

cont. ass. f. star-delta (wye-delta) start, I/O-Link AC-3, 5.5 kW/400 V, 24 V DC 3-pole, Size S00 Size S00, screw terminals electrical and mechanical interlock 2 NO integrated



Product brand name	SIRIUS
Product designation	Contacteur assembly for star-delta (wye-delta) start
Product type designation	3RA24
Manufacturer's article number	<ul style="list-style-type: none"> • 1 of the supplied contactor 3RT2015-1BB41-0CC0 • 2 of the supplied contactor 3RT2015-1BB41 • 3 of the supplied contactor 3RT2015-1BB41 • of the supplied RS assembly kit 3RA2913-2BB1 • of the supplied function module for communication 3RA2711-1CA00

General technical data	
Size of contactor	S00
Product extension	No
<ul style="list-style-type: none"> • Auxiliary switch 	
Insulation voltage	690 V
<ul style="list-style-type: none"> • with degree of pollution 3 rated value 	
Degree of pollution	3
Surge voltage resistance rated value	6 kV
Protection class IP	

<ul style="list-style-type: none"> • on the front 	IP20
Shock resistance	9.8g / 5 ms and 5.9g / 10 ms
Shock resistance at rectangular impulse	
<ul style="list-style-type: none"> • at AC 	6,7g / 5 ms, 4,2g / 10 ms
<ul style="list-style-type: none"> • at DC 	6,7g / 5 ms, 4,2g / 10 ms
Shock resistance with sine pulse	
<ul style="list-style-type: none"> • at AC 	10,5g / 5 ms, 6,6g / 10 ms
<ul style="list-style-type: none"> • at DC 	10,5g / 5 ms, 6,6g / 10 ms
Mechanical service life (switching cycles)	
<ul style="list-style-type: none"> • of contactor typical 	10 000 000
<ul style="list-style-type: none"> • of the contactor with added auxiliary switch block typical 	10 000 000
Reference code acc. to DIN EN 81346-2	Q

Ambient conditions	
Installation altitude at height above sea level	
<ul style="list-style-type: none"> • maximum 	2 000 m
Ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +60 °C
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • at AC-3 rated value maximum 	690 V
Operating current	
<ul style="list-style-type: none"> • at AC-1 at 400 V <ul style="list-style-type: none"> — at ambient temperature 40 °C rated value — at ambient temperature 60 °C rated value 	18 A 16 A
<ul style="list-style-type: none"> • at AC-2 at 400 V rated value 	12 A
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value 	12 A
Operating power	
<ul style="list-style-type: none"> • at AC-2 at 400 V rated value 	5.5 kW
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value — at 500 V rated value — at 690 V rated value 	5.5 kW 7.2 kW 9.2 kW
No-load switching frequency	1 500 1/h
Operating frequency	
<ul style="list-style-type: none"> • at AC-1 maximum 	1 000 1/h

• at AC-2 maximum	1 000 1/h
• at AC-3 maximum	1 000 1/h
• at AC-4 maximum	300 1/h

Control circuit/ Control

Type of voltage of the control supply voltage	DC
Control supply voltage 1	
• at DC rated value	24 V
Design of the surge suppressor	with varistor
Closing power of magnet coil at DC	5.9 W
Holding power of magnet coil at DC	5.9 W

Auxiliary circuit

Number of NO contacts for auxiliary contacts	
• instantaneous contact	3
Operating current of auxiliary contacts at AC-12 maximum	10 A
Operating current of auxiliary contacts at AC-15	
• at 230 V	6 A
• at 400 V	3 A
Operating current of auxiliary contacts at DC-13	
• at 24 V	10 A
• at 60 V	2 A
• at 110 V	1 A
• at 220 V	0.3 A
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
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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
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail
Height	68 mm
Width	135 mm
Depth	145 mm

Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • 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 	<ul style="list-style-type: none"> 6 mm 0 mm 6 mm 6 mm 6 mm 6 mm 0 mm 6 mm 6 mm 6 mm 6 mm 0 mm 6 mm 6 mm 6 mm

Connections/ Terminals

Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 	<ul style="list-style-type: none"> screw-type terminals screw-type terminals
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts 	<ul style="list-style-type: none"> 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm² 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x (0,5 ... 4 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14)
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing • at AWG conductors for auxiliary contacts 	<ul style="list-style-type: none"> 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14)

