



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 3.50...5.00 A 230 V AC Spring-type terminal for 60 mm busbar systems (also fulfills type of coordination 1) Type of coordination 2, I_q = 150 kA 1 NO+1 NC (contactor)

product brand name	SIRIUS
product designation	Direct (on-line) starter
design of the product	for 60 mm busbars
product type designation	3RA21
manufacturer's article number	
• of the supplied contactor	3RT2024-2AP00
• of the supplied circuit-breakers	3RV2021-1FA20
• of the supplied busbar adapter	8US1251-5NT11
• of the supplied link module	3RA2921-2AA00
General technical data	
size of the circuit-breaker	S0
size of load feeder	S0
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
shock resistance acc. to IEC 60068-2-27	6g / 11 ms
mechanical service life (switching cycles) of contactor typical	10 000 000
type of assignment	2
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 Prohibition (Date)	01.03.2017 00:00:00
Ambient conditions	
• ambient temperature during operation	-20 ... +60 °C
• ambient temperature during storage	-50 ... +80 °C
• ambient temperature 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	3.5 ... 5 A
• operating voltage rated value	690 V
• operating voltage 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		3.6 A
operating power at AC-3		
• at 400 V rated value		1 500 W
Control circuit/ Control		
type of voltage of the control supply voltage		AC
control supply voltage at AC		
• at 50 Hz rated value		230 V
apparent holding power of magnet coil at AC		8.5 V·A
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		4.8 A
yielded mechanical performance [hp]		
• for 3-phase AC motor		
— at 200/208 V rated value		1 hp
— at 220/230 V rated value		1 hp
— at 460/480 V rated value		3 hp
— at 575/600 V rated value		3 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 acc. to IEC 60947-4-1 rated value		150 000 A
Installation/ mounting/ dimensions		
mounting position		vertical
fastening method		for snapping onto 60 mm busbar systems
height		260 mm
width		45 mm
depth		165 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		spring-loaded terminals
Safety related data		
B10 value with high demand rate acc. to SN 31920		1 000 000
proportion of dangerous failures		
• with high demand rate acc. to SN 31920		73 %
touch protection on the front acc. to IEC 60529		finger-safe, for vertical contact from the front
Certificates/ approvals		
General Product Approval		For use in hazardous
		Declaration of Conformity

			locations		
				Miscellaneous	
Test Certificates			Marine / Shipping		
Type Test Certificates/Test Report	Special Test Certificate				
Marine / Shipping			other	Railway	
			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=3RA2120-1FH24-0AP0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1FH24-0AP0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1FH24-0AP0>

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

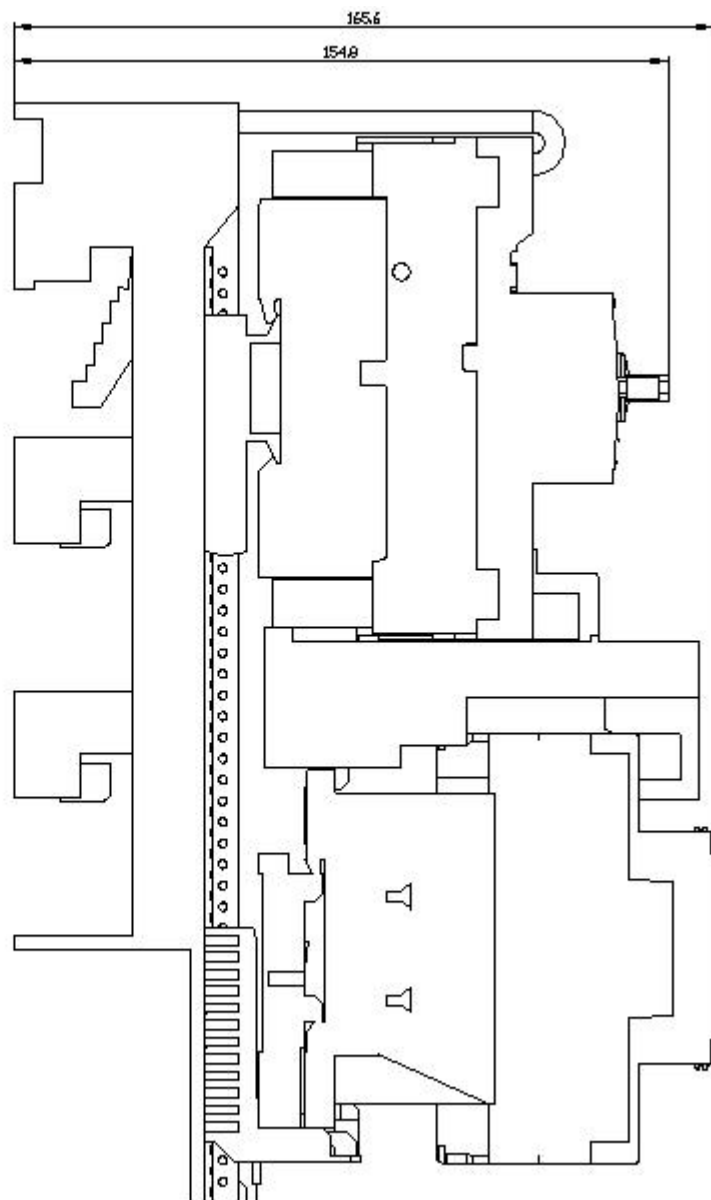
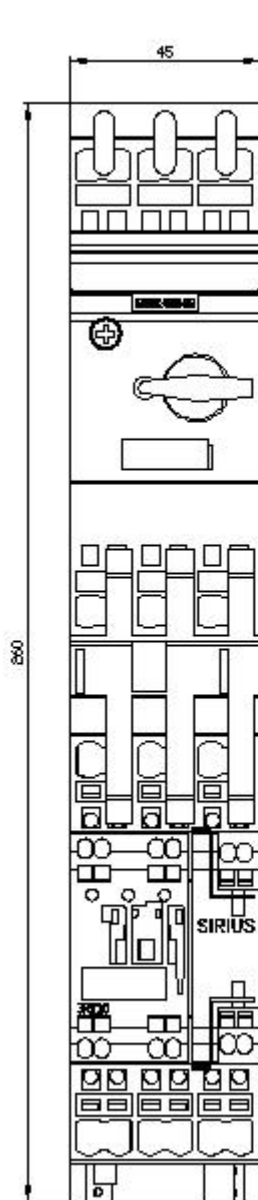
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1FH24-0AP0&lang=en

