated value - at 230 V rated value - for 3-phase AC motor - at 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value	0.5 hp 2 hp 3 hp 3 hp 7.5 hp 10 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		
mounting position	vertical	
fastening method	for snapping onto 60 mm busbar systems	
height	260 mm	
width	45 mm	
depth	155 mm	
required spacing - for grounded parts - forwards - backwards - upwards - at the side - downwards - for live parts - forwards - backwards - upwards - downwards - at the side	10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 10 mm 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 mm², 2x (2.5 ... 6 mm²)	
connectable conductor cross-section for main contacts finely stranded with core end processing	1 ... 6 mm²	
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		
General Product Approval	For use in hazardous locations	Test Certificates



[Type Test Certificates/Test Report](#)

Test Certificates		Maritime application				
Special Test Certificate		 ABS	 BUREAU VERITAS	 DNV	 LRS	 PRS
Maritime application		other		Railway		Environment
 RINA	 RMRS			Confirmation	Special Test Certificate	Environmental Confirmations

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=3RA2125-1KD24-0AK6>
Cax online generator
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-1KD24-0AK6>
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1KD24-0AK6>
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-1KD24-0AK6&lang=en
Characteristic: Tripping characteristics, I²t, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1KD24-0AK6/char>
Further characteristics (e.g. electrical endurance, switching frequency)
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-1KD24-0AK6&objecttype=14&gridview=view1>

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