SIEMENS

Data sheet 3RA2415-8XF31-2AP0

Contactor assembly for star-delta (wye-delta) start AC-3, 5.5 kW/400 V, 230 V AC 50/60 Hz, 3-pole, Size S00 Spring-type terminals electrical and mechanical interlock 3 NO integrated

product brand name	SIRIUS
product designation	Contactor assembly for star-delta (wye-delta) start
product type designation	3RA24
manufacturer's article number	
● 1 of the supplied contactor	3RT2015-2AP01
● 2 of the supplied contactor	3RT2015-2AP01
● 3 of the supplied contactor	3RT2015-2AP01
● of the supplied RS assembly kit	3RA2913-2BB2
● of the supplied function module for wye-delta circuits	3RA2816-0EW20
General technical data	
size of contactor	S00
product extension auxiliary switch	No
shock resistance at rectangular impulse	
● at AC	6,7g / 5 ms, 4,2g / 10 ms
● at DC	6,7g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
● at AC	10,5g / 5 ms, 6,6g / 10 ms
● at DC	10,5g / 5 ms, 6,6g / 10 ms
mechanical service life (operating cycles)	
● of contactor typical	10 000 000
● of the contactor with added auxiliary switch block typical	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
● during operation	-25 ... +60 °C
● during storage	-55 ... +80 °C
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
number of NC contacts for main contacts	0
operating voltage	
● at AC-3 rated value maximum	690 V
operational current	
● at AC-3	
— at 400 V rated value	12 A
operating power	
● at AC-3	
— at 400 V rated value	5.5 kW

— at 500 V rated value	7.2 kW
— at 690 V rated value	9.2 kW
operating frequency	
● at AC-3 maximum	1 000 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage 1 at AC	
● at 50 Hz rated value	230 V
● at 60 Hz rated value	230 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 ... 1.1
● at 60 Hz	0.85 ... 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	56 VA
● at 60 Hz	51 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.8
● at 60 Hz	0.75
apparent holding power of magnet coil at AC	
● at 50 Hz	10.4 VA
● at 60 Hz	8.6 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.25
● at 60 Hz	0.25
Auxiliary circuit	
number of NO contacts for auxiliary contacts	
● instantaneous contact	3
contact reliability of auxiliary contacts	< 1 error per 100 million operating cycles
UL/CSA ratings	
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
design of the fuse link	
● for short-circuit protection of the main circuit	
— with type of coordination 1 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
— with type of assignment 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
● for short-circuit protection of the auxiliary switch required	fuse gG: 10 A
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method	screw and snap-on mounting onto 35 mm DIN rail
height	84 mm
width	135 mm
depth	145 mm
required spacing	
● with side-by-side mounting	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm
● for grounded parts	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— at the side	6 mm
— downwards	6 mm
● for live parts	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm

— downwards	6 mm
— at the side	6 mm

Connections/ Terminals

type of electrical connection	
● for main current circuit	spring-loaded terminals
● for auxiliary and control circuit	spring-loaded terminals
● at contactor for auxiliary contacts	Spring-type terminals
● of magnet coil	Spring-type terminals
type of connectable conductor cross-sections for main contacts	
● solid	2x (0.5 ... 4 mm²)
● solid or stranded	2x (0,5 ... 4 mm²)
● finely stranded with core end processing	2x (0.5 ... 2.5 mm²)
● finely stranded without core end processing	2x (0.5 ... 2.5 mm²)
type of connectable conductor cross-sections	
● for auxiliary contacts	
— solid or stranded	2x (0.5 ... 2.5 mm²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm²)
— finely stranded without core end processing	2x (0.5 ... 1.5 mm²)
● for AWG cables for auxiliary contacts	2x (20 ... 14)

Safety related data

B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
● with low demand rate according to SN 31920	40 %
● with high demand rate according to SN 31920	75 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 a
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front

Communication/ Protocol

product function bus communication	No
protocol is supported AS-Interface protocol	No
product function control circuit interface with IO link	No

