

Contactor assembly for star-delta (wye-delta) start, AS-i AC-3, 11 kW/400 V, 24 V DC 3-pole, size S0 screw terminals electrical and mechanical interlock 3 NO + 3 NC integrated



product brand name	SIRIUS
Product designation	Contactor 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 3RT2024-1BB40-0CC0 • 2 of the supplied contactor 3RT2024-1BB40 • 3 of the supplied contactor 3RT2024-1BB40 • of the supplied RS assembly kit 3RA2923-2BB1 • of the supplied function module for communication 3RA2712-1CA00

General technical data	
Size of contactor	S0
Product extension	No
<ul style="list-style-type: none"> • Auxiliary switch 	No
<ul style="list-style-type: none"> • Insulation voltage with degree of pollution 3 at AC rated value 	690 V
Surge voltage resistance rated value	6 kV
<ul style="list-style-type: none"> • protection class IP on the front 	IP20
Shock resistance at rectangular impulse	

<ul style="list-style-type: none"> • at AC • at DC 	7,5g / 5 ms, 4,7g / 10 ms 10g / 5 ms, 7,5g / 10 ms
Shock resistance with sine pulse <ul style="list-style-type: none"> • at AC • at DC 	11,8g / 5 ms, 7,4g / 10 ms 15g / 5 ms, 10g / 10 ms
Mechanical service life (switching cycles) <ul style="list-style-type: none"> • of contactor typical • of the contactor with added auxiliary switch block typical 	10 000 000 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 • during storage 	-25 ... +60 °C -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-3 <ul style="list-style-type: none"> — at 400 V rated value 	25 A
Operating power <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 • at AC-4 at 400 V rated value 	11 kW 15.6 kW 19 kW 2 kW
No-load switching frequency	1 500 1/h
Operating frequency at AC-3 maximum	1 000 1/h

Control circuit/ Control

Type of voltage of the control supply voltage	DC
Control supply voltage 1 <ul style="list-style-type: none"> • at DC rated value 	24 V
Closing power of magnet coil at DC	13.8 W
Holding power of magnet coil at DC	13.8 W

Auxiliary circuit

Number of NC contacts for auxiliary contacts	
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• instantaneous contact	3
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
• operating current of auxiliary contacts at AC-15 at 400 V	3 A
• operating current of auxiliary contacts at DC-13 at 24 V	10 A
• Operating current of auxiliary contacts at DC-13 at 60 V	2 A
• Operating current of auxiliary contacts at DC-13 at 110 V	1 A
• Operating current of auxiliary contacts at DC-13 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

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: 63 A
— with type of assignment 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 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	101 mm
Width	135 mm
Depth	181 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 screw-type terminals
- Type of electrical connection for auxiliary and control current circuit screw-type terminals

Type of connectable conductor cross-sections

- for main contacts
 - solid 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²)
 - single or multi-stranded 2x (1 ... 2,5 mm²), 2x (2,5 ... 10 mm²)
 - finely stranded with core end processing 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²
- at AWG conductors for main contacts 2x (16 ... 12), 2x (14 ... 8)

Type of connectable conductor cross-sections

- for auxiliary contacts
 - single or multi-stranded 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²)
 - finely stranded with core end processing 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
- at AWG conductors for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14)

Safety related data

B10 value

- with high demand rate acc. to SN 31920 1 000 000

Proportion of dangerous failures

- with low demand rate acc. to SN 31920 40 %
- with high demand rate acc. to SN 31920 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

No

Protocol is supported

- AS-Interface protocol

Yes

Product function Control circuit interface with IO link

No

Certificates/ approvals

General Product Approval	Declaration of Conformity	Test Certificates	Marine / Shipping
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EG-Konf.

