

Load feeder fuseless, Direct-on-line starting 400 V AC, Size S00
 1.10...1.60 A 24 V DC screw terminal for installation on standard
 mounting rail (also fulfills type of coordination 1) Type of coordination
 2, I_q = 150 kA 1 NO (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	
<ul style="list-style-type: none"> • of the supplied contactor • of the supplied circuit-breakers • of the supplied link module 	3RT2015-1BB41 3RV2011-1AA10 3RA1921-1DA00

General technical data	
Size of the circuit-breaker	S00
Size of load feeder	S00
Insulation voltage	
<ul style="list-style-type: none"> • with degree of pollution 3 rated value 	690 V
Surge voltage resistance rated value	6 kV
Protection class IP	
<ul style="list-style-type: none"> • on the front • of the terminal 	IP20 IP20
Shock resistance	
<ul style="list-style-type: none"> • acc. to IEC 60068-2-27 	6g / 11 ms

Mechanical service life (switching cycles)	
• of contactor typical	30 000 000
Type of assignment	2
Protection against electrical shock	finger-safe

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 pick-up value current of the current-dependent overload release	1.1 ... 1.6 A
Operating voltage	
• rated value	690 V
• at AC-3 rated value maximum	690 V
Operating frequency rated value	50 ... 60 Hz
Operating current	
• at AC-3	
— at 400 V rated value	1.5 A
Operating power	
• at AC-3	
— at 400 V rated value	550 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	4 W

Auxiliary circuit

Product extension Auxiliary switch	Yes
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Protective and monitoring functions

Trip class	CLASS 10
Design of the overload release	thermal (bimetallic)

UL/CSA ratings

Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	1.6 A
Yielded mechanical performance [hp]	

- for three-phase AC motor
 - at 460/480 V rated value 0.75 hp
 - at 575/600 V rated value 0.75 hp

Short-circuit protection

Product function Short circuit protection	Yes
Design of the short-circuit trip	magnetic
Conditional short-circuit current (I_q) <ul style="list-style-type: none"> • at 400 V acc. to IEC 60947-4-1 rated value 	150 000 A

Installation/ mounting/ dimensions

Mounting position	vertical
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail
Height	167 mm
Width	45 mm
Depth	97 mm
Required spacing <ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — forwards 20 mm — Backwards 0 mm — upwards 50 mm — at the side 20 mm — downwards 10 mm • for live parts <ul style="list-style-type: none"> — forwards 20 mm — Backwards 0 mm — upwards 50 mm — downwards 10 mm — at the side 20 mm 	






Connections/Terminals






Type of electrical connection <ul style="list-style-type: none"> • for main current circuit 	screw-type terminals
Type of connectable conductor cross-sections <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — stranded 0.5 ... 4 mm², 2x (0.75 ... 2.5 mm²) • at AWG conductors for main contacts 2x (20 ... 16), only for contactor 2x (18 ... 14), 2x 12 	
Connectable conductor cross-section for main contacts <ul style="list-style-type: none"> • finely stranded with core end processing 	0.5 ... 2.5 mm ²



Safety related data

B10 value <ul style="list-style-type: none"> • with high demand rate acc. to SN 31920 	1 000 000
Proportion of dangerous failures	

Certificates/approvals

General Product Approval	For use in hazardous locations	Declaration of Conformity	Test Certificates
 CSA	 UL	 EAC	 ATEX
			 EG-Konf.
Type Test Certificates/Test Report			

Test Certificates	Marine / Shipping
Special Test Certificate	 ABS
	 BUREAU VERITAS
	 LRS
	 PRS
	 RINA

Marine / Shipping	other	Railway
 RMRS	 DNV-GL DNVGL.COM/AF	Confirmation
		Vibration and Shock

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2110-1AA15-1BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2110-1AA15-1BB4>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1AA15-1BB4>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

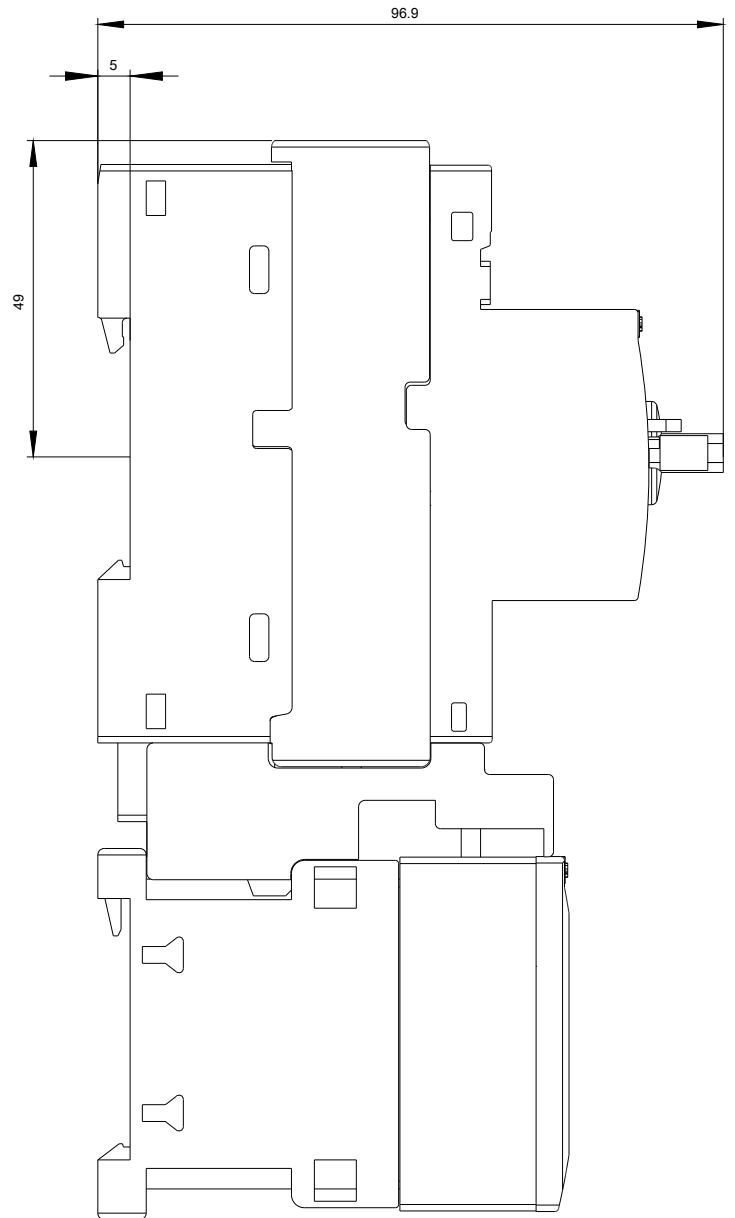
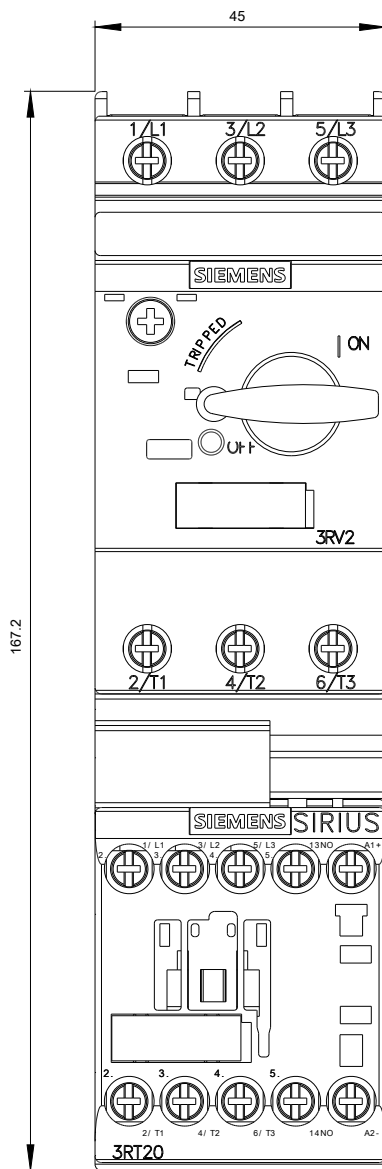
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2110-1AA15-1BB4&lang=en

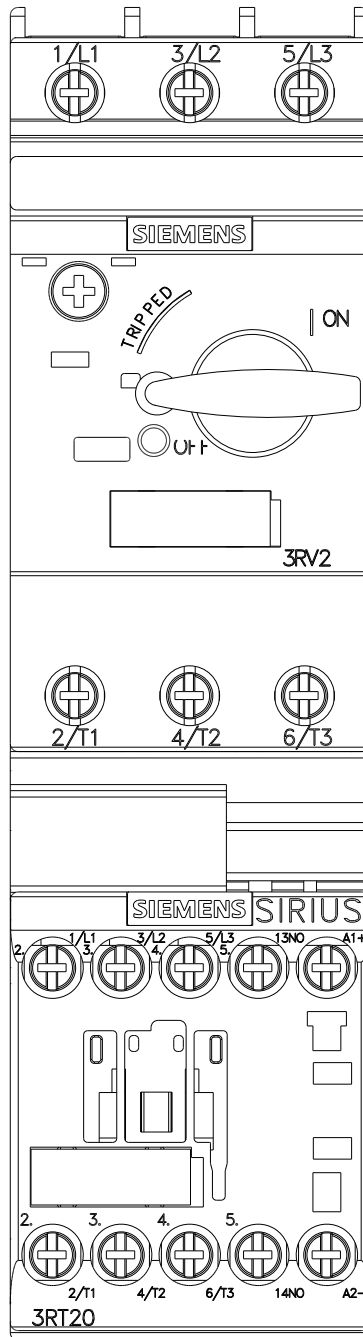
Characteristic: Tripping characteristics, I²t, Let-through current

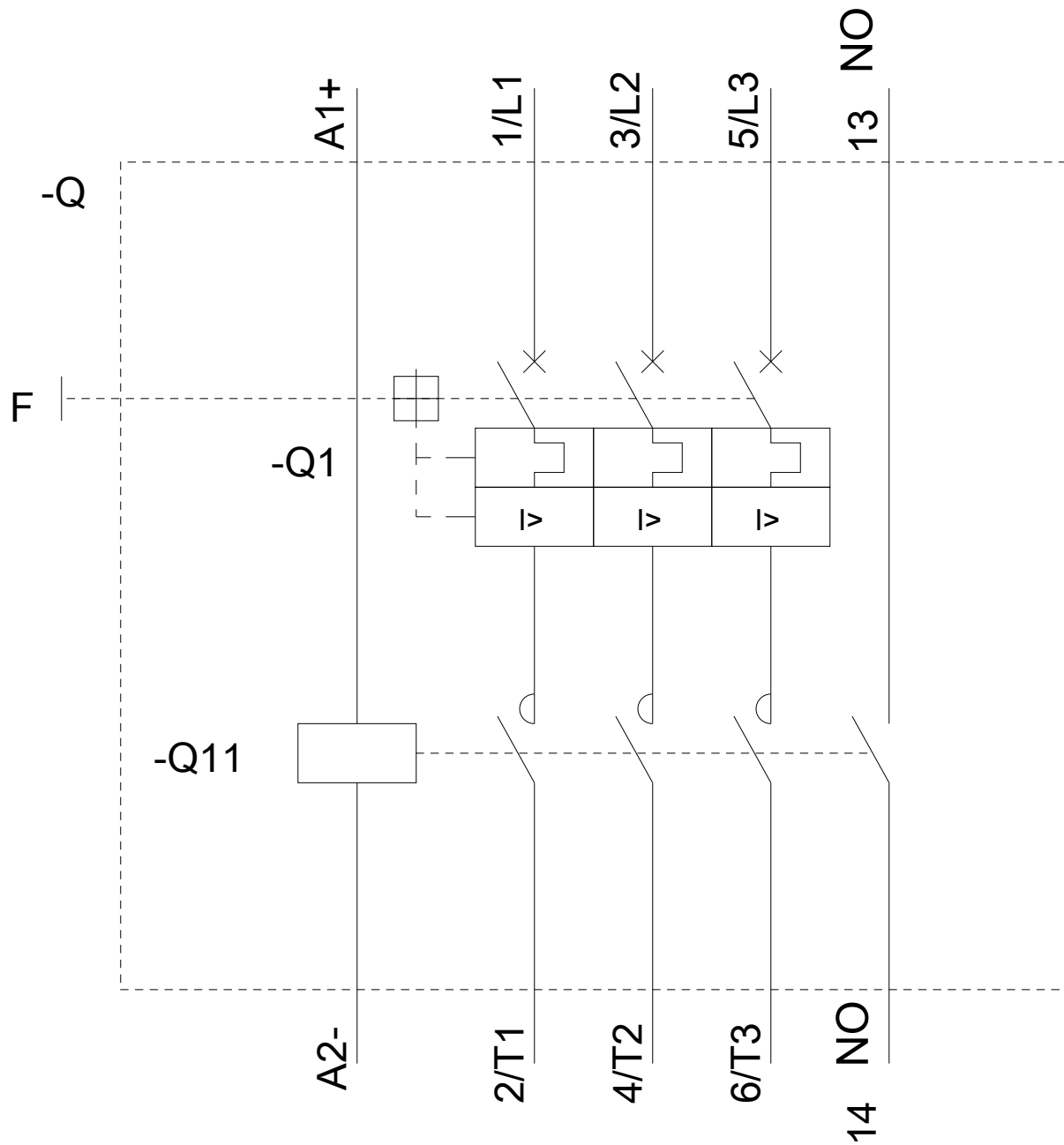
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1AA15-1BB4/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2110-1AA15-1BB4&objecttype=14&gridview=view1>







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