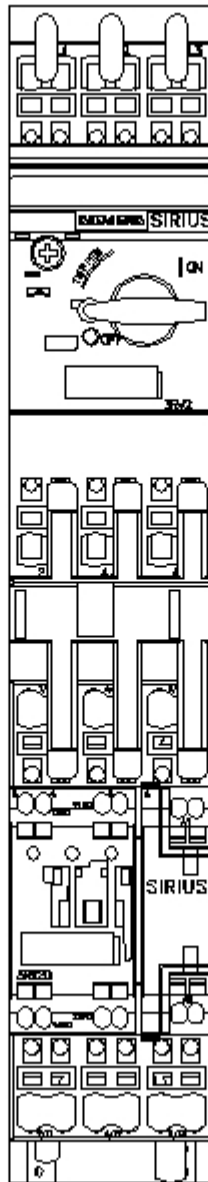
Characteristic: Tripping characteristics, I²t, Let-through current

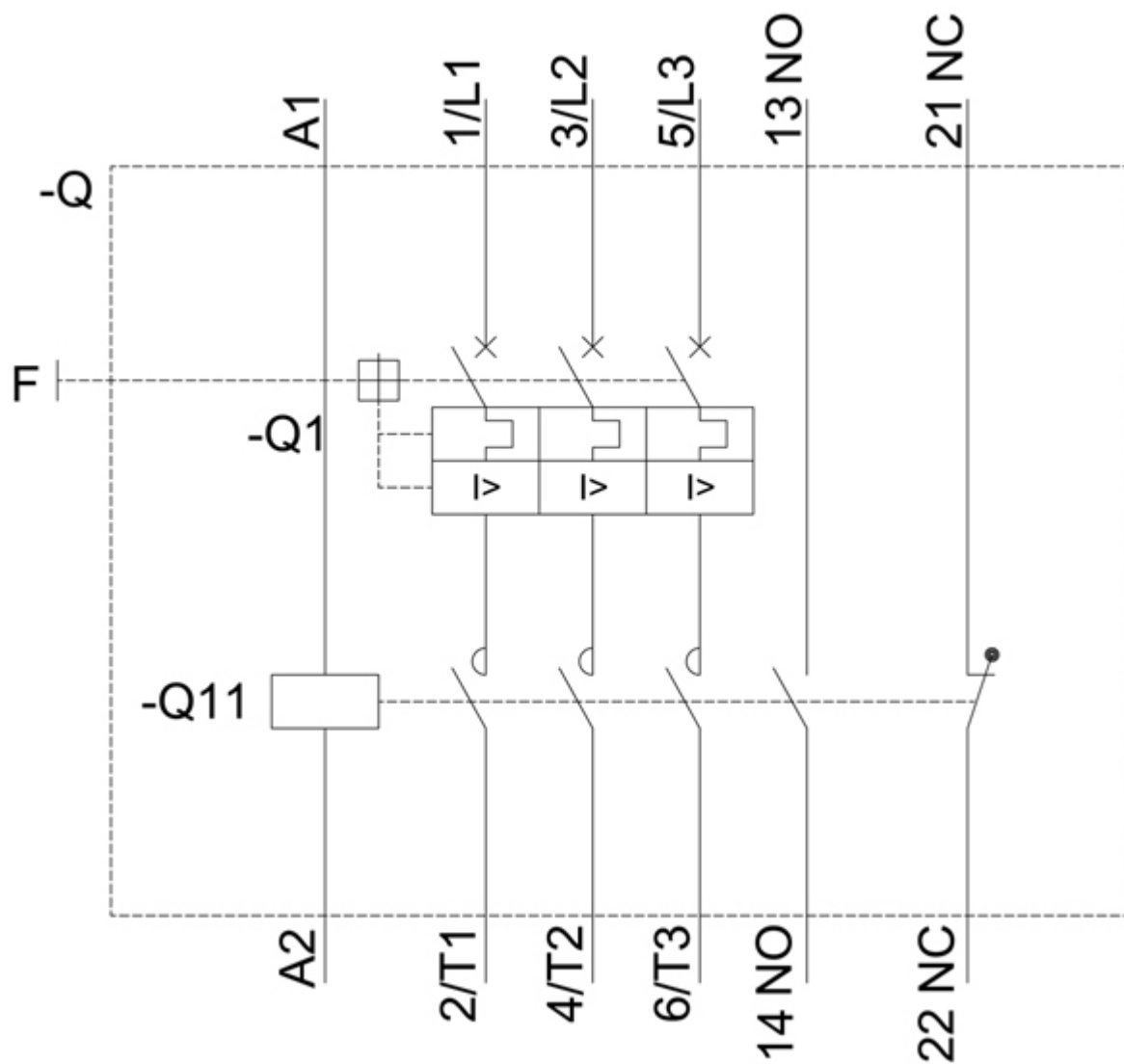
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1FH24-0AP0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1FH24-0AP0&objecttype=14&gridview=view1>







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