Certificates/ approvals

General Product Approval				Declaration of Conformity	Test Certificates	
Confirmation	EAC	UK CA	CE EG-Konf.		Special Test Certific-ate	Type Test Certific-ates/Test Report

Marine / Shipping

ABS, BUREAU VERITAS, DNV, LRS, PRS, RINA

Marine / Shipping	other	Railway
RMRS	Confirmation	Vibration and Shock

Further information

Siemens has decided to exit the Russian market (see here).
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
Siemens is working on the renewal of the current EAC certificates.
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).
Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RA2415-8XF31-2AP0

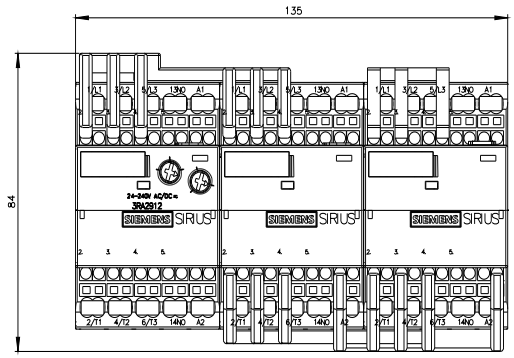
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2415-8XF31-2AP0

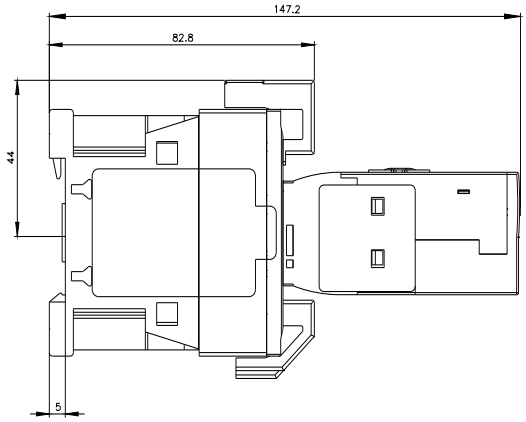
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RA2415-8XF31-2AP0

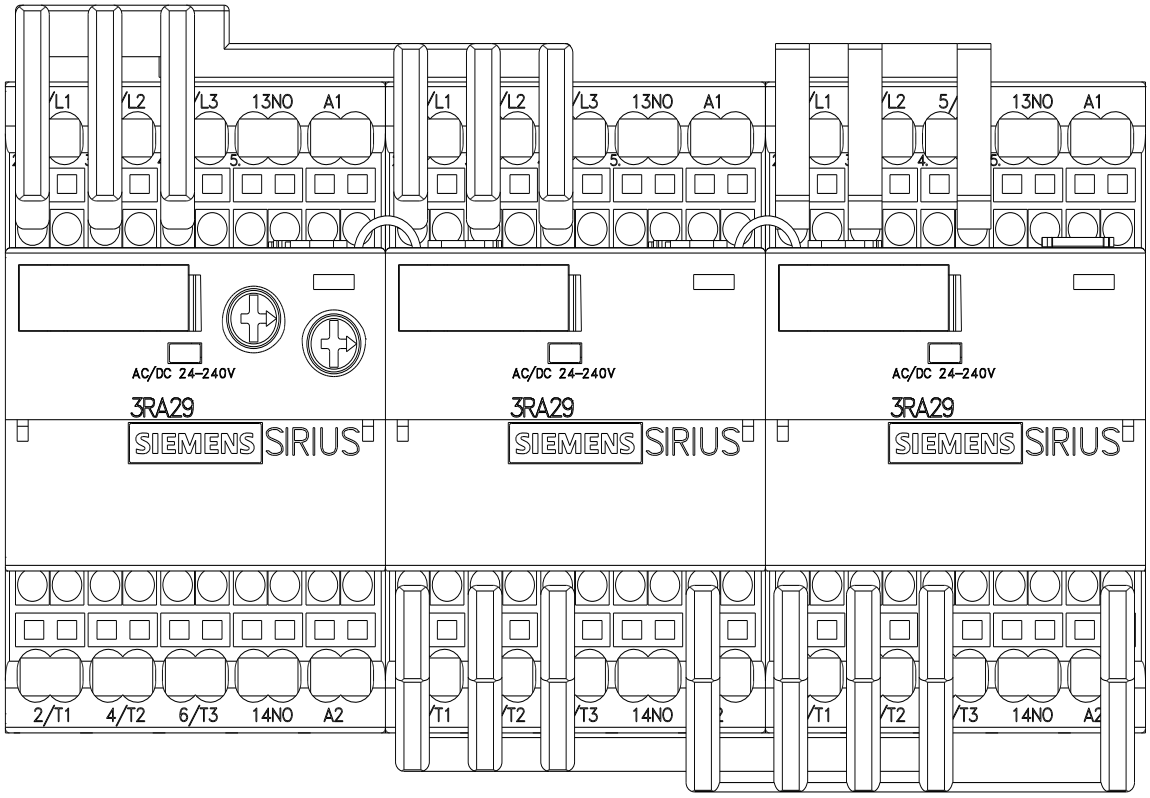
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2415-8XF31-2AP0&lang=en

