SIEMENS

Data sheet

3RA2120-1GH24-0BB4



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 4.50...6.30 A 24 V DC Spring-type 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>3RT2024-2BB40</u>		
 of the supplied circuit-breakers 	3RV2021-1GA20		
 of the supplied busbar adapter 	<u>8US1251-5NT11</u>		
 of the supplied link module 	3RA2921-2AA00		
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 	2.7 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)	03/01/2017		
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	4.5 6.3 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	33 33 1 IZ		
at AC-3 at 400 V rated value	6.3 A		
at AC-3e at 400 V rated value	6.3 A		
operating power			
• at AC-3			
— at 400 V rated value	2 200 W		
• at AC-3e			
— at 400 V rated value	2 200 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	82 A		
UL/CSA ratings			
full-load current (FLA) for 3-phase AC motor			
at 480 V rated value	6.3 A		
at 600 V rated value	6.3 A		
yielded mechanical performance [hp]			
for single-phase AC motor			
— at 110/120 V rated value	0.25 hp		
— at 230 V rated value	0.75 hp		
• for 3-phase AC motor			
— at 200/208 V rated value	2 hp		
— at 220/230 V rated value	2 hp		
— at 460/480 V rated value	5 hp		
— at 575/600 V rated value	5 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	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	No			
protocol is supported AS-Interface protocol	No				
Certificates/ approvals					
General Product Approval		For use in hazard- ous locations	Declaration of Conformity		

Confirmation











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).

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$

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=3RA2120-1GH24-0BB4

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1GH24-0BB4

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1GH24-0BB4

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

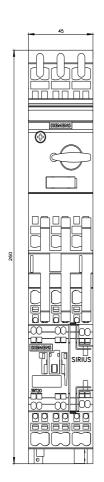
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1GH24-0BB4&lang=en

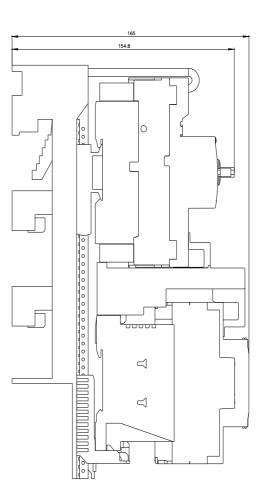
Characteristic: Tripping characteristics, I2t, Let-through current

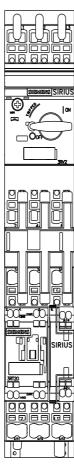
https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1GH24-0BB4/char

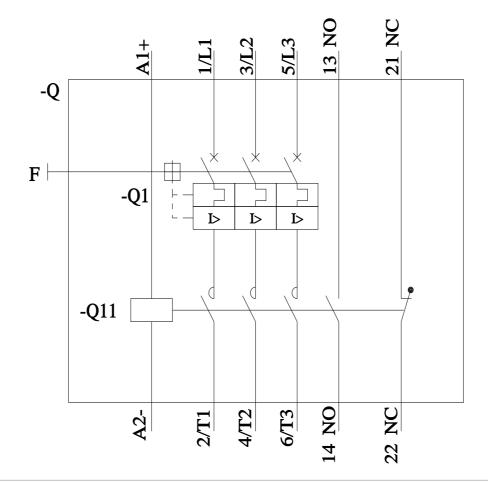
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1GH24-0BB4&objecttype=14&gridview=view1









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