# **SIEMENS**

## **Data sheet**

# 3RA2220-1BD23-0BB4



Fuseless motor starter Reversing operation 600VAC Size S0 1.4-2A 24V DC screw connection For snapping onto 60 mm busbar systems Type of coordination 2 IQ = 150 KA Also full fills type Of coordination 1 1NO+1NC (per contactor)

product brand name	SIRIUS
product designation	non-fused motor starter 3RA2
design of the product	reversing starter
manufacturer's article number	
<ul> <li>of the supplied contactor</li> </ul>	3RT2023-1BB40
<ul> <li>of the supplied circuit-breakers</li> </ul>	3RV2011-1BA10
<ul> <li>of the supplied RS assembly kit</li> </ul>	3RA2923-1DB1
<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	S00
size of load feeder	S0
product extension auxiliary switch	Yes
insulation voltage with degree of pollution 3 at AC rated value	690 V
degree of pollution	3
surge voltage resistance rated value	6 kV
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
Ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-20 +60 °C
<ul> <li>during storage</li> </ul>	-50 +80 °C
<ul> <li>during transport</li> </ul>	-55 +80 °C
Main circuit	
man choate	
number of poles for main current circuit	3
	3 electromechanical
number of poles for main current circuit	
number of poles for main current circuit design of the switching contact adjustable current response value current of the	electromechanical
number of poles for main current circuit design of the switching contact adjustable current response value current of the current-dependent overload release	electromechanical
number of poles for main current circuit design of the switching contact adjustable current response value current of the current-dependent overload release operating voltage	electromechanical 1.4 2 A
number of poles for main current circuit design of the switching contact adjustable current response value current of the current-dependent overload release operating voltage • rated value	electromechanical 1.4 2 A 690 V
number of poles for main current circuit design of the switching contact adjustable current response value current of the current-dependent overload release operating voltage  • rated value • at AC-3 rated value maximum	electromechanical 1.4 2 A  690 V 690 V
number of poles for main current circuit design of the switching contact adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum operating frequency rated value	electromechanical 1.4 2 A  690 V 690 V 50 60 Hz
number of poles for main current circuit design of the switching contact adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum operating frequency rated value operational current at AC-3 at 400 V rated value	electromechanical 1.4 2 A  690 V 690 V 50 60 Hz
number of poles for main current circuit design of the switching contact adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum operating frequency rated value operational current at AC-3 at 400 V rated value operating power at AC-3	electromechanical 1.4 2 A  690 V 690 V 50 60 Hz 1.9 A

Control circuit/ Control	
control supply voltage at DC	
• rated value	24 V
holding power of magnet coil at DC	5.9 W
Auxiliary circuit	
number of NC contacts for auxiliary contacts	2
number of NO contacts for auxiliary contacts	2
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	26 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	1.63 A
• at 600 V rated value	1.72 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 230 V rated value	0.13 hp
<ul> <li>for 3-phase AC motor</li> </ul>	
— at 460/480 V rated value	0.75 hp
— at 575/600 V rated value	1 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	153 000 A
Installation/ mounting/ dimensions	
mounting position	vertical
fastening method	for snapping onto 60 mm busbar systems
height	260 mm
width	90 mm
depth	165 mm
required spacing	
for grounded parts     forwards	10 mm
— forwards — backwards	10 mm 0 mm
— packwards — upwards	30 mm
— upwards — at the side	9 mm
— downwards	10 mm
for live parts	10 11111
— forwards	10 mm
— backwards	0 mm
— upwards	30 mm
— downwards	10 mm
— at the side	9 mm
Connections/ Terminals	
type of electrical connection for main current circuit	screw-type terminals
type of connectable conductor cross-sections	,
for main contacts stranded	1 10 mm², 2x (2.5 6 mm²)
at AWG cables for main contacts	
• at AVVG cables for main contacts	2x (16 12), 2x (14 8)
connectable conductor cross-section for main contacts finely stranded with core end processing	2x (16 12), 2x (14 8) 1 6 mm <sup>2</sup>
connectable conductor cross-section for main contacts	
connectable conductor cross-section for main contacts finely stranded with core end processing	
connectable conductor cross-section for main contacts finely stranded with core end processing  Safety related data	1 6 mm²
connectable conductor cross-section for main contacts finely stranded with core end processing  Safety related data  B10 value with high demand rate according to SN 31920 proportion of dangerous failures with high demand rate	1 6 mm <sup>2</sup> 1 000 000

#### Certificates/ approvals For use in hazard-**Declaration of General Product Approval** other **Dangerous Good**

Confirmation





ous locations



Conformity

Confirmation

Transport Information

### **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=3RA2220-1BD23-0BB4

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-1BD23-0BB4

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1BD23-0BB4

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2220-1BD23-0BB4&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1BD23-0BB4/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2220-1BD23-0BB4&objecttype=14&gridview=view1

12/15/2020 last modified: