

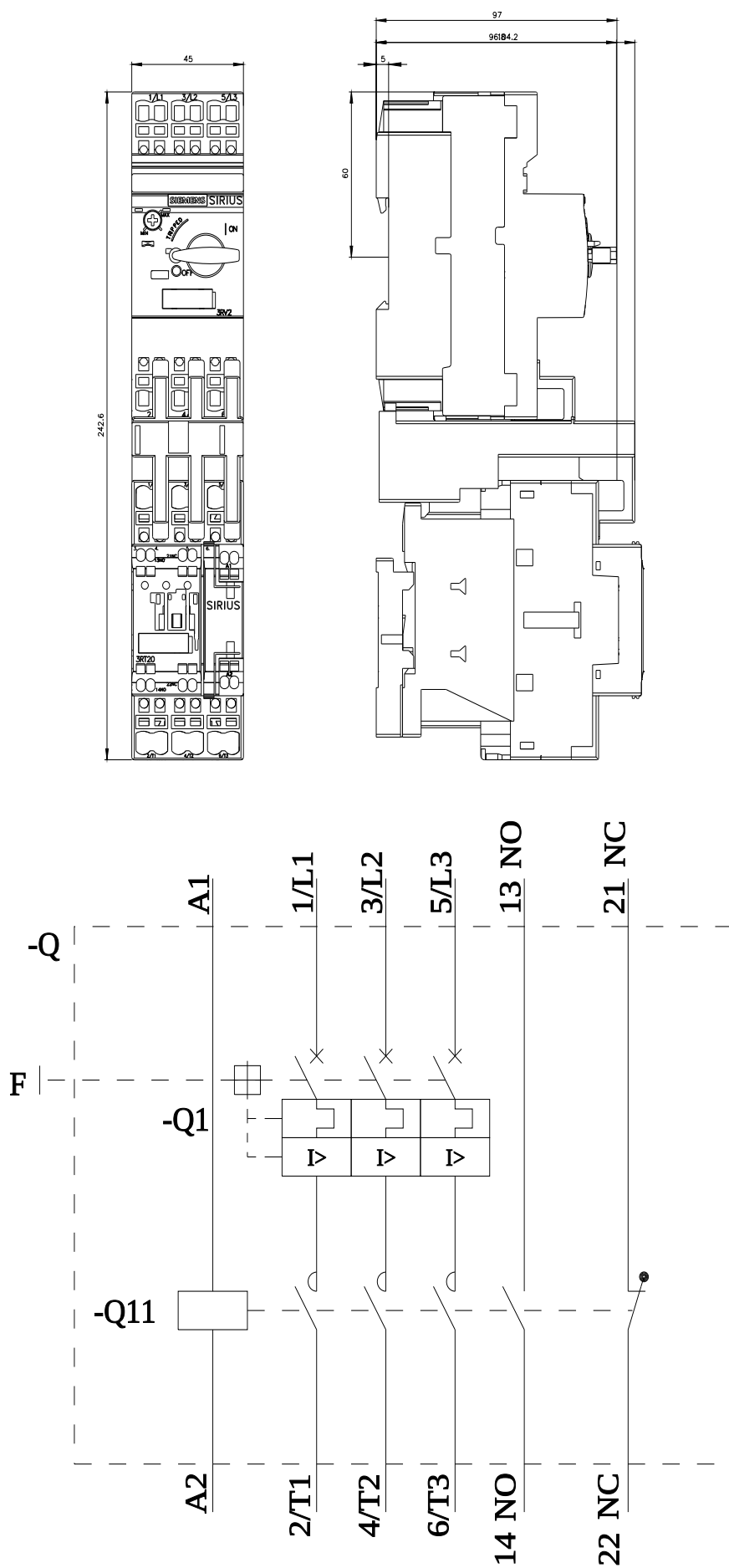
Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 3.50...5.00 A 230 V AC Spring-type terminal for installation on standard mounting rail (also fulfills type of coordination 1) Type of coordination 2, I_q = 150 kA 1 NO+1 NC (contactor)

product brand name	SIRIUS
product designation	Direct (on-line) starter
design of the product	for DIN-rail or screw mounting
product type designation	3RA21
manufacturer's article number	
• of the supplied contactor	3RT2024-2AP00
• of the supplied circuit-breakers	3RV2021-1FA20
• 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	2.7 W
• without load current share typical	7.6 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)	03/01/2017
SVHC substance name	Lead CAS-No. 7439-92-1
Net Weight	0.952 g
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	3.5 ... 5 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	5 A
• at AC-3e at 400 V rated value	5 A
operating power	
• at AC-3	
— at 400 V rated value	1 500 W
• at AC-3e	

— 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	7.6 VA
• at 50 Hz	7.6 VA
inductive power factor with the holding power of the coil	0.25
• at 50 Hz	0.25
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	65 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	5 A
• at 600 V rated value	5 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	0.25 hp
— at 230 V rated value	0.5 hp
• for 3-phase AC motor	
— at 200/208 V rated value	1.5 hp
— at 220/230 V rated value	1.5 hp
— at 460/480 V rated value	3 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 (I_q)	
• at 400 V according to IEC 60947-4-1 rated value	150 000 A
Installation/ mounting/ dimensions	
mounting position	vertical
fastening method	screw and snap-on mounting onto 35 mm DIN rail
height	243 mm
width	45 mm
depth	107 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
• for auxiliary and control circuit	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	No		
• PROFIsafe protocol	No		
protocol is supported AS-Interface protocol	No		
Approvals Certificates			
Environment	General Product Approval		
Environmental Confirmations			
For use in hazardous locations	Test Certificates Special Test CertificateType Test Certificates/Test Report	Maritime application	
Maritime application	ConfirmationConfirmation	other	
other	Railway		
	Special Test Certificate		

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=3RA2120-1FE24-0AP0	
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1FE24-0AP0	
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1FE24-0AP0&lang=en	
Cax online generator https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1FE24-0AP0	
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>	



last modified:

4/24/2026 