














Load feeder fuseless, Reversing duty 400 V AC, Size S0 9.00...12.5 A 24 V DC
Spring-type terminal for installation on standard mounting rail with standard
mounting rail adapter (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	Reversing starter
design of the product	for DIN-rail or screw mounting
product type designation	3RA22
manufacturer's article number	
<ul style="list-style-type: none"> • of the supplied contactor • of the supplied circuit-breakers • of the supplied RH assembly kit • of the supplied link module • of the supplied DIN-rail adapter 	3RT2024-2BB40 3RV2021-1KA20 3RA2923-1BB2 3RA2921-2AA00 3RA2922-1AA00
General technical data	
size of the circuit-breaker	S0
size of load feeder	S0
power loss [W] for rated value of the current	
<ul style="list-style-type: none"> • at AC in hot operating state per pole • without load current share typical 	3.4 W 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)	03/01/2017
SVHC substance name	Lead CAS-No. 7439-92-1
Net Weight	2.426 kg
Ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport 	-20 ... +60 °C -50 ... +80 °C -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	9 ... 12.5 A
operating voltage	
<ul style="list-style-type: none"> • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum 	690 V 690 V 690 V
operating frequency rated value	50 ... 60 Hz
operational current	
<ul style="list-style-type: none"> • at AC-3 at 400 V rated value • at AC-3e at 400 V rated value 	12 A 12 A
operating power	

<ul style="list-style-type: none"> ● at AC-3 <ul style="list-style-type: none"> — at 400 V rated value 	5 500 W
<ul style="list-style-type: none"> ● at AC-3e <ul style="list-style-type: none"> — at 400 V rated value 	5 500 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	163 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
<ul style="list-style-type: none"> ● at 480 V rated value 	11 A
<ul style="list-style-type: none"> ● at 600 V rated value 	10 A
yielded mechanical performance [hp]	
<ul style="list-style-type: none"> ● for single-phase AC motor <ul style="list-style-type: none"> — at 110/120 V rated value — at 230 V rated value ● for 3-phase AC motor <ul style="list-style-type: none"> — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value 	0.75 hp 2 hp 3 hp 3 hp 7.5 hp 10 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 according to IEC 60947-4-1 rated value 	150 000 A
Installation/ mounting/ dimensions	
mounting position	vertical
fastening method	On adapter for screw and snap-on mounting on 35 mm DIN rail
height	269 mm
width	90 mm
depth	130 mm
required spacing	
<ul style="list-style-type: none"> ● for grounded parts <ul style="list-style-type: none"> — forwards — backwards — upwards — at the side — downwards ● for live parts <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at the side 	32 mm 0 mm 50 mm 10 mm 10 mm 32 mm 0 mm 50 mm 10 mm 10 mm
Connections/ Terminals	
type of electrical connection	
<ul style="list-style-type: none"> ● 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		No			
• PROFIsafe protocol		No			
protocol is supported AS-Interface protocol		No			
Approvals Certificates					
Environment	General Product Approval				For use in hazardous locations
Environmental Confirmations					
Test Certificates					
Maritime application					
Type Test Certificates/Test Report	Special Test Certificate				
Maritime application			other		
			Confirmation	Confirmation	
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=3RA2220-1KF24-0BB4					
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1KF24-0BB4					
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2220-1KF24-0BB4&lang=en					
Cax online generator https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-1KF24-0BB4					
Characteristic curves <a haupt"><="" href="https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=" mmp_prod_no>"="">https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>					

last modified:

4/24/2026 