



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S2 49...59 A 20 ... 33 V AC/DC screw terminal for installation on standard mounting rail (also fulfills type of coordination 1) Type of coordination 2, I_q = 100 kA 1 NO+1 NC (contactor) with circuit (integrated)

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	
<ul style="list-style-type: none"> • of the supplied contactor • of the supplied circuit-breakers • of the supplied link module 	3RT2037-1NB30 3RV2031-4XA10 3RA2931-1AA00
General technical data	
size of the circuit-breaker	S2
size of load feeder	S2
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 	12.5 W 2 W
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	6g / 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 (Date)	03/01/2017
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Melamine - 108-78-1
Weight	2.411 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	49 ... 59 A
operating voltage	
<ul style="list-style-type: none"> • rated value 	690 V

<ul style="list-style-type: none"> • at AC-3 rated value maximum 	690 V
<ul style="list-style-type: none"> • at AC-3e rated value maximum 	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 	59 A
<ul style="list-style-type: none"> • at AC-3e at 400 V rated value 	59 A
operating power	
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value 	30 000 W
<ul style="list-style-type: none"> • at AC-3e <ul style="list-style-type: none"> — at 400 V rated value 	30 000 W
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	
<ul style="list-style-type: none"> • at 50 Hz rated value 	20 ... 33 V
<ul style="list-style-type: none"> • at 60 Hz rated value 	20 ... 33 V
control supply voltage at DC rated value	20 ... 33 V
apparent holding power of magnet coil at AC	2 VA
<ul style="list-style-type: none"> • at 50 Hz 	2 VA
<ul style="list-style-type: none"> • at 60 Hz 	2 VA
inductive power factor with the holding power of the coil	1
holding power of magnet coil at DC	1 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	845 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
<ul style="list-style-type: none"> • at 480 V rated value 	59 A
<ul style="list-style-type: none"> • at 600 V rated value 	52 A
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 	100 000 A
Installation/ mounting/ dimensions	
mounting position	vertical, horizontal
fastening method	screw and snap-on mounting to two 35 mm DIN rails
height	274 mm
width	55 mm
depth	150 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 	32 mm 0 mm 50 mm 10 mm 10 mm
<ul style="list-style-type: none"> • 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
Connections/ Terminals	
type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	screw-type terminals
<ul style="list-style-type: none"> • for auxiliary and control circuit 	screw-type 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

General Product Approval	For use in hazardous locations	Test Certificates
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[Type Test Certificates/Test Report](#)

Test Certificates

Test Certificates	Maritime application				
Special Test Certificate					

Maritime application

Maritime application	other	Railway	Dangerous goods
			Confirmation
			Special Test Certificate
			Transport Information

Environment

Environmental Confirmations

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=3RA2130-4XA37-0NB3>

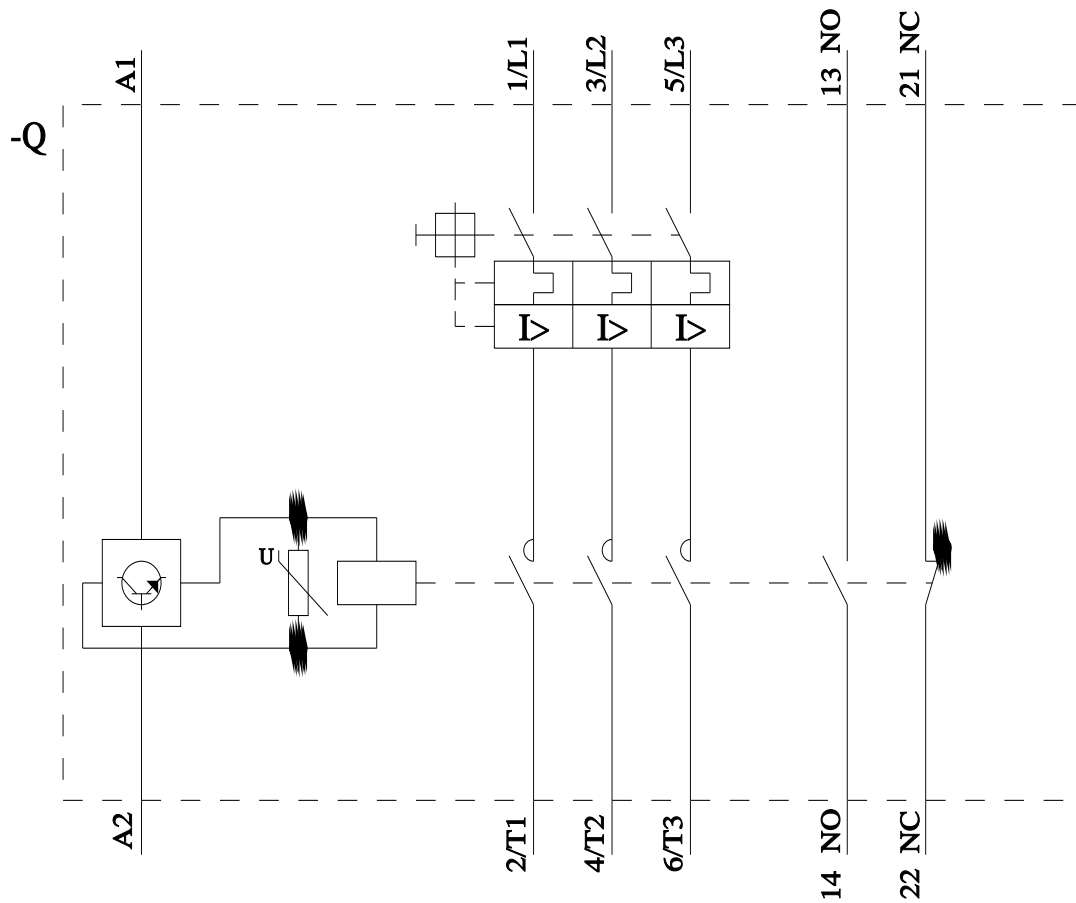
Cax online generator
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2130-4XA37-0NB3>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2130-4XA37-0NB3>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2130-4XA37-0NB3&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2130-4XA37-0NB3/char>

Further characteristics (e.g. electrical endurance, switching frequency)
<https://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2130-4XA37-0NB3&objecttype=14&gridview=view1>



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