Data sheet 3RA2120-4ND27-0BB4



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 23.0...28.0 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 	3RV2021-4NA10
 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 	6.7 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	23 28 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 	28 A
• at AC-3e at 400 V rated value	28 A
operating power	
• at AC-3	
— at 400 V rated value	15 000 W
• at AC-3e	
— at 400 V rated value	15 000 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	364 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	27 A
at 400 V rated value at 600 V rated value	27 A
	ZIA
yielded mechanical performance [hp]	
• for single-phase AC motor	O ha
— at 110/120 V rated value	2 hp
— at 230 V rated value	5 hp
• for 3-phase AC motor	
— at 200/208 V rated value	7.5 hp
— at 220/230 V rated value	10 hp
— at 460/480 V rated value	20 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
— at the side	
— at the side	20 mm
	20 mm
Connections/ Terminals type of electrical connection	20 mm

for main current circuit	screw-type terminals	
 for auxiliary and control circuit 	screw-type terminals	
Safety related data		
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		

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General Product Approval

For use in hazardous locations

Declaration of Conformity

Confirmation











Test Certificates

Marine / Shipping

Special Test Certificate

Type Test Certificates/Test Report









Marine / Shipping

other

Railway

Dangerous Good







Confirmation

Vibration and Shock

Transport Information

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=3RA2120-4ND27-0BB4

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA2120-4ND27-0BB4}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4ND27-0BB4

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

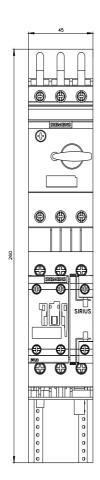
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-4ND27-0BB4&lang=en

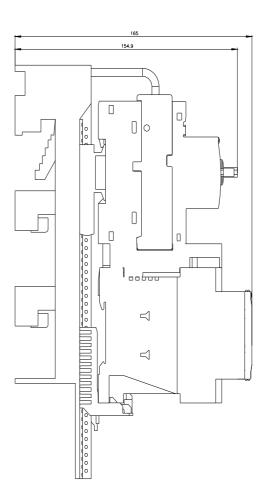
Characteristic: Tripping characteristics, I2t, Let-through current

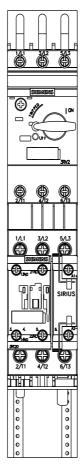
https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4ND27-0BB4/char

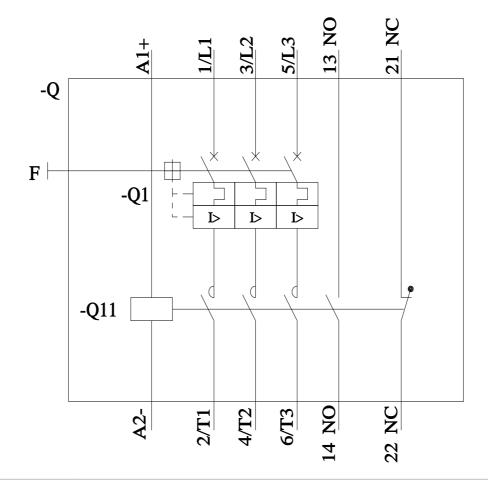
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-4ND27-0BB4&objecttype=14&gridview=view1









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