# **SIEMENS**

## **Data sheet**

# 3RA2120-1DA23-0BB4



Fuseless motor starter Direct start 600VAC Size S0 2.2-3.2A 24V DC screw connection For screw mounting Or 35 mm rail-mounting Type of coordination 2 IQ = 150 KA Also full fills type Of coordination 1 1NO+1NC (contactor)

product designation design of the product direct starter  anuffacturer's article number  of the supplied contactor of the supplied circuit-breakers of the supplied link module  Several technical data size of the circuit-breaker size of the circuit-breaker size of the circuit-breaker size of the circuit-breaker size of load feeder So product extension auxiliary switch Yes insulation voltage with degree of poliution 3 at AC rated value degree of poliution surge voltage resistance rated value for the substance Prohibitance (Date)  Ambient conditions  ambient temperature of during operation of during storage of during transport  design of the switching contact adjustable current response value current of the current-dependent overload release operating voltage  at AC-3 rated value  operating power at AC-3 at at 40 V rated value  1 at 100 W  of the supplied contactor (and the supplied current and contact of the current- and the conditions  and the conditions  adjustable current response value current of the current- dependent overload release operating voltage  at AC-3 rated value  at AC-3 rated value  at AC-3 rated value  at AC-3 rated value  at AC-3 value  at AC-3 value  at AC-3 value  at AC-3 value value  at AC-3 value  at AC-3 value  1 100 W  operating power at AC-3 at at all all and a AC-3 at at all all and a AC-3 at at all all and a AC-3 at all all all and a AC-3 at AC-3 value  1 100 W	product brand name	SIRIUS
manufacturer's article number  • of the supplied contactor  • of the supplied circuit-breakers  • of the supplied circuit-breakers  • of the supplied circuit-breakers  • of the supplied circuit-breaker  • of the supplied circuit-breaker  size of the circuit-breaker  size of load feeder  product extension auxiliary switch  Yes insulation voltage with degree of pollution 3 at AC rated value  degree of pollution  3  surge voltage resistance rated value  6kV  shock resistance according to IEC 60068-2-27  6g / 11 ms  mechanical service life (operating cycles) of contactor typical  type of assignment  2  Substance Prohibitance (Date)  Ambient conditions  ambient temperature  • during operation  • during storage  • during storage  • during transport  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  • at AC-3 rated value  • operating frequency rated value  operating frequency rated value  operating frequency rated value  operating frequency rated value  operating power at AC-3	product designation	non-fused motor starter 3RA2
of the supplied circuit-breakers     of the supplied liricuit-breakers     of the supplied link module     3RA2921-1BA00  General technical data  size of the circuit-breaker     size of load feeder     So     product extension auxiliary switch     insulation voltage with degree of pollution 3 at AC rated value     degree of pollution     surge voltage resistance rated value     shock resistance according to IEC 60068-2-27     sly f 11 ms     mechanical service life (operating cycles) of contactor typical     type of assignment     2     Substance Prohibitance (Date)     Ambient conditions  ambient temperature     ouring operation     during storage     ouring transport  All circuit     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	design of the product	direct starter
of the supplied circuit-breakers     of the supplied link module     3RA2921-1BA00  General technical data  size of the circuit-breaker     size of load feeder     So product extension auxiliary switch     insulation voltage with degree of pollution 3 at AC rated value     degree of pollution     surge voltage resistance rated value     shock resistance according to IEC 60068-2-27     mechanical service life (operating cycles) of contactor typical     type of assignment     2     Substance Prohibitance (Date)     ambient temperature     during operation     during storage     during transport      during transport      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     operating frequency rated value     operating power at AC-3     operating power at AC-3     **C  **AC-3 rated value value     operating power at AC-3  **O  **O  **C  **AC-3 rated value value     operating power at AC-3  **O  **O  **O  **O  **O  **O  **O  *	manufacturer's article number	
of the supplied link module  General technical data  size of the circuit-breaker  size of load feeder  product extension auxiliary switch  yes insulation voltage with degree of pollution 3 at AC rated value  degree of pollution  surge voltage resistance rated value  shock resistance according to IEC 60068-2-27  mechanical service life (operating cycles) of contactor typical  type of assignment  2  Substance Prohibitance (Date)  3/3/1/2017  Ambient conditions  ambient temperature  during operation  during storage  during storage  during transport  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  at AC-3 rated value  operating rower at AC-3  operating power at AC-3  operating power at AC-3  operating power at AC-3  operating power at AC-3  storage SD  so  so  so  so  so  so  so  so  so  s	<ul> <li>of the supplied contactor</li> </ul>	<u>3RT2023-1BB40</u>
size of the circuit-breaker size of load feeder product extension auxiliary switch yes insulation voltage with degree of pollution 3 at AC rated value degree of pollution 3 surge voltage resistance rated value 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 Substance Prohibitance (Date) 03/01/2017  Ambient conditions ambient temperature during operation during storage during transport -55 +80 °C  4 during transport -55 +80 °C  Main circuit number of poles for main current circuit design of the switching contact electromechanical adjustable current response value current of the current- dependent overload release operating voltage 1 at AC-3 rated value operating frequency rated value operating power at AC-3	<ul> <li>of the supplied circuit-breakers</li> </ul>	3RV2011-1DA10
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 (operating cycles) of contactor typical 10 000 000  type of assignment 2  Substance Prohibitance (Date) 03/01/2017  Ambient conditions  ambient temperature  • during operation -20 +60 °C • during transport -55 +80 °C  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  operating voltage  • rated value 690 V  operating frequency rated value 690 V  operating frequency rated value 50 60 Hz  operating power at AC-3	<ul> <li>of the supplied link module</li> </ul>	3RA2921-1BA00
size of load feeder  product extension auxiliary switch  product extension auxiliary switch  yes  insulation voltage with degree of pollution 3 at AC rated value  degree of pollution  3  surge voltage resistance rated value  shock resistance according to IEC 60068-2-27  6g / 11 ms  mechanical service life (operating cycles) of contactor typical  type of assignment  2  Substance Prohibitance (Date)  Ambient conditions  ambient temperature  • during operation  • during storage  • during transport  Ambien circuit  number of poles for main current circuit  design of the switching contact  design of the switching contact  electromechanical  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  operating frequency rated value  operating power at AC-3  operating power at AC-3	General technical data	
