Data sheet 3RA2120-4BD27-0BB4



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 13...20 A 24 V DC screw terminal for 60 mm busbar systems (also fulfills type of coordination 1) Type of coordination 2, Iq = 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	
 of the supplied contactor 	<u>3RT2027-1BB40</u>
 of the supplied circuit-breakers 	3RV2021-4BA10
 of the supplied busbar adapter 	<u>8US1251-5NT10</u>
 of the supplied link module 	3RA2921-1BA00
General technical data	
size of the circuit-breaker	S0
size of load feeder	S0
power loss [W] for rated value of the current	
 at AC in hot operating state per pole 	5.8 W
 without load current share typical 	5.9 W
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 (operating 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
reference code according to IEC 81346-2:2019	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
ambient temperature	
during operation	-20 +60 °C
during storage	-50 +80 °C
during transport	-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	13 20 A
operating voltage	
rated value	690 V
• at AC-3 rated value maximum	690 V

at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current	
• at AC-3 at 400 V rated value	20 A
at AC-3e at 400 V rated value	20 A
operating power	
• at AC-3	
— at 400 V rated value	7 500 W
• at AC-3e	
— at 400 V rated value	7 500 kW
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)
response value current of instantaneous short-circuit trip unit	260 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor • at 480 V rated value	20 A
	20 A
• at 600 V rated value	20 A
yielded mechanical performance [hp]	
• for single-phase AC motor	461
— at 110/120 V rated value	1.5 hp
— at 230 V rated value	3 hp
• for 3-phase AC motor	
— at 200/208 V rated value	7.5 hp
 — at 220/230 V rated value 	7.5 hp
— at 460/480 V rated value	15 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	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
	10 mm
— at the side	10 mm 20 mm

General Product Approval	For use in hazard-
Certificates/ approvals	
protocol is supported AS-Interface protocol	No
PROFIsafe protocol	No
 PROFINET IO protocol 	No
protocol is supported	
Communication/ Protocol	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
 with high demand rate according to SN 31920 	73 %
proportion of dangerous failures	
B10 value with high demand rate according to SN 31920	1 000 000
Safety related data	
 for auxiliary and control circuit 	screw-type terminals
for main current circuit	screw-type terminals

Confirmation

General Product Approval







ous locations



Declaration of Conformity



Test Certificates

Marine / Shipping

Type Test Certificates/Test Report Special Test Certificate









Marine / Shipping





Confirmation

other

Vibration and Shock

Railway

Transport Information

Dangerous Good

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RA2120-4BD27-0BB4

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-4BD27-0BB4

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4BD27-0BB4

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

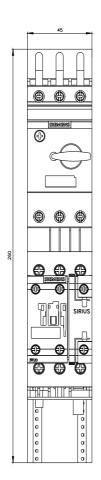
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-4BD27-0BB4&lang=en

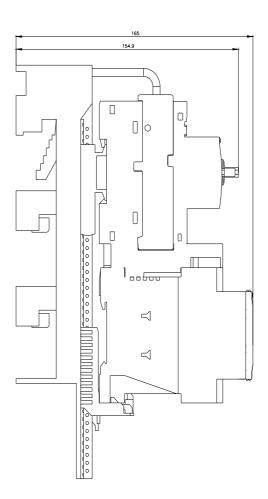
Characteristic: Tripping characteristics, I2t, Let-through current

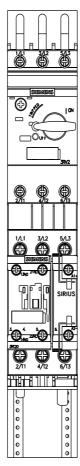
https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4BD27-0BB4/char

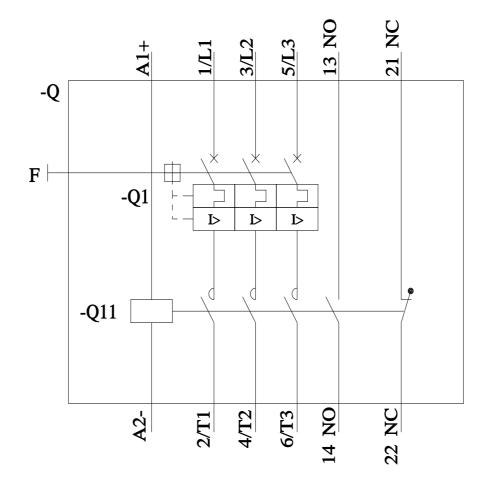
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-4BD27-0BB4&objecttype=14&gridview=view1









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