Safety related data

B10 value	
<ul style="list-style-type: none"> • with high demand rate acc. to SN 31920 	1 000 000
Proportion of dangerous failures	
<ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 	<ul style="list-style-type: none"> 40 % 75 %
Failure rate [FIT]	

- with low demand rate acc. to SN 31920

100 FIT

T1 value for proof test interval or service life acc. to IEC 61508

20 y

Communication/ Protocol

Product function Bus communication

Yes

Protocol is supported

- AS-Interface protocol

No

Product function Control circuit interface with IO link

Yes

Certificates/ approvals

General Product Approval	Declaration of Conformity	Test Certificates	Marine / Shipping
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[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping



other

Railway

[Confirmation](#)

[Vibration and Shock](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2415-8XE31-1BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2415-8XE31-1BB4>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2415-8XE31-1BB4>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

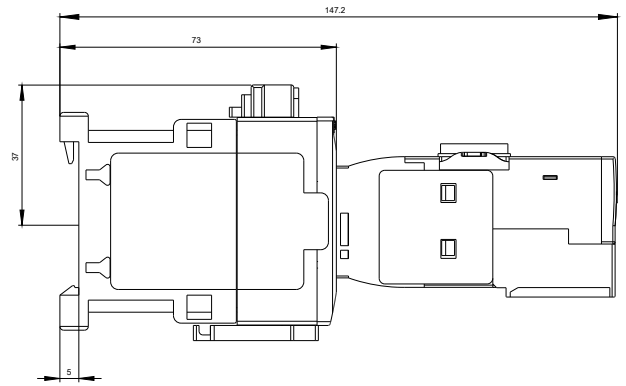
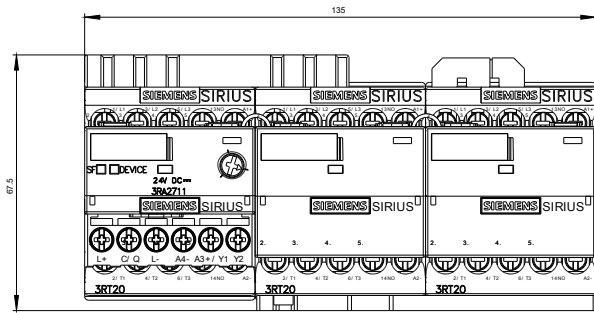
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2415-8XE31-1BB4&lang=en

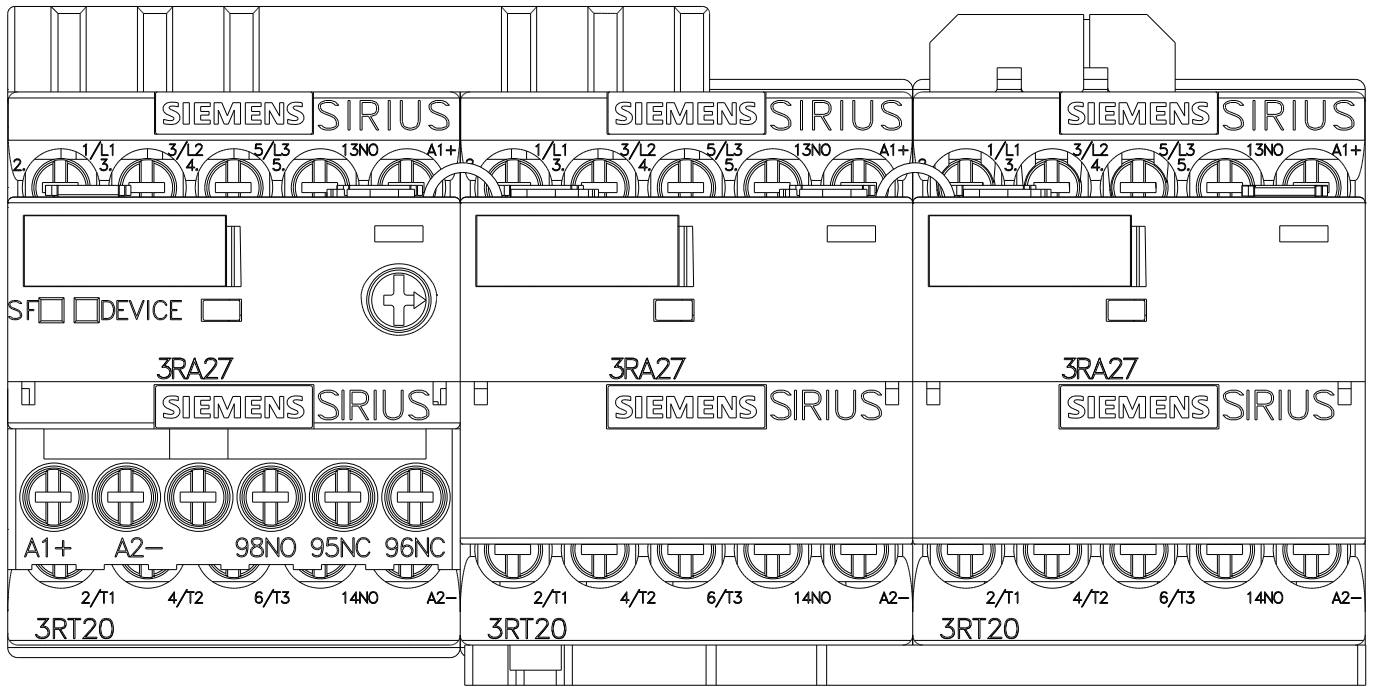
Characteristic: Tripping characteristics, I²t, Let-through current