product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated value 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 (operating cycles) of contactor typical 10 000 000 type of assignment 2 Substance Prohibitance (Date) 03/01/2017 Ambient conditions ambient temperature • during operation • during storage • during transport 0 during transport 0 design of the switching contact design of the switching contact dependent overload release operating voltage • rated value • at AC-3 rated value maximum operating power at AC-3  operating power at AC-3	size of the circuit-breaker	S00
insulation voltage with degree of pollution 3 at AC rated value  degree of pollution  surge voltage resistance rated value shock resistance according to IEC 60068-2-27  feg / 11 ms mechanical service life (operating cycles) of contactor typical type of assignment  2 Substance Prohibitance (Date)  Ambient conditions  ambient temperature  during operation during storage during transport  Main circuit  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 power at AC-3  e 60 V operating power at AC-3  e 690 V operating power at AC-3	size of load feeder	S0
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 (operating cycles) of contactor typical 10 000 000 type of assignment 2 Substance Prohibitance (Date) 03/01/2017 Ambient conditions ambient temperature  • during operation -20 +60 °C • during storage -50 +80 °C  • during transport -55 +80 °C  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  operating voltage  • rated value 690 V operating frequency rated value 50 60 Hz operating power at AC-3 at 400 V rated value 2.7 A operating power at AC-3	product extension auxiliary switch	Yes
surge voltage resistance rated value 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 Substance Prohibitance (Date)  Ambient conditions ambient temperature • during operation • during storage • during transport  number of poles for main current circuit 3 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 operating frequency rated value operating power at AC-3 operating power at AC-3	insulation voltage with degree of pollution 3 at AC rated value	690 V
shock resistance according to IEC 60068-2-27  mechanical service life (operating cycles) of contactor typical type of assignment 2 Substance Prohibitance (Date)  Ambient conditions  ambient temperature  • during operation • during storage • during transport  Main circuit  number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value operating power at AC-3 operating power at AC-3	degree of pollution	3
mechanical service life (operating cycles) of contactor typical type of assignment 2 Substance Prohibitance (Date)  Amblent conditions  ambient temperature  • during operation • during storage • during transport  -20 +60 °C  -50 +80 °C  -55 +80 °C  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 operating voltage • rated value • at AC-3 rated value maximum  operating frequency rated value operating power at AC-3	surge voltage resistance rated value	6 kV
type of assignment 2 Substance Prohibitance (Date) 03/01/2017  Ambient conditions  ambient temperature	shock resistance according to IEC 60068-2-27	6g / 11 ms
Substance Prohibitance (Date)  Ambient conditions  ambient temperature  • during operation • during storage • during transport  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 power at AC-3  operating power at AC-3	mechanical service life (operating cycles) of contactor typical	10 000 000
Ambient conditions  ambient temperature  • during operation • during storage • during transport  -50 +80 °C  40 during transport  -55 +80 °C   Main circuit  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  690 V  operating frequency rated value  operating requency rated value  operating power at AC-3  operating power at AC-3	type of assignment	2
ambient temperature  • during operation  • during storage  • during transport  -50 +80 °C  • during transport  -55 +80 °C  Main circuit  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  690 V  operating frequency rated value  operational current at AC-3 at 400 V rated value  operating power at AC-3	Substance Prohibitance (Date)	03/01/2017
<ul> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>55 +80 °C</li> </ul> Main circuit number of poles for main current circuit design of the switching contact <ul> <li>electromechanical</li> </ul> adjustable current response value current of the current-dependent overload release <ul> <li>operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>operating frequency rated value</li> <li>operating frequency rated value</li> <li>operating power at AC-3 at 400 V rated value</li> <li>operating power at AC-3</li> </ul>	Ambient conditions	
<ul> <li>during storage</li> <li>during transport</li> <li>55 +80 °C</li> </ul> Main circuit number of poles for main current circuit design of the switching contact <ul> <li>electromechanical</li> <li>adjustable current response value current of the current-dependent overload release</li> </ul> operating voltage <ul> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>operating frequency rated value</li> <li>operating frequency rated value</li> <li>operational current at AC-3 at 400 V rated value</li> <li>operating power at AC-3</li> </ul>	ambient temperature	
<ul> <li>during transport</li> <li>-55 +80 °C</li> </ul> Main circuit <ul> <li>number of poles for main current circuit</li> <li>design of the switching contact</li> <li>electromechanical</li> </ul> adjustable current response value current of the current-dependent overload release <ul> <li>operating voltage</li> <li>e rated value</li> <li>e at AC-3 rated value maximum</li> <li>operating frequency rated value</li> <li>operational current at AC-3 at 400 V rated value</li> <li>operating power at AC-3</li> </ul> Operating power at AC-3	<ul> <li>during operation</li> </ul>	-20 +60 °C
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  operating power at AC-3  operating power at AC-3	during storage	-50 +80 °C
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	during transport	-55 +80 °C
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	Main circuit	
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	number of poles for main current circuit	3
dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  690 V  operating frequency rated value  operational current at AC-3 at 400 V rated value  operating power at AC-3	design of the switching contact	electromechanical
<ul> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>operational current at AC-3 at 400 V rated value</li> <li>operating power at AC-3</li> </ul>		2.2 3.2 A
<ul> <li>at AC-3 rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>operational current at AC-3 at 400 V rated value</li> <li>operating power at AC-3</li> </ul>	operating voltage	
operating frequency rated value 50 60 Hz operational current at AC-3 at 400 V rated value 2.7 A operating power at AC-3	rated value	690 V
operational current at AC-3 at 400 V rated value 2.7 A operating power at AC-3	at AC-3 rated value maximum	690 V
operating power at AC-3	operating frequency rated value	50 60 Hz
	operational current at AC-3 at 400 V rated value	2.7 A
at 400 V rated value     1 100 W	operating power at AC-3	
	• at 400 V rated value	1 100 W
• at 500 V rated value 1 500 W	at 500 V rated value	1 500 W
Control circuit/ Control	Control circuit/ Control	
control supply voltage at DC	control supply voltage at DC	
• rated value 24 V	rated value	24 V
holding power of magnet coil at DC 5.9 W	holding power of magnet coil at DC	5.9 W

