SIEMENS

Data sheet

3RA2415-8XH31-2BB4

STAR-DELTA COMB. WITH ASI AC3, 5,5KW/400V DC24V, 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 	3RT2015-2BB41-0CC0
 2 of the supplied contactor 	3RT2015-2BB41
 3 of the supplied contactor 	3RT2015-2BB41
 of the supplied RS assembly kit 	3RA2913-2BB2
 of the supplied function module for communication 	3RA2712-2CA00

General technical data:		
Insulation voltage		
 with degree of pollution 3 Rated value 	V	690
Degree of pollution		3
Shock resistance		9.8g / 5 ms and 5.9g / 10 ms
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
 of the contactor typical 		10 000 000
 of the contactor with added auxiliary switch 		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		
at AC-3 Rated value maximum	V	690
Operating current		
• at AC-1		
— at 400 V at ambient temperature 40 °C	Α	18
Rated value		
— at 400 V at ambient temperature 60 °C	Α	16
Rated value	Α	12
at AC-2 at 400 V Rated value	A	12
• at AC-3		40
— at 400 V Rated value	A	12
Operating power	1347	
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		DC
Control supply voltage 1		
• for DC Rated value	V	24
Operating range factor control supply voltage rated		0.85 1.1
value of the magnet coil for DC Design of the surge suppressor		with varistor
Closing power of the magnet coil for DC	W	5.9
Holding power of the magnet coil for DC	W	5.9
Flording power of the magnet con for BC	VV	0.9
uxiliary circuit:		
Number of NC contacts		
for auxiliary contacts		
— instantaneous contact		0
— lagging switching		0
Number of NO contacts		
• for auxiliary contacts		
 instantaneous contact 		3
— leading contact		0
Product expansion Auxiliary switch		No

Operating current of the auxiliary contacts at AC-12 maximum	Α	10
Operating current of the auxiliary contacts at AC-15		
● at 230 V	Α	6
● at 400 V	Α	3
Operating current of the auxiliary contacts at DC-13		
● at 24 V	Α	10
● at 60 V	Α	2
• at 110 V	Α	1
• at 220 V	Α	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		
• for short-circuit protection of the main circuit		
 — 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
• for short-circuit protection of the auxiliary switch required		fuse gL/gG: 10 A
nstallation/ 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
Height		mounting rail
-	mm	mounting rail 84
Width	mm mm	84 135
Width Depth		84
Width	mm	84 135
Width Depth	mm	84 135
Width Depth Required spacing	mm	84 135
Width Depth Required spacing • with side-by-side mounting	mm mm	84 135 145
Width Depth Required spacing • with side-by-side mounting — forwards	mm mm	84 135 145
Width Depth Required spacing • with side-by-side mounting — forwards — Backwards	mm mm mm	84 135 145 6 0
Width Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards	mm mm mm mm	84 135 145 6 0 6
Width Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards	mm mm mm mm mm	84 135 145 6 0 6 6
Width Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side	mm mm mm mm mm	84 135 145 6 0 6 6
Width Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts	mm mm mm mm mm mm	84 135 145 6 0 6 6 6

 — downwards ● for live parts — forwards — Backwards mm 6 mm 6 mm 0 	
— 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
 for auxiliary and control current circuit 	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 processing 	2x (0.5 2.5 mm²)
 for AWG conductors for main contacts 	1x (20 12)
for auxiliary contacts	
 single or multi-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 conductors for auxiliary contacts 	2x (20 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	FIT	100
T1 value for proof test interval or service life acc. to IEC 61508	У	20
Protection against electrical shock		finger-safe

Mechanical data:	
Size of contactor	S00

Communication/ Protocol:	
Product function Bus communication	Yes
Protocol is supported	
AS-interface protocol	Yes

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

Certificates/ approvals:

General	Declaration of	Test	Shipping Approval
Product	Conformity	Certificates	
Approval			





Special Test Certificate







other

Shipping Approval







LRS







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

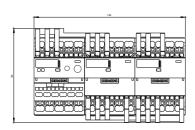
Cax online generator

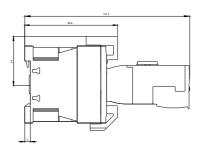
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA24158XH312BB4

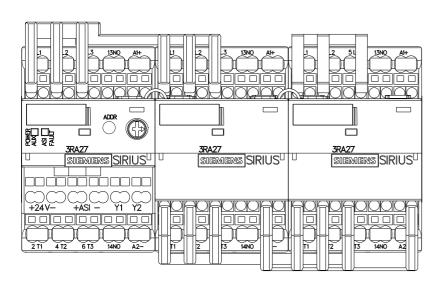
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RA24158XH312BB4/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=3RA24158XH312BB4&lang=en

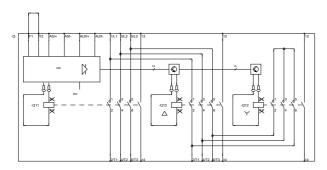






STEROMBASIECK-KOMB

DREWRICHTUNG 1 (RECHTSLAUF)



SITAR CEMIASCOMB.

BOTACION DIRECCIONSE

last modified:

11.03.2015