

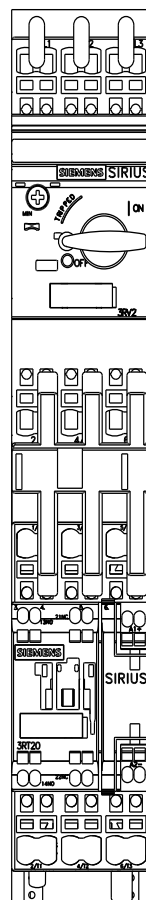
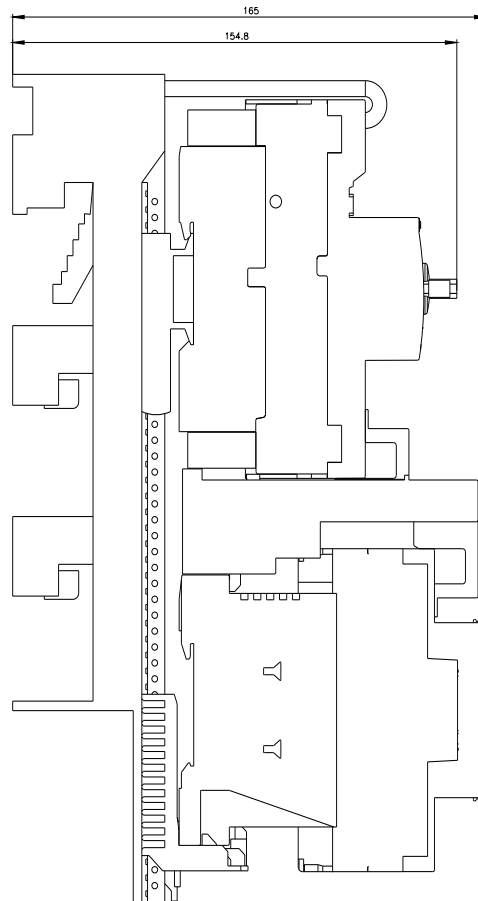
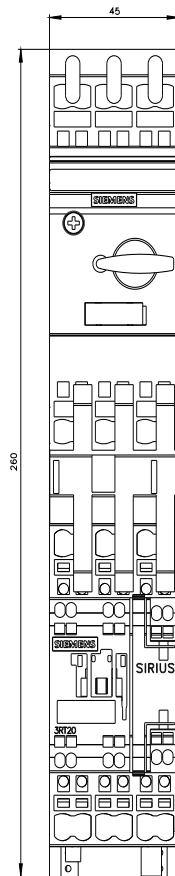


Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 16...22 A 24 V DC
Spring-type terminal for 60 mm busbar systems (also fulfills type of coordination 1)
Type of coordination 2, I_q = 150 kA 1 NO+1 NC (contactor)

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	3RT2027-2BB40
• of the supplied circuit-breakers	3RV2021-4CA20
• 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
power loss [W] for rated value of the current	
• at AC in hot operating state per pole	5.8 W
• without load current share typical	5.9 W
type of calculation of power loss current-dependent	quadratic
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	6 g / 11 ms
mechanical service life (operating cycles) of contactor typical	10 000 000
type of coordination	2
reference code according to IEC 81346-2:2019	Q
Substance Prohibitance (day/month/year)	10/01/2009
Net Weight	1.616 kg
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	16 ... 22 A
operating voltage	
• rated value	690 V

• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
operating frequency rated value	50 ... 60 Hz
operational current	
• at AC-3 at 400 V rated value	22 A
• at AC-3e at 400 V rated value	22 A
operating power	
• at AC-3 — at 400 V rated value	11 000 W
• at AC-3e — at 400 V rated value	11 000 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	5.9 W
Auxiliary circuit	
product extension auxiliary switch	Yes
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	286 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	22 A
• at 600 V rated value	22 A
yielded mechanical performance [hp]	
• for single-phase AC motor — at 110/120 V rated value — at 230 V rated value	1.5 hp 3 hp
• for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value	7.5 hp 7.5 hp 15 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (I_q)	
• at 400 V according 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 — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — downwards — at the side	20 mm 0 mm 50 mm 20 mm 10 mm 20 mm 0 mm 50 mm 10 mm 20 mm
Connections/ Terminals	

type of electrical connection					
• for main current circuit • for auxiliary and control circuit		spring-loaded terminals spring-loaded terminals			
Safety related data					
product function suitable for safety function		Yes			
Electrical Safety					
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 • PROFIsafe protocol		No No			
protocol is supported AS-Interface protocol		No			
Approvals Certificates					
Environment	General Product Approval	For use in hazardous locations			
Environmental Conformations	 UL	 EAC	 EG-Konf.	 UKCA	 ATEX
Test Certificates		Maritime application			
Type Test Certificates/Test Report	Special Test Certificate	 ABS	 BUREAU VERITAS	 DNV	 LRS
Maritime application			other		
 PRS	 RINA	 RMRS	Confirmation	Confirmation	 产品合格 QC PASS
Railway	Dangerous goods				
Special Test Certificate	Transport Information				
Further information					
Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875					
Information for data generation and storage https://support.industry.siemens.com/cs/ww/en/view/109995012					
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=3RA2120-4CH27-0BB4					
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4CH27-0BB4					
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-4CH27-0BB4&lang=en					
Cax online generator https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-4CH27-0BB4					
Characteristic curves <a href='https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>'>https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>					





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