



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 16...22 A
230 V AC 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 	3RT2027-2AP00 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	AC	
control supply voltage at AC		
• at 50 Hz rated value	230 V	
• at 50 Hz rated value	230 ... 230 V	
apparent holding power of magnet coil at AC	9.8 VA	
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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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



LRS

Marine / Shipping	other
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[Environmental Confirmations](#)

[Confirmation](#)

Railway

[Vibration and Shock](#)

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=3RA2120-4CH27-0AP0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-4CH27-0AP0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4CH27-0AP0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-4CH27-0AP0&lang=en

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4CH27-0AP0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-4CH27-0AP0&objecttype=14&gridview=view1>

last modified:

2/16/2022