[Miscellaneous](#)

[Special Test Certificate](#)



ABS



BUREAU VERITAS

Marine / Shipping

other



LRS



PRS



RINA



RMRS



DNVGL.COM/AF

[Confirmation](#)

Railway

[Vibration and Shock](#)

Further information

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=3RA2423-8XH32-1BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2423-8XH32-1BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2423-8XH32-1BB4>

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

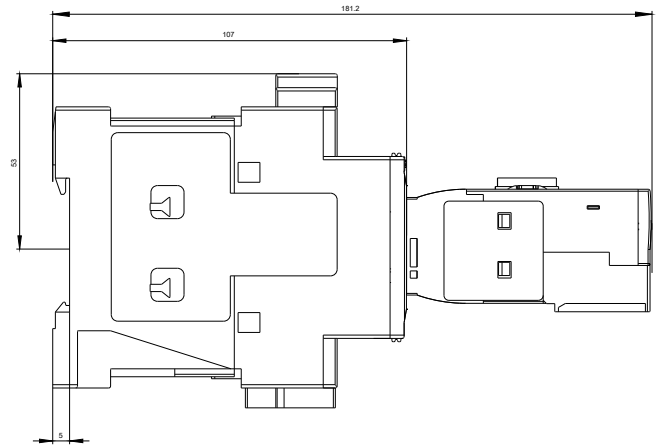
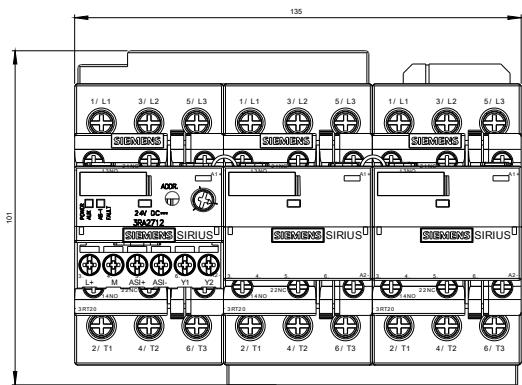
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2423-8XH32-1BB4&lang=en

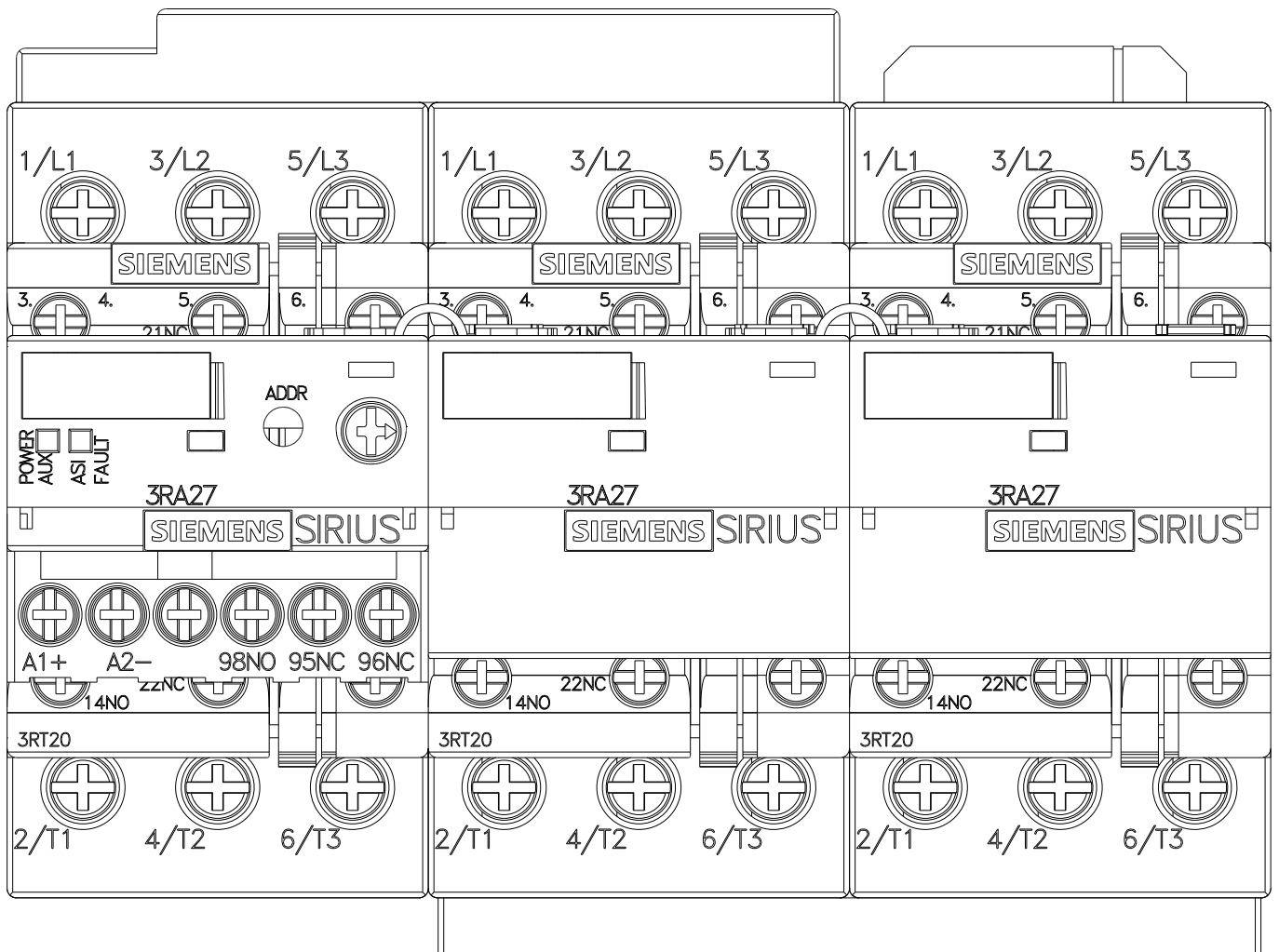
Characteristic: Tripping characteristics, I²t, Let-through current

