# **SIEMENS**

#### **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	
<ul> <li>of the supplied contactor</li> </ul>	<u>3RT2027-1BB40</u>
<ul> <li>of the supplied circuit-breakers</li> </ul>	3RV2021-4BA10
<ul> <li>of the supplied busbar adapter</li> </ul>	<u>8US1251-5NT10</u>
<ul> <li>of the supplied link module</li> </ul>	3RA2921-1BA00
General technical data	
size of the circuit-breaker	SO
size of load feeder	SO
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state per pole</li> </ul>	5.8 W
<ul> <li>without load current share typical</li> </ul>	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
reference code according to IEC 81346-2:2019	Q
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1
Weight	1.477 kg
Ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-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
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V

	20.17
operating frequency rated value 50	90 V
	0 60 Hz
operational current	
	0 A
	0 A
operating power	
• at AC-3	
	500 W
• at AC-3e	
	500 W
Control circuit/ Control	
type of voltage of the control supply voltage	OC .
control supply voltage at DC rated value 24	4 V
holding power of magnet coil at DC 5.	.9 W
Auxiliary circuit	
product extension auxiliary switch	'es
Protective and monitoring functions	
trip class C	CLASS 10
design of the overload release th	nermal (bimetallic)
response value current of instantaneous short-circuit trip unit	60 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	0 A
• at 600 V rated value	0 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— 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
<ul><li>— at 220/230 V rated value</li><li>7.</li></ul>	.5 hp
— at 460/480 V rated value	5 hp
Short-circuit protection	
product function short circuit protection	'es
· · · · · · · · · · · · · · · · · · ·	nagnetic
conditional short-circuit current (Iq)	
	50 000 A
Installation/ mounting/ dimensions	
	ertical
	or snapping onto 60 mm busbar systems
	60 mm
	5 mm
	65 mm
required spacing	
for grounded parts	
	0 mm
	mm
	0 mm
·	0 mm
	0 mm
for live parts	· · · · · ·
- Tot live parte	0 mm
— forwards	mm
— backwards 0	
<ul><li>backwards</li><li>upwards</li><li>50</li></ul>	0 mm
<ul> <li>backwards</li> <li>upwards</li> <li>downwards</li> </ul>	0 mm 0 mm
<ul> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul>	0 mm
<ul> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> Connections/ Terminals	0 mm 0 mm
— backwards         0           — upwards         56           — downwards         10           — at the side         20           Connections/ Terminals           type of electrical connection	0 mm 0 mm 0 mm
backwards 0 upwards 56 downwards 116 at the side 26  Connections/ Terminals  type of electrical connection  ● for main current circuit set	0 mm 0 mm

Safety related data	
product function suitable for safety function	Yes
Electrical Safety	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Communication/ Protocol	
protocol is supported	
<ul> <li>PROFINET IO protocol</li> </ul>	No
PROFIsafe protocol	No
protocol is supported AS-Interface protocol	No
Approvals Certificates	

**General Product Approval** 

For use in hazardous locations





Confirmation







**Test Certificates** 

Marine / Shipping

Type Test Certificates/Test Report

Special Test Certificate









Marine / Shipping

other

Railway

**Dangerous goods** 







Confirmation

Special Test Certific-

**Transport Information** 

#### **Environment**

**Environmental Con**firmations

#### Further information

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

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

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

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

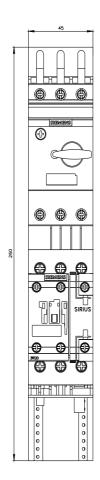
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

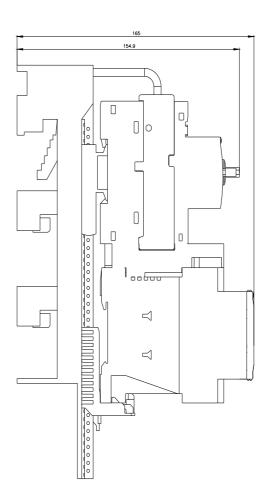
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2120-4BD27-0BB4&lang=en

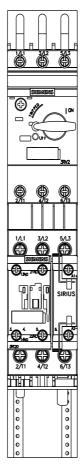
Characteristic: Tripping characteristics, I²t, Let-through current

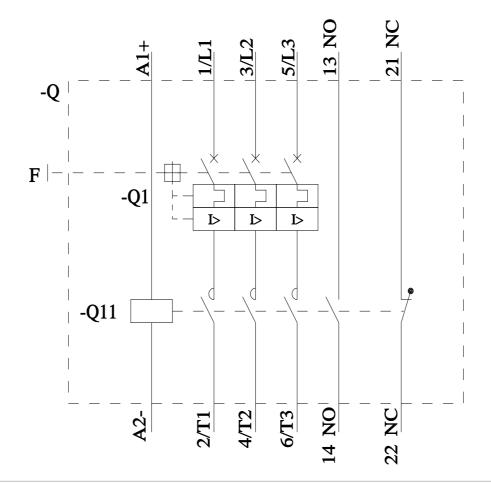
https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4BD27-0BB4/char

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-4BD27-0BB4&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-4BD27-0BB4&objecttype=14&gridview=view1</a>









last modified: 4/1/2025 🖸

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

### Siemens:

3RA21204BD270BB4