SIEMENS

Data sheet	3RA2115-1HA16-1AP6

Fuseless motor starter Direct start 600VAC Size S00 5.5-8Amp 220/240VAC 50/60HZ screw connection For screw mounting Or 35 mm rail-mounting Type of coordination 1 1NO+1NC (MSP) 1NO (contactor)

product brand name	SIRIUS
product designation	non-fused motor starter 3RA2
design of the product	direct starter
manufacturer's article number	
● of the supplied contactor	3RT2016-1AP61
● of the supplied circuit-breakers	3RV2011-1HA15
● 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 (operating cycles) of contactor typical	30 000 000
type of assignment	1
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	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	
control supply voltage at AC	
● at 50 Hz rated value	220 V
● at 50 Hz rated value	187 ... 242 V

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● at 60 Hz rated value	240 V
● at 60 Hz rated value	192 ... 264 V
apparent holding power of magnet coil at AC	4.8 VA
inductive power factor with the holding power of the coil	0.25

Auxiliary circuit

number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	2

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 400 V according to IEC 60947-4-1 rated value	153 000 A

Installation/ mounting/ dimensions

mounting position	vertical
fastening method	Snap-mounted to DIN rail or screw-mounted with additional push-in lug
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)
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 60529	IP20
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 hazardous locations	Declaration of Conformity	
[Confirmation](#)	UL	EAC	ATEX	UKCA	CE EG-Konf.

Test Certificates		Marine / Shipping			
[Type Test Certificates/Test Report](#)	[Special Test Certificate](#)	ABS	BUREAU VERITAS	Lloyd's Register LRS	PRS

Marine / Shipping			other	Railway
RINA	RMRS	DNV·GL	[Confirmation](#)	[Vibration and Shock](#)

