SIEMENS

Data sheet 3RA2110-1HA16-1BB4



FUSELESS LOAD FEEDER DIRECT START, AC 400V, SZ. S00 5.5. . .8A, DC 24V SCREW TERMINAL FOR RAIL MOUNTING, TYPE OF ASSIGNMENT 1,IQ = 150KA 1NO (CONTACTOR)

product brand name	SIRIUS
product designation	Direct (on-line) starter
design of the product	for standard rail or screw mounting
product type designation	3RA21
manufacturer's article number	
● of the supplied contactor	3RT2016-1BB41
● of the supplied circuit-breakers	3RV2011-1HA10
● of the supplied link module	3RA1921-1DA00
General technical data	
size of the circuit-breaker	S00
size of load feeder	S00
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 (switching cycles) of contactor typical	30 000 000
type of assignment	1
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
Substance Prohibitance (Date)	10/01/2009
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	5.5 ... 8 A
operating voltage	
● rated value	690 V
● at AC-3 rated value maximum	690 V
operating frequency rated value	50 ... 60 Hz

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operational current at AC-3 at 400 V rated value	6.5 A
operating power at AC-3	
● at 400 V rated value	3 000 W
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC	
● rated value	24 V
● rated value	24 ... 24 V
holding power of magnet coil at DC	4 W
Auxiliary circuit	
product extension auxiliary switch	Yes
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
● at 480 V rated value	8 A
yielded mechanical performance [hp]	
● for 3-phase AC motor	
— 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 standard mounting rail
height	167 mm
width	45 mm
depth	97 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	
type of electrical connection	
● for main current circuit	screw-type terminals
● for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
● for main contacts	
— stranded	0.5 ... 4 mm², 2x (0.75 ... 2.5 mm²)
● at AWG cables for main contacts	2x (20 ... 16), only for contactor 2x (18 ... 14), 2x 12
connectable conductor cross-section for main contacts finely stranded with core end processing	0.5 ... 2.5 mm²
Safety related data	
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	

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● with high demand rate according to SN 31920	73 %
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

Certificates/ approvals

General Product Approval				For use in hazard-ous locations	Declaration of Conformity
CSA	Confirmation	UL	EAC	ATEX	UKCA

Declaration of Conformity	Test Certificates		Marine / Shipping		
EG-Konf.	Type Test Certific-ates/Test Report	Special Test Certific-ate	ABS	BUREAU VERITAS	LRS

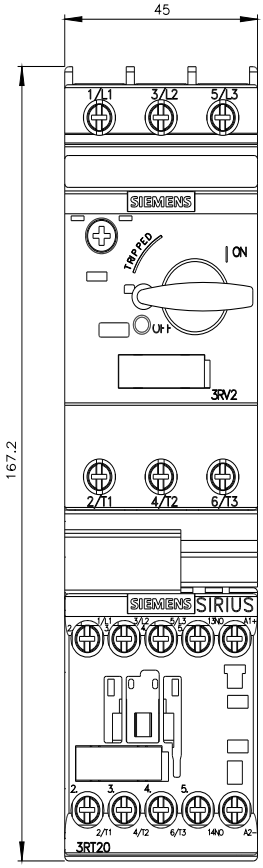
Marine / Shipping				other	Railway
PRS	RINA	RMRS	DNV-GL	Confirmation	Vibration and Shock

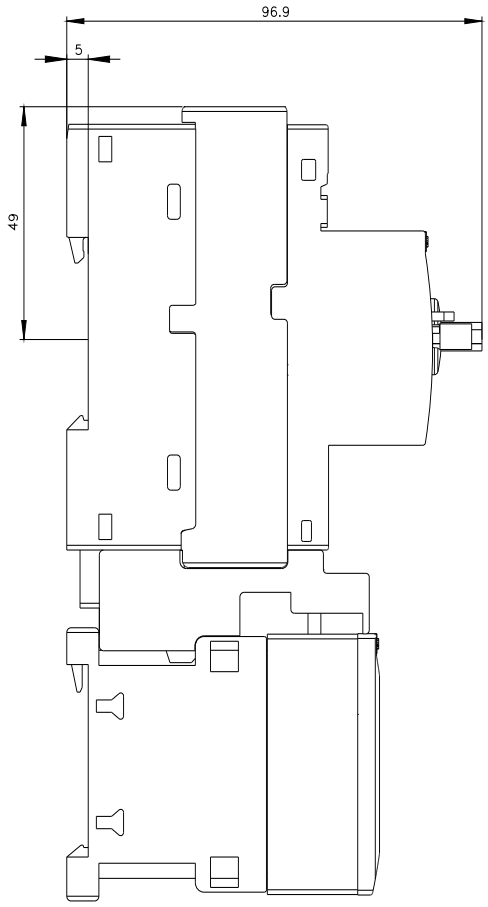
Dangerous Good
Transport Informa-tion

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=3RA2110-1HA16-1BB4
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2110-1HA16-1BB4
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1HA16-1BB4
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2110-1HA16-1BB4&lang=en
Characteristic: Tripping characteristics, I²t, Let-through current
https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1HA16-1BB4/char
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2110-1HA16-1BB4&objecttype=14&gridview=view1

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