## SIEMENS

## Data sheet

## 3RA2125-1ED23-0BB4

	Fuseless motor starter Direct start 600VAC Size S0 2.8-4A 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 (MSP) 1NO+1NC (contactor)
product brand name	SIRIUS
product designation	non-fused motor starter 3RA2
design of the product	direct starter
manufacturer's article number	
<ul> <li>of the supplied contactor</li> </ul>	<u>3RT2023-1BB40</u>
<ul> <li>of the supplied circuit-breakers</li> </ul>	<u>3RV2011-1EA15</u>
<ul> <li>of the supplied busbar adapter</li> </ul>	8US1251-5NT10
of the supplied link module	3RA2921-1BA00
General technical data	
size of the circuit-breaker	S00
size of load feeder	SO
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
	2
type of assignment	
Weight	1.25 kg
Ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-20 +60 °C
<ul> <li>during storage</li> </ul>	-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	2.8 4 A
operating voltage	
	600 \/
<ul> <li>rated value</li> </ul>	690 V
rated value     at AC-3 rated value maximum	690 V
• at AC-3 rated value maximum	690 V
• at AC-3 rated value maximum operating frequency rated value	690 V 50 60 Hz
at AC-3 rated value maximum     operating frequency rated value     operational current at AC-3 at 400 V rated value	690 V 50 60 Hz
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	690 V 50 60 Hz 3.6 A
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         • at 400 V rated value	690 V 50 60 Hz 3.6 A 1 500 W
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         at 400 V rated value         at 500 V rated value	690 V 50 60 Hz 3.6 A 1 500 W
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         e at 400 V rated value         e at 500 V rated value         Control circuit/ Control         control supply voltage at DC rated value	690 V 50 60 Hz 3.6 A 1 500 W 2 200 W
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         at 400 V rated value         at 500 V rated value         control circuit/ Control         control supply voltage at DC rated value         holding power of magnet coil at DC	690 V 50 60 Hz 3.6 A 1 500 W 2 200 W 24 V
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         at 400 V rated value         at 500 V rated value     Control circuit/ Control     control supply voltage at DC rated value     holding power of magnet coil at DC Auxiliary circuit	690 V 50 60 Hz 3.6 A 1 500 W 2 200 W 24 V 5.9 W
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         at 400 V rated value         at 500 V rated value         control circuit/ Control         control supply voltage at DC rated value         holding power of magnet coil at DC         Auxiliary circuit         number of NC contacts for auxiliary contacts	690 V 50 60 Hz 3.6 A 1 500 W 2 200 W 24 V 5.9 W 22
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         • at 400 V rated value         • at 500 V rated value         • at 500 V rated value         Control circuit/ Control         control supply voltage at DC rated value         holding power of magnet coil at DC         Auxiliary circuit         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts	690 V 50 60 Hz 3.6 A 1 500 W 2 200 W 24 V 5.9 W
<ul> <li>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             <ul></ul></li></ul>	690 V 50 60 Hz 3.6 A 1 500 W 2 200 W 24 V 5.9 W 22 2
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         at 400 V rated value         at 500 V rated value         control circuit/ Control         control supply voltage at DC rated value         holding power of magnet coil at DC         Auxiliary circuit         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Protective and monitoring functions         trip class	690 V 50 60 Hz 3.6 A 1 500 W 2 200 W 2 200 W 2 2 200 W 2 2 20 W 2 2 20 Z 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
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         at 400 V rated value         at 500 V rated value         control circuit/ Control         control supply voltage at DC rated value         holding power of magnet coil at DC         Auxiliary circuit         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Protective and monitoring functions         trip class         design of the overload release	690 V 50 60 Hz 3.6 A 1 500 W 2 200 W 24 V 5.9 W 2 2 2 2 2 2 CLASS 10 thermal (bimetallic)
<ul> <li>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             <ul></ul></li></ul>	690 V 50 60 Hz 3.6 A 1 500 W 2 200 W 2 200 W 2 2 200 W 2 2 20 W 2 2 20 V 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
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 <ul> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 500 V rated value</li> </ul> <li>Control circuit/ Control         <ul> <li>control supply voltage at DC rated value</li> <li>holding power of magnet coil at DC</li> <li>Auxiliary circuit             <ul> <li>number of NC contacts for auxiliary contacts</li> <li>number of NO contacts for auxiliary contacts</li> </ul> </li> <li>Protective and monitoring functions         <ul> <li>trip class</li> <li>design of the overload release</li> <li>response value current of instantaneous short-circuit trip unit</li> <li>UL/CSA ratings</li> </ul> </li> </ul></li>	690 V 50 60 Hz 3.6 A 1 500 W 2 200 W 24 V 5.9 W 2 2 2 2 2 2 CLASS 10 thermal (bimetallic)
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         at 400 V rated value         at 500 V rated value         control circuit/ Control         control supply voltage at DC rated value         holding power of magnet coil at DC         Auxiliary circuit         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         Protective and monitoring functions         trip class         design of the overload release         response value current of instantaneous short-circuit trip unit	690 V 50 60 Hz 3.6 A 1 500 W 2 200 W 24 V 5.9 W 2 2 2 2 2 2 CLASS 10 thermal (bimetallic)

at 600 V rated value yielded mechanical performance [hp]	4 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	0.13 hp
— at 230 V rated value	0.33 hp
• for 3-phase AC motor	
— at 200/208 V rated value	0.75 hp
— at 220/230 V rated value	0.75 hp
— at 460/480 V rated value	2 hp
— at 575/600 V rated value	3 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (lq)	
<ul> <li>at 400 V according to IEC 60947-4-1 rated value</li> </ul>	153 000 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	10 mm
— backwards	0 mm
— upwards	30 mm
— at the side	9 mm
— downwards	10 mm
for live parts	
— 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)
connectable conductor cross-section for main contacts finely stranded with core end processing	1 6 mm²
Safety related data	
proportion of dangerous failures with high demand rate according to SN 31920	73 %
	1 000 000
B10 value with high demand rate according to SN 31920	
B10 value with high demand rate according to SN 31920 Electrical Safety	
· · · · ·	IP20
Electrical Safety	
Electrical Safety protection class IP on the front according to IEC 60529	IP20

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=3RA2125-1ED23-0BB4 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-1ED23-0BB4 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1ED23-0BB4 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2125-1ED23-0BB4&lang=en Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1ED23-0BB4/char Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-1ED23-0BB4&objecttype=14&gridview=view1

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