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Data sheet 3RA2120-1GA24-0BB4



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 4.50...6.30 A 24 V DC screw terminal for installation on standard mounting rail (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 DIN-rail or screw mounting
product type designation	3RA21
manufacturer's article number	
● of the supplied contactor	3RT2024-1BB40
● of the supplied circuit-breakers	3RV2011-1GA10
● of the supplied link module	3RA2921-1BA00
General technical data	
size of the circuit-breaker	S00
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
type of calculation of power loss current-dependent	quadratic
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	6 g / 11 ms
mechanical service life (operating cycles) of contactor typical	10 000 000
type of coordination	2
reference code according to IEC 81346-2:2019	Q
Substance Prohibitance (day/month/year)	10/01/2009
Net Weight	0.917 kg
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

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● at AC-3e rated value maximum	690 V
operating frequency rated value	50 ... 60 Hz
operational current	
● 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 W
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC rated value	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	screw and snap-on mounting onto 35 mm DIN rail
height	193 mm
width	45 mm
depth	107 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	

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type of electrical connection	
● for main current circuit	screw-type terminals
● for auxiliary and control circuit	screw-type terminals
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	
● PROFINET IO protocol	No
● PROFIsafe protocol	No
protocol is supported AS-Interface protocol	No

Approvals Certificates

Environment	General Product Approval				For use in hazardous locations
Environmental Confirmations	UL	EAC	EG-Konf.	UKCA	ATEX

For use in hazardous locations	Test Certificates		Maritime application		
EG-Konf.	Special Test Certificate	Type Test Certificates/Test Report	ABS	BUREAU VERITAS	DNV

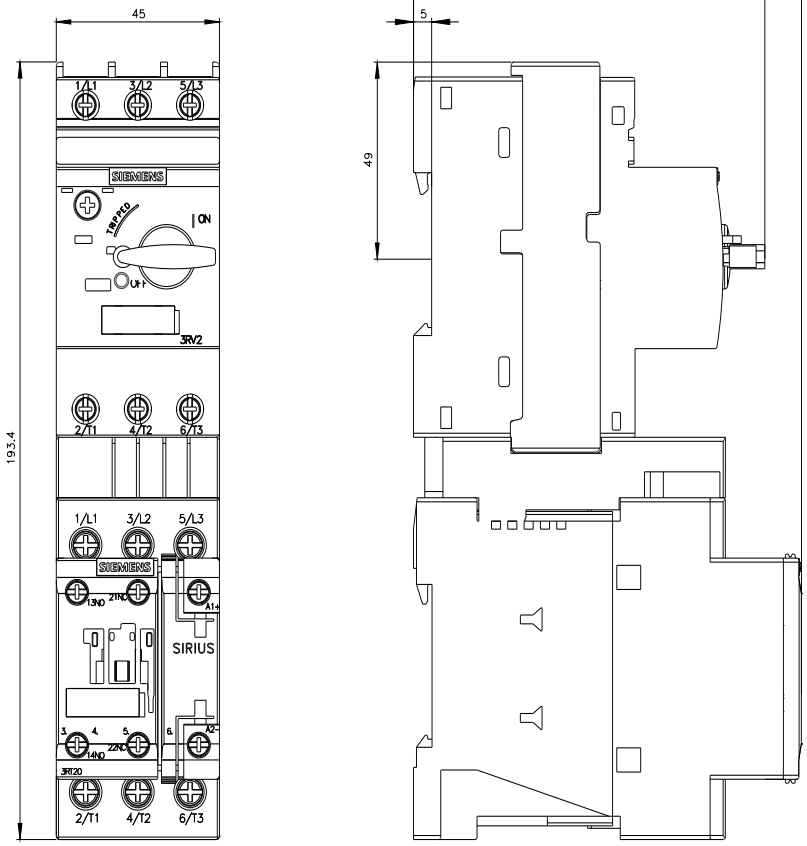
Maritime application			other		
LRS	PRS	RINA	Confirmation	Confirmation	产品合格 QC PASS

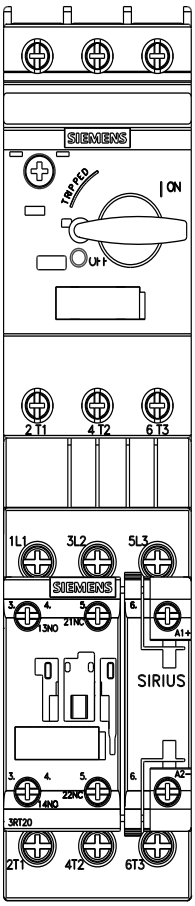
Railway	Dangerous goods
Special Test Certificate	Transport Information

Further information

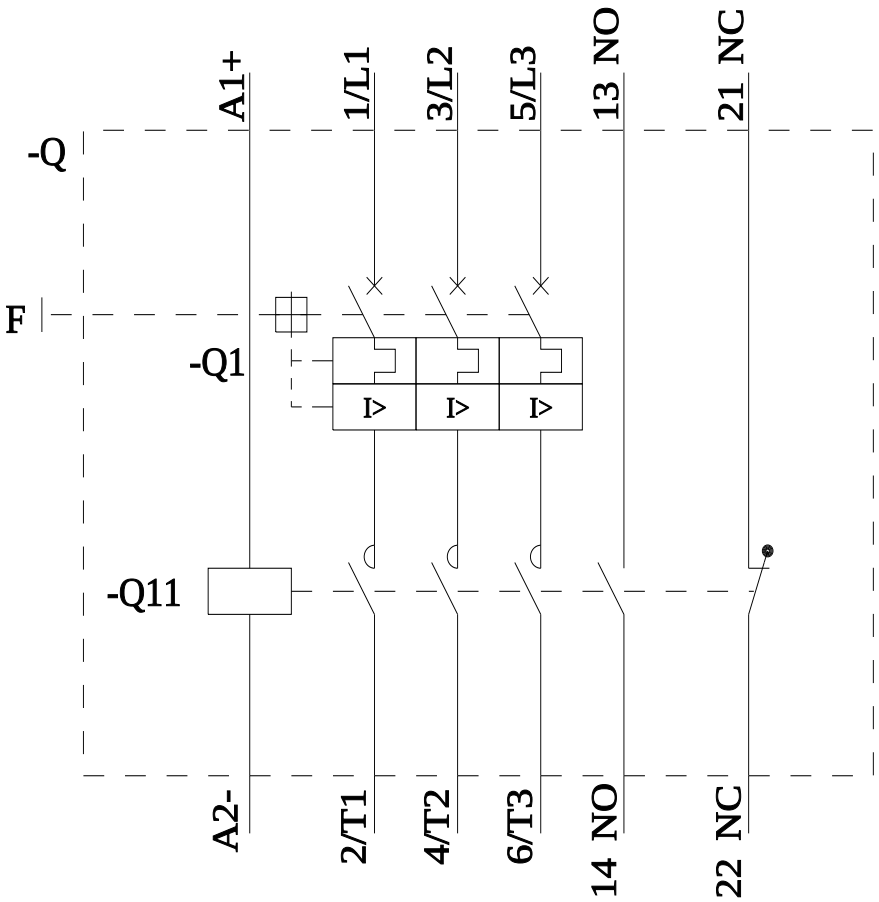
Information on the packaging
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Information- and Downloadcenter (Catalogs, Brochures,…)
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Industry Mall (Online ordering system)
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1GA24-0BB4
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
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last modified: 4/24/2026

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