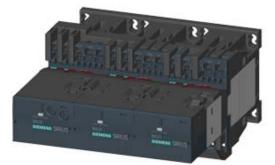
# **SIEMENS**

## Data sheet

# 3RA2415-8XF31-2AP0

STAR-DELTA-COMB. AC3, 5,5KW/400V AC230V, 50/60HZ, 3-POLE SZ S00, SPRING-LOADED TERMINAL ELECTR. AND MECH. INTERLOCK 3NO INTEGR.



product brand name	SIRIUS		
Product designation	star-delta (wye-delta) contactor assembly 3RA24		
Manufacturer article number			
• 1 of the supplied contactor	<u>3RT2015-2AP01</u>		
• 2 of the supplied contactor	<u>3RT2015-2AP01</u>		
• 3 of the supplied contactor	<u>3RT2015-2AP01</u>		
<ul> <li>of the supplied RS assembly kit</li> </ul>	<u>3RA2913-2BB2</u>		
<ul> <li>of the supplied function module for wye-delta</li> </ul>	3RA2816-0EW20		
circuits			

## General technical data:

Insulation voltage				
<ul> <li>with degree of pollution 3 Rated value</li> </ul>	V	690		
Degree of pollution	_	3		
Shock resistance 9.8g / 5 ms and		9.8g / 5 ms and 5.9g / 10 ms		
Surge voltage resistance Rated value	kV 6			
Mechanical service life (switching cycles)	_			
<ul> <li>of the contactor typical</li> </ul>		10 000 000		
<ul> <li>of the contactor with added auxiliary switch</li> </ul>		10 000 000		
block typical				
Protection class IP				
• on the front		IP20		
Equipment marking				
• 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		
<ul> <li>at AC-3 Rated value maximum</li> </ul>	V	690
Operating current		
● at AC-1		
— at 400 V at ambient temperature 40 °C	А	18
Rated value		
— at 400 V at ambient temperature 60 $^\circ \mathrm{C}$	А	16
Rated value		
• at AC-2 at 400 V Rated value	А	12
• at AC-3		
— at 400 V Rated value	А	12
Operating power		
• at AC-2 at 400 V Rated value	kW	5.5
Operating power		
• at AC-3		
— at 400 V Rated value	kW	5.5
— at 500 V Rated value	kW	7.2
— at 690 V Rated value	kW	9.2
Operating frequency		
● at AC-3 maximum	1/h	1 000
No-load switching frequency	1/h	1 500
Control circuit/ Control:		
Type of voltage of the control supply voltage		AC
Control supply voltage 1 with AC		
• at 50 Hz Rated value	V	230
• at 60 Hz Rated value	V	230
Operating range factor control supply voltage rated	-	
value of the magnet coil with AC		
• at 50 Hz		0.8 1.1
● at 60 Hz		0.85 1.1
Auxiliary circuit:		
Number of NC contacts		
<ul> <li>for auxiliary contacts</li> </ul>		
— instantaneous contact		0
— lagging switching		0
Number of NO contacts		
<ul> <li>for auxiliary contacts</li> </ul>		
— instantaneous contact		3
— leading contact		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	-			
• at 230 V	А	6		
● at 400 V	А	3		
Operating current of the auxiliary contacts at DC-13	-			
• at 24 V	A	10		
• at 60 V	А	2		
• at 110 V	А	1		
• at 220 V	А	0.3		
Contact reliability of the auxiliary contacts		< 1 error per 100 million operating cycles		
JL/CSA ratings:				
Contact rating of the auxiliary contacts acc. to UL		A600 / Q600		
Short-circuit:				
Design of the fuse link				
<ul> <li>for short-circuit protection of the main circuit</li> </ul>				
— with type of assignment 1 required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A		
— with type of assignment 2 required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE 20 A		
<ul> <li>for short-circuit protection of the auxiliary switch</li> </ul>		fuse gL/gG: 10 A		
required				
nstallation/ mounting/ dimensions:				
mounting position		+/-180° rotation possible on vertical mounting		
		surface; can be tilted forward and backward by +/-		
Mounting type		22.5° on vertical mounting surface		
		screw and snap-on mounting onto 35 mm standard mounting rail		
Height	mm	screw and snap-on mounting onto 35 mm standard		
Width	mm mm	screw and snap-on mounting onto 35 mm standard mounting rail		
Width Depth	-	screw and snap-on mounting onto 35 mm standard mounting rail 84		
Width	mm	screw and snap-on mounting onto 35 mm standard mounting rail 84 135		
Width Depth Required spacing • with side-by-side mounting	mm	screw and snap-on mounting onto 35 mm standard mounting rail 84 135 145		
Width Depth Required spacing	mm	screw and snap-on mounting onto 35 mm standard mounting rail 84 135 145 6		
Width Depth Required spacing • with side-by-side mounting	mm mm	screw and snap-on mounting onto 35 mm standard mounting rail 84 135 145		
Width Depth Required spacing  • with side-by-side mounting — forwards	mm mm	screw and snap-on mounting onto 35 mm standard mounting rail 84 135 145 6		
Width Depth Required spacing  • with side-by-side mounting	mm mm mm mm	screw and snap-on mounting onto 35 mm standard mounting rail 84 135 145 6 0		
Width Depth Required spacing  • with side-by-side mounting	mm mm mm mm	screw and snap-on mounting onto 35 mm standard mounting rail 84 135 145 6 0 6		
Width Depth Required spacing  • with side-by-side mounting  — forwards — Backwards — upwards — downwards	mm mm mm mm mm	screw and snap-on mounting onto 35 mm standard mounting rail 84 135 145 6 0 6 6 6		
Width Depth Required spacing  • with side-by-side mounting	mm mm mm mm mm	screw and snap-on mounting onto 35 mm standard mounting rail 84 135 145 6 0 6 6 6		
Width Depth Required spacing  • with side-by-side mounting	mm mm mm mm mm mm	screw and snap-on mounting onto 35 mm standard mounting rail 84 135 145 6 6 6 6 6		