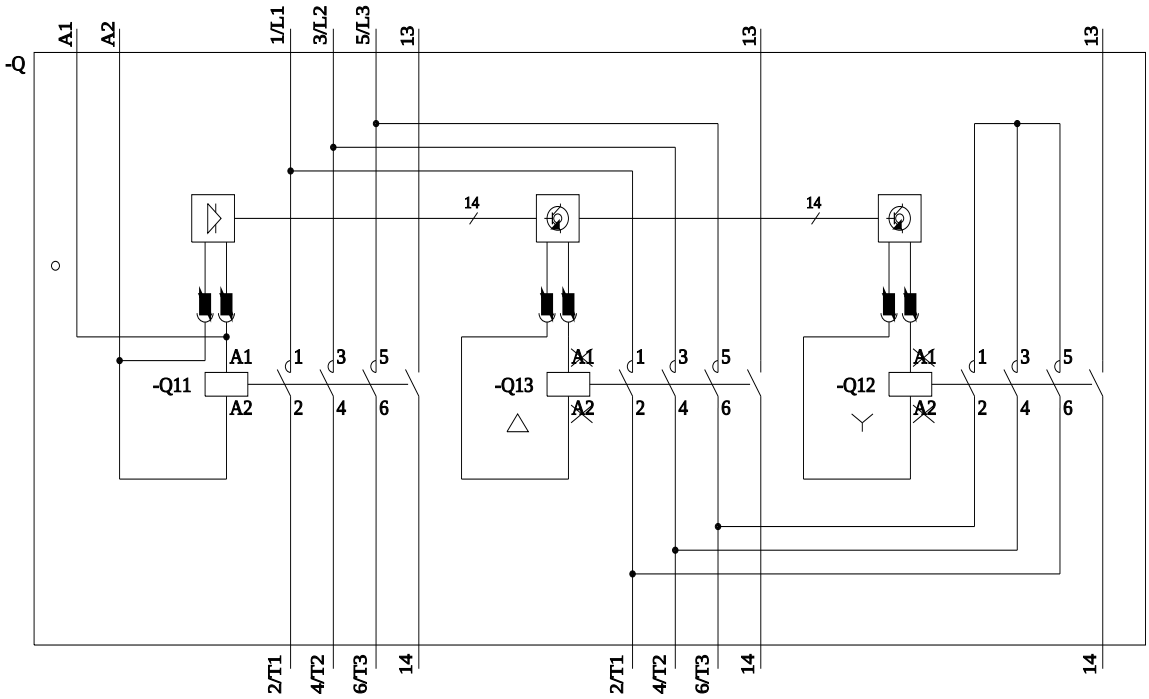
Characteristic: Tripping characteristics, I²t, Let-through current
https://support.industry.siemens.com/cs/ww/en/ps/3RA2415-8XF31-2AP0/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2415-8XF31-2AP0&objecttype=14&gridview=view1









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