





Contactor assembly for star-delta (wye-delta) start AC-3, 37 kW/400 V, 230 V AC 50/60 Hz, 3-pole, size S2 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	
• 1 of the supplied contactor	3RT2035-1AL20
• 2 of the supplied contactor	3RT2035-1AL20
• 3 of the supplied contactor	3RT2027-1AL20
• of the supplied RS assembly kit	3RA2933-2C
• of the supplied function module for wye-delta circuits	3RA2816-0EW20
General technical data	
size of contactor	S2
product extension auxiliary switch	No
shock resistance at rectangular impulse	
• at AC	11.8g / 5 ms, 7.4g / 10 ms
shock resistance with sine pulse	
• at AC	18.5g / 5 ms, 11.6g / 10 ms
mechanical service life (operating cycles)	
• of contactor typical	10 000 000
• of the contactor with added auxiliary switch block typical	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2014
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-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	
• at AC-3 rated value maximum	690 V
operational current	
• at AC-3	
— at 400 V rated value	80 A
operating power	
• at AC-3	
— at 400 V rated value	37 kW
operating frequency	
• at AC-3 maximum	1 000 1/h

Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage 1 at AC	
• at 50 Hz rated value	230 V
• at 60 Hz rated value	230 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 ... 1.1
• at 60 Hz	0.85 ... 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	422 VA
• at 60 Hz	378 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.69
• at 60 Hz	0.65
apparent holding power of magnet coil at AC	
• at 50 Hz	36.4 VA
• at 60 Hz	35 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.36
• at 60 Hz	0.39
Auxiliary circuit	
number of NC contacts for auxiliary contacts	
• instantaneous contact	3
number of NO contacts for auxiliary contacts	
• instantaneous contact	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	
• for short-circuit protection of the main circuit	
— with type of coordination 1 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A
— with type of assignment 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 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
fastening method	screw fixing
height	142 mm
width	177.5 mm
depth	223 mm
required spacing	
• with side-by-side mounting	
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
• for grounded parts	
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm

Connections/ Terminals				
type of electrical connection <ul style="list-style-type: none">• for main current circuit• for auxiliary and control circuit• at contactor for auxiliary contacts• of magnet coil		screw-type terminals screw-type terminals Screw-type terminals Screw-type terminals		
type of connectable conductor cross-sections for main contacts <ul style="list-style-type: none">• solid• solid or stranded• finely stranded with core end processing		2x (1 ... 35 mm²), 1x (1 ... 50 mm²) 2x (1 ... 35 mm²), 1x (1 ... 50 mm²) 2x (1 ... 25 mm²), 1x (1 ... 35 mm²)		
type of connectable conductor cross-sections <ul style="list-style-type: none">• for auxiliary contacts<ul style="list-style-type: none">— solid or stranded— finely stranded with core end processing• at AWG cables for auxiliary contacts		2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14)		
Safety related data				
B10 value with high demand rate according to SN 31920		1 000 000		
proportion of dangerous failures <ul style="list-style-type: none">• with low demand rate according to SN 31920• with high demand rate according to SN 31920		40 % 73 %		
failure rate [FIT] with low demand rate according to SN 31920		100 FIT		
T1 value for proof test interval or service life according to IEC 61508		20 a		
protection class IP on the front according to IEC 60529		IP20		
touch protection on the front according to IEC 60529		finger-safe, for vertical contact from the front		
Communication/ Protocol				
product function bus communication		No		
protocol is supported AS-Interface protocol		No		
product function control circuit interface with IO link		No		
Certificates/ approvals				
General Product Approval		Declaration of Conformity	Test Certificates	Marine / Shipping
Confirmation				
			Type Test Certificates/Test Report	
other		Dangerous Good		

Further information
<p>Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business</p> <p>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).</p> <p>Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875</p> <p>Information- and Downloadcenter (Catalogs, Brochures,...) https://www.siemens.com/ic10</p> <p>Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2435-8XF32-1AL2</p> <p>Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2435-8XF32-1AL2</p> <p>Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RA2435-8XF32-1AL2</p> <p>Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2435-8XF32-1AL2&lang=en</p> <p>Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RA2435-8XF32-1AL2/char</p> <p>Further characteristics (e.g. electrical endurance, switching frequency)</p>