Auxiliary circuit				
number of NC contacts for auxiliary contacts	1			
number of NO contacts for auxiliary contacts	1			
Protective and monitoring functions				
trip class	CL	ASS 10		
design of the overload release	the	ermal (bimetallic)		
response value current of instantaneous short-circu	uit trip unit 41	.6 A		
UL/CSA ratings				
full-load current (FLA) for 3-phase AC motor				
<ul> <li>at 480 V rated value</li> </ul>	2.8	B A		
at 600 V rated value	3.1	16 A		
yielded mechanical performance [hp]				
<ul> <li>for single-phase AC motor</li> </ul>				
<ul> <li>— at 110/120 V rated value</li> </ul>	0.1	1 hp		
— at 230 V rated value	0.2	25 hp		
<ul> <li>for 3-phase AC motor</li> </ul>				
<ul> <li>at 200/208 V rated value</li> </ul>	0.8	5 hp		
— at 220/230 V rated value	0.7	75 hp		
— at 460/480 V rated value	1.5	5 hp		
— at 575/600 V rated value	21	qr		
Short-circuit protection				
product function short circuit protection	Ye	es		
design of the short-circuit trip	ma	agnetic		
conditional short-circuit current (Iq)				
<ul> <li>at 400 V according to IEC 60947-4-1 rated v</li> </ul>	alue 15	3 000 A		
Installation/ mounting/ dimensions				
mounting position	ve	rtical		
fastening method	Sr	ap-mounted to DIN rail or screw-mounted with additional push-in lug		
height	19	3.1 mm		
width	45	mm		
depth	10	7 mm		
required spacing				
<ul> <li>for grounded parts</li> </ul>				
— forwards	10	mm		
— backwards	1 0	mm		
— upwards	30	mm		
— at the side	1 9	9 mm		
— downwards	10	mm		
• for live parts				
— forwards	10	mm		
— backwards	1 0	0 mm		
— upwards	30	30 mm		
— downwards	10	mm		
— at the side	9 1	mm		
Connections/ Terminals				
type of electrical connection for main current circuit	SC	rew-type terminals		
type of connectable conductor cross-sections for main contacts stranded		1 10 mm², 2x (2.5 6 mm²)		
connectable conductor cross-section for main contacts finely stranded with core end processing		1 6 mm²		
Safety related data				
B10 value with high demand rate according to SN	31920 1 (	000 000		
proportion of dangerous failures with high demand according to SN 31920	rate 73	%		
		20		
touch protection on the front according to IEC		ger-safe, for vertical contact from the front		
Certificates/ approvals				
General Product Approval	For use in hazard- ous locations	Declaration of Conformity other		