— at the side	mm	6
— downwards	mm	6
• for live parts		
— forwards	mm	6
— Backwards	mm	0
— upwards	mm	6
— downwards	mm	6
— at the side	mm	6
Connections/ Terminals:	_	
Type of electrical connection	_	
• for main current circuit		spring-loaded terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>		spring-loaded terminals
Type of connectable conductor cross-section		
• for main contacts		
— single or multi-stranded		2x (0,5 4 mm²)
— finely stranded with core end processing		2x (0.5 2.5 mm²)
— finely stranded without core end		2x (0.5 2.5 mm²)
processing		
<ul> <li>for AWG conductors for main contacts</li> </ul>		1x (20 12)
<ul> <li>for auxiliary contacts</li> </ul>		
— single or multi-stranded		2x (0,5 2,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²)
— finely stranded without core end		2x (0.5 1.5 mm²)
processing		
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (20 14)
Apparent pick-up power of the magnet coil with AC		
• at 50 Hz	V·A	27
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
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	%	75
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	100
T1 value for proof test interval or service life acc. to	у	20
IEC 61508		
Protection against electrical shock		finger-safe
Mechanical data:		
Size of contactor		S00
Communication/ Protocol:		
Product function Bus communication		No

Protocol is supported				
AS-interface protocol		No		
Product function Control circuit interface with IO link		No		
Ambient conditions:				
Installation altitude at height above sea level	m	2 000		
maximum				
Ambient temperature				
• during operation	°C	-25 +60		
• during storage	°C	-55 +80		

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Certificates/ approvals:
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General Product Approval	Declaration of Conformity	Test Shipping A Certificates		Shipping Approval		
EHC	EG-Konf.	Special Test Certificate	ABS	BUREAU VERITAS		
Shipping Appro	oval				other	
GL C	Lloyd's Register	PRS	RINA	RMRS	Environmental Confirmations	

other other

### Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

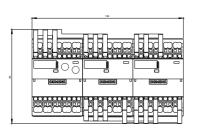
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

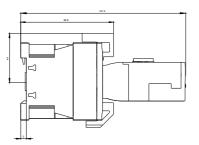
#### Cax online generator

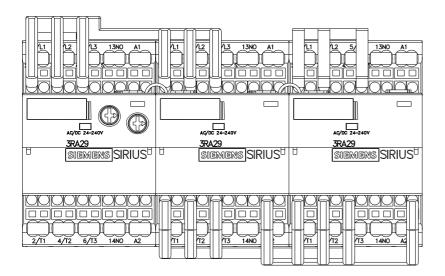
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA24158XF312AP0

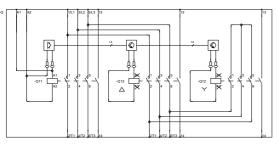
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA24158XF312AP0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA24158XF312AP0&lang=en









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