SIEMENS

Data sheet 3RA2110-1HA16-1AK6



FUSELESS LOAD FEEDER DIRECT START, AC 400V, SZ. S00 5.5. . .8A, AC 110/120V 50/60HZ SCREW TERMINAL FOR RAIL MOUNTING, TYPE OF ASSIGNMENT 1,IQ = 150KA 1NO (CONTACTOR)

product brand name	SIRIUS
product designation	non-fused load feeders 3RA2
design of the product	direct starter
manufacturer's article number	
● of the supplied contactor	3RT2016-1AK61
● 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
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	30 000 000
type of assignment	1
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
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
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
● at 500 V rated value	4 000 W
● at 690 V rated value	5 500 W
Control circuit/ Control	

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control supply voltage at AC	
● at 50 Hz rated value	110 V
● at 60 Hz rated value	120 V
apparent holding power of magnet coil at AC	4.2 VA
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	104 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
● at 480 V rated value	7.6 A
● at 600 V rated value	6.33 A
yielded mechanical performance [hp]	
● for single-phase AC motor	
— at 110/120 V rated value	0.33 hp
— at 230 V rated value	1 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 690 V according to IEC 60947-4-1 rated value	4 000 A
● at 400 V according to IEC 60947-4-1 rated value	153 000 A
● at 500 V according to IEC 60947-4-1 rated value	42 000 A
Installation/ mounting/ dimensions	
mounting position	vertical
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
height	167.2 mm
width	45 mm
depth	97.1 mm
required spacing	
● for grounded parts	
— forwards	0 mm
— backwards	0 mm
— upwards	20 mm
— at the side	9 mm
— downwards	10 mm
● for live parts	
— forwards	0 mm
— backwards	0 mm
— upwards	20 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	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 with high demand rate according to SN 31920	73 %
protection class IP on the front according to IEC	IP20

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60529	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front

Certificates/ approvals

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

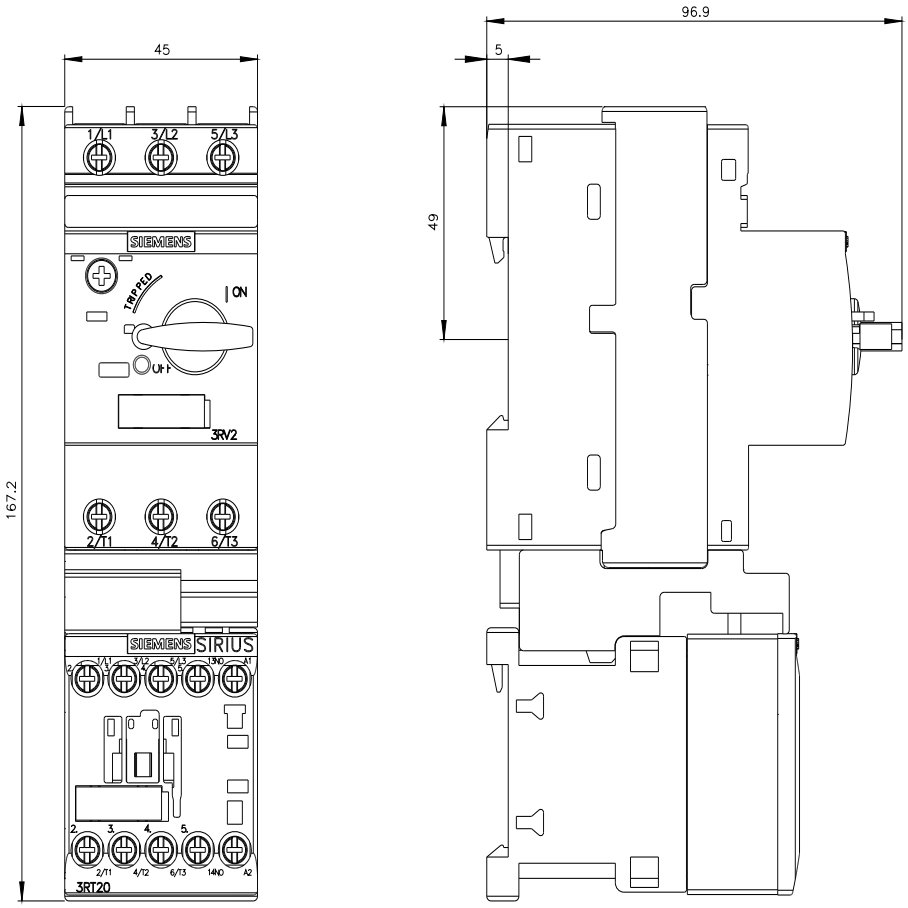
Declaration of Conformity	Test Certificates		Marine / Shipping		
EG-Konf.	Special Test Certific-ate	Type Test Certific-ates/Test Report	ABS	BUREAU VERITAS	Lloyd's Register LRS

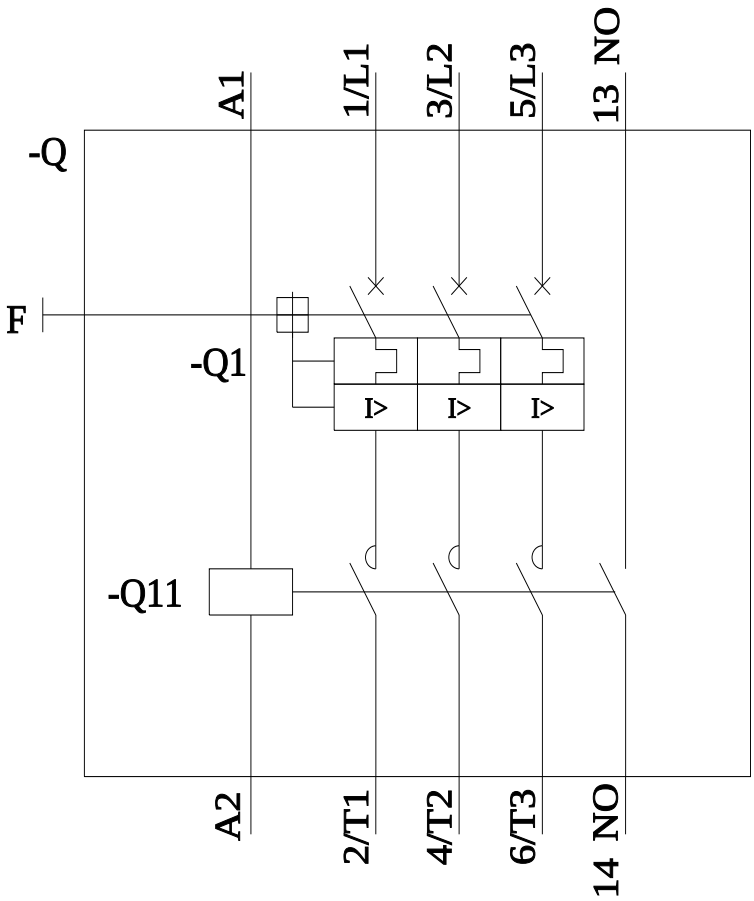
Marine / Shipping				other	Railway
PRS	RINA	RMRS	DNV-GL	Confirmation	Vibration and Shock

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=3RA2110-1HA16-1AK6
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2110-1HA16-1AK6
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1HA16-1AK6
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2110-1HA16-1AK6&lang=en
Characteristic: Tripping characteristics, I²t, Let-through current
https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1HA16-1AK6/char
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2110-1HA16-1AK6&objecttype=14&gridview=view1

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