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=3RA2115-1HA16-1AP6

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2115-1HA16-1AP6

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RA2115-1HA16-1AP6

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
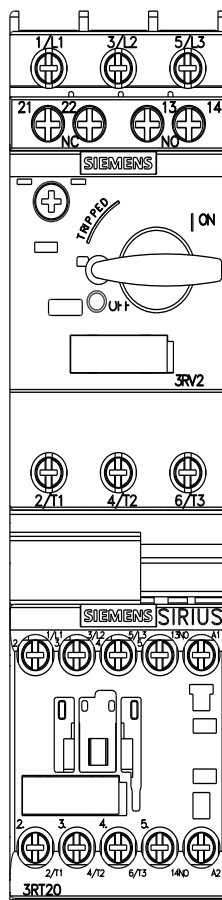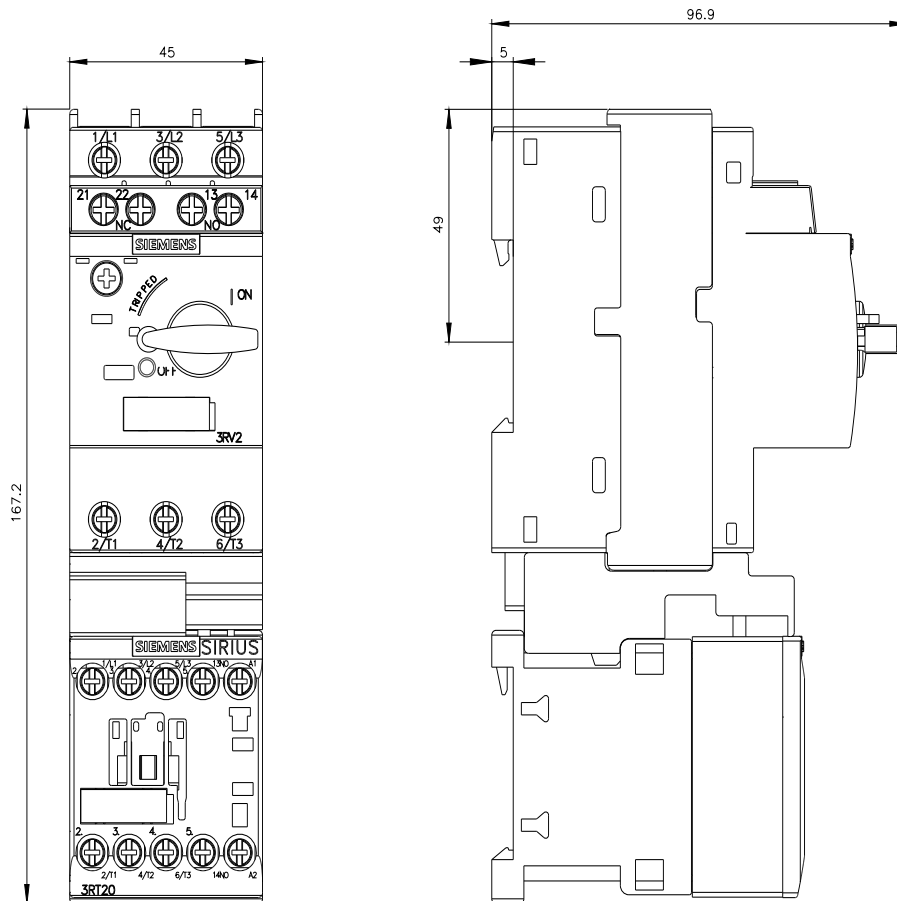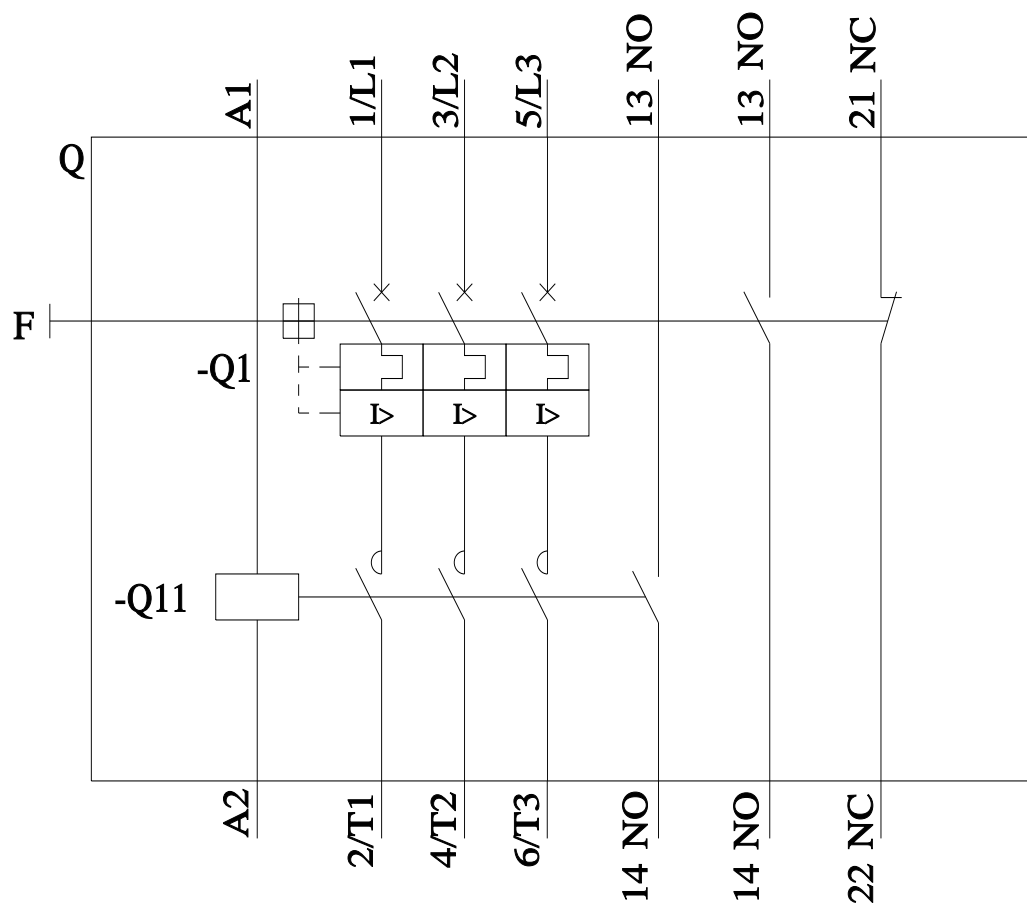http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2115-1HA16-1AP6&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current
https://support.industry.siemens.com/cs/ww/en/ps/3RA2115-1HA16-1AP6/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2115-1HA16-1AP6&objecttype=14&gridview=view1

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1/L1 — 2/T1
3/L2 — 4/T2
5/L3 — 6/T3

13 NO — 14 NO
13 NO — 14 NO
21 NC — 22 NC

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