

STAR-DELTA (WYE-D.) COMBINATION
AC3:55KW/400V 24-33V AC/DC SIZE S2, SCREW
CONNECTION ELECTR. AND MECH. INTERLOCK
3NO+3NC INTEGR.,



Figure similar

product brand name	SIRIUS
Product designation	star-delta (wye-delta) contactor assembly 3RA24
Manufacturer article number	
<ul style="list-style-type: none"> • 1 of the supplied contactor • 2 of the supplied contactor • 3 of the supplied contactor • of the supplied RS assembly kit • of the supplied function module for wye-delta circuits 	3RT2037-1NB30 3RT2037-1NB30 3RT2035-1NB30 3RA2934-2BB1 3RA2816-0EW20

General technical data:

Insulation voltage		
<ul style="list-style-type: none"> • with degree of pollution 3 Rated value 	V	690
Degree of pollution		3
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
<ul style="list-style-type: none"> • of the contactor typical • of the contactor with added auxiliary switch block typical 		10 000 000 10 000 000
Protection class IP		
<ul style="list-style-type: none"> • on the front 		IP20
Equipment marking		
<ul style="list-style-type: none"> • acc. to DIN EN 81346-2 		Q

Main circuit:

Number of poles for main current circuit		3
Number of NC contacts for main contacts		0

Number of NO contacts for main contacts		3
Operating voltage		
• at AC-3 Rated value maximum	V	690
Operating current		
• at AC-1		
— at 400 V at ambient temperature 40 °C Rated value	A	80
— at 400 V at ambient temperature 60 °C Rated value	A	70
• at AC-2 at 400 V Rated value	A	115
• at AC-3		
— at 400 V Rated value	A	115
Operating power		
• at AC-2 at 400 V Rated value	kW	55
• at AC-4 at 400 V Rated value	kW	48.5
Operating power		
• at AC-3		
— at 400 V Rated value	kW	55
Operating frequency		
• at AC-3 maximum	1/h	700
No-load switching frequency	1/h	1 500

Control circuit/ Control:

Type of voltage of the control supply voltage		AC/DC
Control supply voltage 1 with AC		
• at 50 Hz	V	20 ... 33
• at 60 Hz	V	20 ... 33
Control supply voltage 1		
• for DC	V	20 ... 33
Operating range factor control supply voltage rated value of the magnet coil with AC		
• at 50 Hz		0.8 ... 1.1
• at 60 Hz		0.8 ... 1.1
Operating range factor control supply voltage rated value of the magnet coil for DC		0.8 ... 1.1
Closing power of the magnet coil for DC	W	23
Holding power of the magnet coil for DC	W	1

Auxiliary circuit:

Number of NC contacts		
• for auxiliary contacts		
— instantaneous contact		3
— lagging switching		0
Number of NO contacts		

<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — instantaneous contact — leading contact 		3 0
Product expansion Auxiliary switch		No
Operating current of the auxiliary contacts at AC-12 maximum	A	10
Operating current of the auxiliary contacts at AC-15		
<ul style="list-style-type: none"> • at 230 V • at 400 V 	A A	6 3
Operating current of the auxiliary contacts at DC-13		
<ul style="list-style-type: none"> • at 24 V • at 60 V • at 110 V • at 220 V 	A A A A	10 2 1 0.3
Contact reliability of the auxiliary contacts		< 1 error per 100 million operating cycles

UL/CSA ratings:

Contact rating of the auxiliary contacts acc. to UL	A600 / Q600
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Short-circuit:

Design of the fuse link		
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of assignment 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required 		gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A fuse gL/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 fixing
Height	mm	142
Width	mm	177.5
Depth	mm	223
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 	mm mm mm mm mm mm	10 0 10 10 10 10

— Backwards	mm	0
— upwards	mm	10
— at the side	mm	10
— downwards	mm	10
• for live parts		
— forwards	mm	10
— Backwards	mm	0
— upwards	mm	10
— downwards	mm	10
— at the side	mm	10

Connections/ Terminals:

Type of electrical connection		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
Type of connectable conductor cross-section		
• for main contacts		
— single or multi-stranded		2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²)
— finely stranded with core end processing		2x (1 ... 25 mm ²), 1x (1 ... 35 mm ²)
• for AWG conductors for main contacts		2x (18 ... 2), 1x (18 ... 1)
• for auxiliary contacts		
— single or multi-stranded		2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²)
— finely stranded with core end processing		2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG conductors for auxiliary contacts		2x (20 ... 16), 2x (18 ... 14)
Apparent pick-up power of the magnet coil with AC		
• at 50 Hz	V·A	40
• at 60 Hz	V·A	40

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	%	73
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	100
T1 value for proof test interval or service life acc. to IEC 61508	y	20
Protection against electrical shock		finger-safe when touched vertically from front acc. to IEC 60529

Mechanical data:

Size of contactor		S2
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Communication/ Protocol:

Product function Bus communication		No
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Protocol is supported		No
<ul style="list-style-type: none"> • AS-interface protocol 		
Product function Control circuit interface with IO link		No

Ambient conditions:

Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
<ul style="list-style-type: none"> • during operation 	°C	-25 ... +60
<ul style="list-style-type: none"> • during storage 	°C	-55 ... +80

Certificates/ approvals:

General Product Approval	Declaration of Conformity	other
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[Environmental Confirmations](#)

Further information

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

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

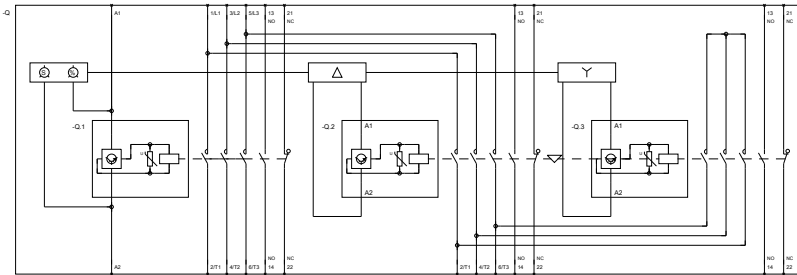
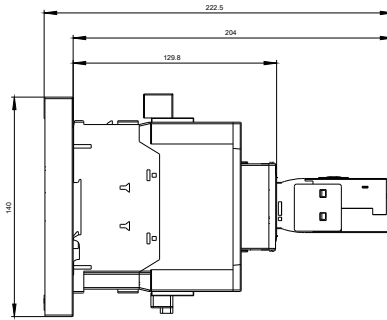
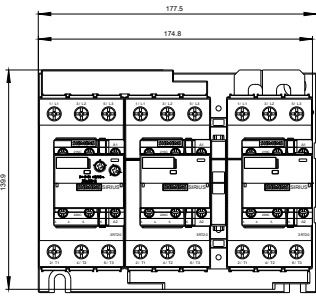
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RA24378XF321NB3>

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

<http://support.automation.siemens.com/WW/view/en/3RA24378XF321NB3/all>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RA24378XF321NB3&lang=en



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