Confirmation

#### **Dangerous Good**

**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=3RA2120-1DA23-0BB4

#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1DA23-0BB4

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1DA23-0BB4

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

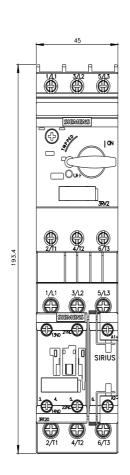
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2120-1DA23-0BB4&lang=en

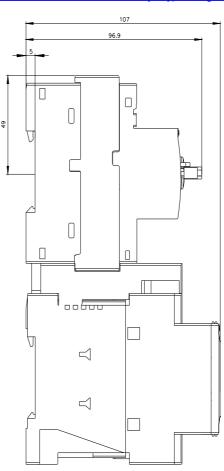
Characteristic: Tripping characteristics, I2t, Let-through current

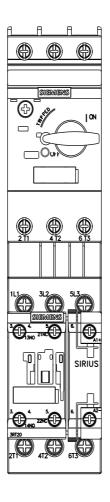
https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1DA23-0BB4/char

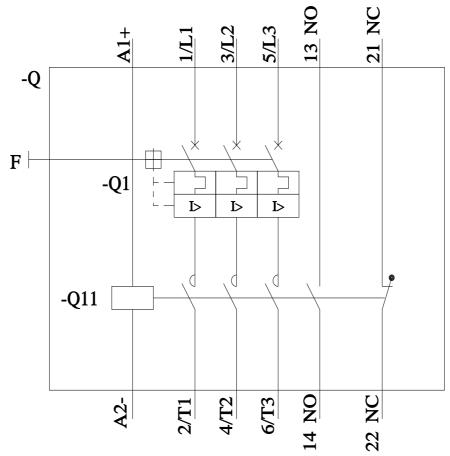
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1DA23-0BB4&objecttype=14&gridview=view1









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