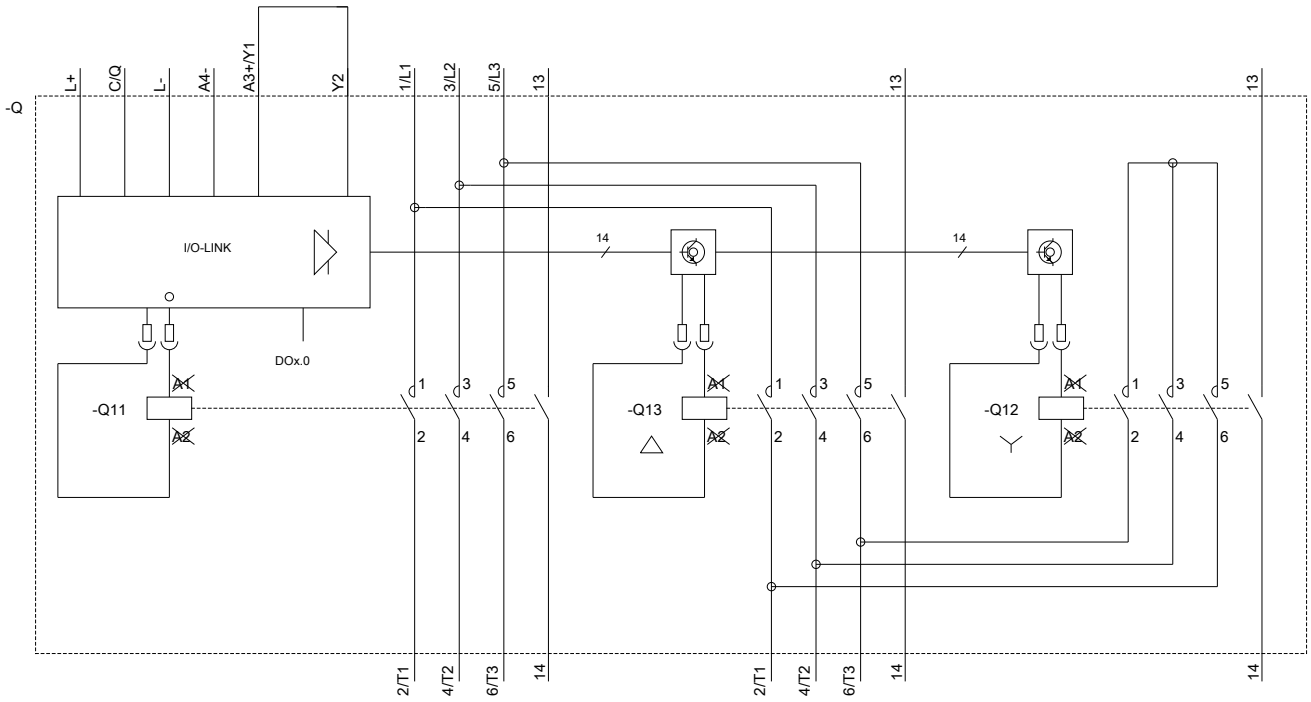
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2415-8XE31-1BB4/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2415-8XE31-1BB4&objecttype=14&gridview=view1>







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