



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 16...22 A 24 V DC Spring-type terminal for 60 mm busbar systems (also fulfills type of coordination 1) Type of coordination 2, I_q = 150 kA 1 NO+1 NC (contactor)

product brand name	SIRIUS
product designation	Direct (on-line) starter
design of the product	for 60 mm busbars
product type designation	3RA21
manufacturer's article number	
<ul style="list-style-type: none"> • of the supplied contactor • of the supplied circuit-breakers • of the supplied busbar adapter • of the supplied link module 	3RT2027-2BB40 3RV2021-4CA20 8US1251-5NT11 3RA2921-2AA00
General technical data	
size of the circuit-breaker	S0
size of load feeder	S0
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
degree of protection NEMA rating	other
shock resistance according to IEC 60068-2-27	6g / 11 ms
mechanical service life (switching cycles) of contactor typical	10 000 000
type of assignment	2
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
Substance Prohibitation (Date)	10/01/2009
Ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport 	-20 ... +60 °C -50 ... +80 °C -50 ... +80 °C
temperature compensation	-20 ... +60 °C
relative humidity during operation	10 ... 95 %
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	16 ... 22 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		
• at 400 V rated value	11 000 W	
Control circuit/ Control		
type of voltage of the control supply voltage	DC	
control supply voltage at DC		
• rated value	24 V	
• rated value	24 ... 24 V	
holding power of magnet coil at DC	5.9 W	
Auxiliary circuit		
product extension auxiliary switch	Yes	
Protective and monitoring functions		
trip class	CLASS 10	
design of the overload release	thermal (bimetallic)	
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	150 000 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	20 mm	
— backwards	0 mm	
— upwards	50 mm	
— at the side	20 mm	
— downwards	10 mm	
• for live parts		
— forwards	20 mm	
— backwards	0 mm	
— upwards	50 mm	
— downwards	10 mm	
— at the side	20 mm	
Connections/ Terminals		
type of electrical connection		
• for main current circuit	spring-loaded terminals	
• for auxiliary and control circuit	spring-loaded terminals	
Safety related data		
B10 value with high demand rate according to SN 31920	1 000 000	
proportion of dangerous failures		
• with high demand rate according to SN 31920	73 %	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front	
Communication/ Protocol		
protocol is supported		
• PROFINET IO protocol	No	
• PROFIsafe protocol	No	
protocol is supported AS-Interface protocol	No	
Certificates/ approvals		
General Product Approval	For use in hazard-ous locations	Declaration of Conformity



[Confirmation](#)



EG-Konf.

Declaration of Conformity	Test Certificates	Marine / Shipping
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



LRS

Marine / Shipping	other	Railway
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[Confirmation](#)

[Vibration and Shock](#)

Dangerous Good

[Transport Information](#)

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=3RA2120-4CH27-0BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-4CH27-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4CH27-0BB4>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-4CH27-0BB4&lang=en

Characteristic: Tripping characteristics, I^t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4CH27-0BB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-4CH27-0BB4&objecttype=14&gridview=view1>

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