## SIEMENS

## Data sheet

## 3RA2416-8XH31-1BB4

Contactor assembly for star-delta (wye-delta) start, AS-i AC-3, 7.5 kW/400 V, 24 V DC 3-pole, Size S00 screw terminals electrical and mechanical interlock 3 NO integrated



product brand name	SIRIUS	
product designation	Contactor assembly for star-delta (wye-delta) start	
product type designation	3RA24	
manufacturer's article number		
<ul> <li>1 of the supplied contactor</li> </ul>	<u>3RT2017-1BB41-0CC0</u>	
<ul> <li>2 of the supplied contactor</li> </ul>	<u>3RT2017-1BB41</u>	
<ul> <li>3 of the supplied contactor</li> </ul>	<u>3RT2015-1BB41</u>	
<ul> <li>of the supplied RS assembly kit</li> </ul>	<u>3RA2913-2BB1</u>	
<ul> <li>of the supplied function module for communication</li> </ul>	<u>3RA2712-1CA00</u>	
General technical data		
size of contactor	S00	
product extension auxiliary switch	No	
shock resistance at rectangular impulse		
• at AC	6,7g / 5 ms, 4,2g / 10 ms	
• at DC	6,7g / 5 ms, 4,2g / 10 ms	
shock resistance with sine pulse		
• at AC	10,5g / 5 ms, 6,6g / 10 ms	
• at DC	10,5g / 5 ms, 6,6g / 10 ms	
mechanical service life (operating cycles)		
<ul> <li>of contactor typical</li> </ul>	10 000 000	
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000	
reference code according to IEC 81346-2	Q	
Substance Prohibitance (Date)	10/01/2009	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
<ul> <li>during operation</li> </ul>	-25 +60 °C	
<ul> <li>during storage</li> </ul>	-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> <li>at AC-3 rated value maximum</li> </ul>	690 V	
operational current		
• at AC-3		
— at 400 V rated value	16 A	
operating power		
• at AC-3		
— at 400 V rated value	7.5 kW	

— at 500 V rated value	10.3 kW
— at 690 V rated value	9.2 kW
operating frequency	5.2 KW
• at AC-3 maximum	1 000 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage 1	
at DC rated value	24 V
closing power of magnet coil at DC	10 W
holding power of magnet coil at DC	10 W
Auxiliary circuit	
number of NO contacts for auxiliary contacts	
<ul> <li>instantaneous contact</li> </ul>	3
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	
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
<ul> <li>— with type of coordination 1 required</li> </ul>	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
<ul> <li>— with type of assignment 2 required</li> </ul>	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	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
fastening method	screw and snap-on mounting onto 35 mm DIN rail
height	68 mm
width	135 mm
depth	145 mm
required spacing	
<ul> <li>with side-by-side mounting</li> </ul>	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm
<ul> <li>for grounded parts</li> </ul>	
— 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 — at the side	6 mm
Connections/ Terminals	6 mm
type of electrical connection <ul> <li>for main current circuit</li> </ul>	screw-type terminals
for auxiliary and control circuit	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	
solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
solid or stranded	2x (0,5 1,5 mm <sup>2</sup> ), 2x (0,75 2,5 mm <sup>2</sup> ), 2x (0,5 4 mm <sup>2</sup> )
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)

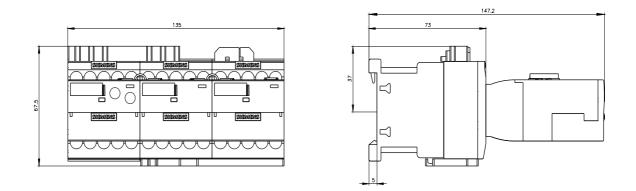
Subject to change without notice © Copyright Siemens

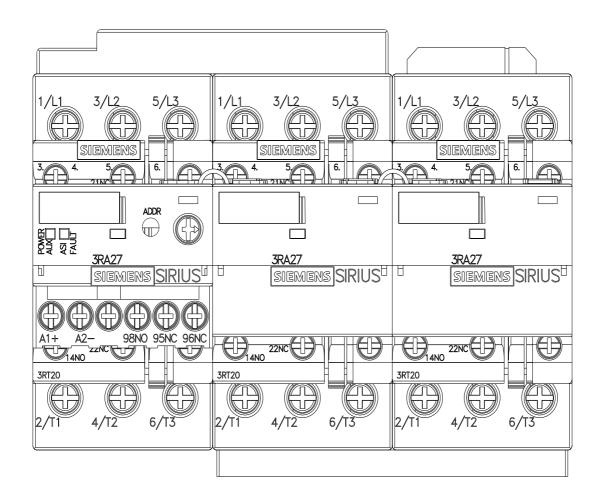
- finely strand	- finely stranded with core end processing 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.7			2.5 mm²)		
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>		2x (2	2x (20 16), 2x (18 14)			
Safety related data						
B10 value with high der	B10 value with high demand rate according to SN 31920		0 000			
proportion of dangerous failures						
<ul> <li>with low demand rate according to SN 31920</li> </ul>		920 40 %	40 %			
<ul> <li>with high demand</li> </ul>	with high demand rate according to SN 31920		75 %			
failure rate [FIT] with low demand rate according to SN 31920		g to SN 31920 100	100 FIT			
T1 value for proof test interval or service life according to IEC 61508		ording to IEC 20 a	20 a			
protection class IP on	the front according to	IEC 60529 IP20	)			
touch protection on th	e front according to IE	<b>C 60529</b> finge	er-safe, for vertical contact	from the front		
Communication/ Protoc	ol					
product function bus communication		No	No			
protocol is supported A	S-Interface protocol	Yes	Yes			
product function control	circuit interface with IO	link No				
Certificates/ approvals						
General Product Approval Declaration of		Declaration of Confo	rmity	Test Certificates		
<u>Confirmation</u>	EHC	UK CA	CE EG-Konf.	<u>Special Test Certific-</u> <u>ate</u>	Type Test Certific- ates/Test Report	
Marine / Shipping						
ABS	BUREAU VERITAS		Lloyd's Register uis	PRS	RINA	
Marine / Shipping	other	Railway	Dangerous Good			
	Confirmation	Vibration and Shock	Transport Information			

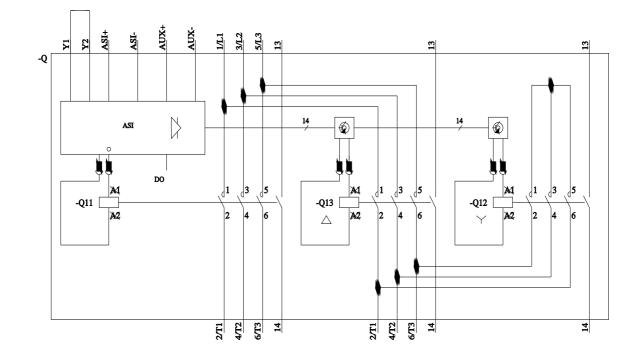
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875 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=3RA2416-8XH31-1BB4 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2416-8XH31-1BB4 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RA2416-8XH31-1BB4 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2416-8XH31-1BB4&lang=en Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2416-8XH31-1BB4/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2416-8XH31-1BB4&objecttype=14&gridview=view1







last modified:

11/21/2022 🖸