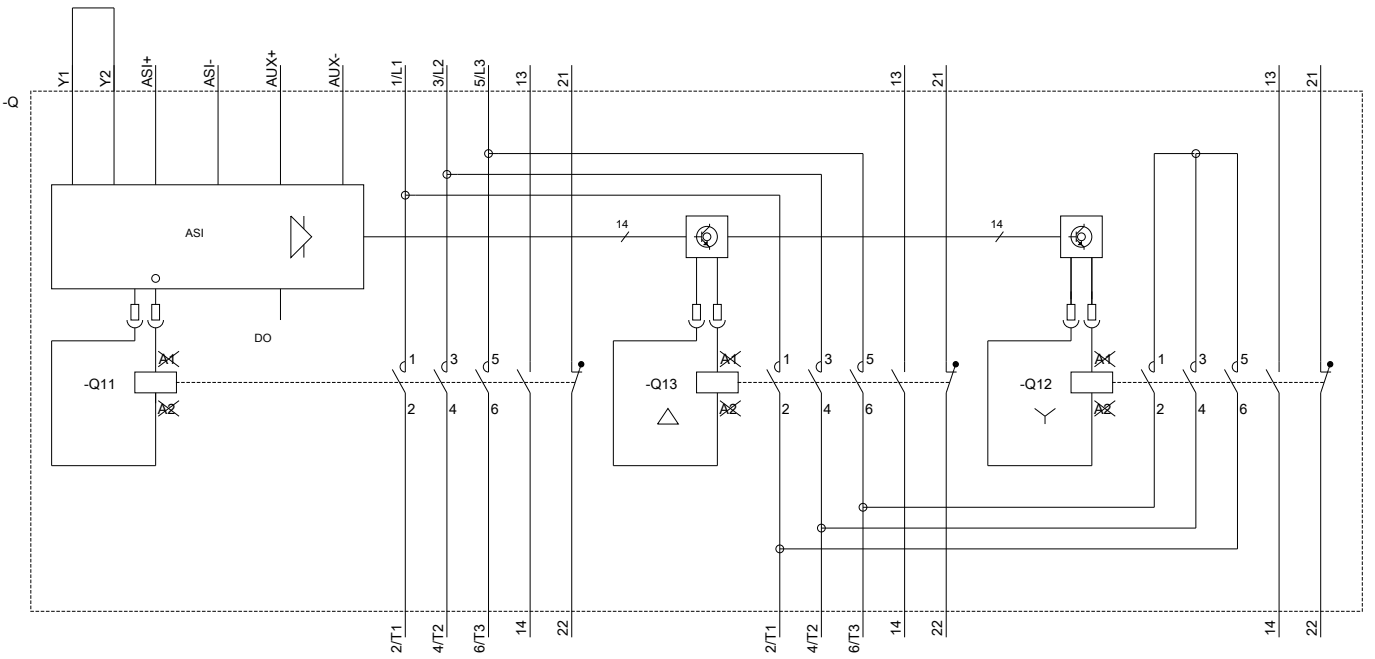
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2423-8XH32-1BB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2423-8XH32-1BB4&objecttype=14&gridview=view1>







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