

FUSELESS MOTOR STARTER DIRECT START 600V AC SZ S0 20-25A 24V DC
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	3RT2027-1BB40
• of the supplied circuit-breakers	3RV2021-4DA15
• of the supplied busbar adapter	8US1251-5NT10
• of the supplied link module	3RA2921-1BA00
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	6g / 11 ms
mechanical service life (operating cycles) of contactor typical	10 000 000
type of assignment	2
Weight	1.25 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	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
Control circuit/ Control	
control supply voltage at DC rated value	24 V
holding power of magnet coil at DC	5.9 W
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	

• at 480 V rated value • at 600 V rated value	22.2 A 21.9 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	2 hp 3 hp 5 hp 7.5 hp 15 hp 20 hp				
Short-circuit protection					
product function short circuit protection	Yes				
design of the short-circuit trip	magnetic				
conditional short-circuit current (I_q) • at 400 V according to IEC 60947-4-1 rated value • at 500 V according to IEC 60947-4-1 rated value	153 000 A 100 000 A				
Installation/ mounting/ dimensions					
mounting position	vertical				
fastening method	for snapping onto 60 mm busbar systems				
height	260 mm				
width	45 mm				
depth	165 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			
 EG-Konf.		 UL		 ATEX	Special Test Certificate
Test Certificates	Marine / Shipping				

[Type Test Certificates/Test Report](#)



Marine / Shipping		other	Railway	Dangerous goods	Environment
		Confirmation	Special Test Certificate	Transport Information	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=3RA2125-4DD27-0BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-4DD27-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4DD27-0BB4>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-4DD27-0BB4&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4DD27-0BB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-4DD27-0BB4&objecttype=14&gridview=view1>

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