## **SIEMENS**

## **Data sheet**

product brand name

## 3RA2435-8XF32-1AL2

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



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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		
<ul> <li>of the supplied RS assembly kit</li> </ul>	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)			
<ul> <li>of contactor typical</li> </ul>	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		

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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			
<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: 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		
	245		
fastening method	screw fixing		
fastening method	screw fixing 142 mm		
height	142 mm		
height width	142 mm 177.5 mm		
height width depth	142 mm		
height width	142 mm 177.5 mm		
height width depth required spacing	142 mm 177.5 mm		
height width depth required spacing • with side-by-side mounting	142 mm 177.5 mm 223 mm		
height width depth required spacing  • with side-by-side mounting — forwards	142 mm 177.5 mm 223 mm		
height width depth required spacing  • with side-by-side mounting — forwards — backwards	142 mm 177.5 mm 223 mm 10 mm 0 mm		
height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm		
height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm 10 mm		
height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — downwards	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm 10 mm		
height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm 10 mm 10 mm		
height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — forwards	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm 10 mm 10 mm		
height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — forwards — backwards — backwards	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm 10 mm 10 mm 10 mm		
height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side  • for grounded parts — forwards — backwards — upwards — upwards	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
height width depth  required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side  • for grounded parts — forwards — backwards — upwards — at the side - downwards — at the side — downwards	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — forwards — backwards — backwards — backwards — backwards — upwards — at the side — downwards — at the side — for live parts	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm		
height  width  depth  required spacing  • with side-by-side mounting  — forwards  — backwards  — upwards  — downwards  — at the side  • for grounded parts  — forwards  — backwards  — backwards  — upwards  — the side  • for grounded parts  — forwards  — backwards  — upwards  — at the side  — downwards  • for live parts  — forwards	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm		
height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — forwards — backwards — upwards — backwards — the side — downwards — at the side — downwards — at the side — downwards • for live parts — forwards — backwards — backwards	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm		
height width depth  required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side  • for grounded parts — forwards — backwards — upwards — at the side — downwards — at the side — for grounded parts — backwards — upwards — at the side — downwards  • for live parts — forwards — backwards — backwards — upwards	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm		
height width depth required spacing  • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — forwards — backwards — upwards — backwards — the side — downwards — at the side — downwards — at the side — downwards • for live parts — forwards — backwards — backwards	142 mm 177.5 mm 223 mm  10 mm 0 mm 10 mm		

Connections/ Terminals						
type of electrical connection						
<ul> <li>for main current circuit</li> </ul>		screw-type terminals				
<ul> <li>for auxiliary and control circuit</li> </ul>		screw-type terminals				
<ul> <li>at contactor for auxiliary contacts</li> </ul>		Screw-type terminals				
of magnet coil		Screw-type terminals				
type of connectable conductor cross-sections for	main contacts					
• solid		2x (1 35 mm²), 1x (1 50 mm²)				
<ul> <li>solid or stranded</li> </ul>		2x (1 35 mm²), 1x (1 50 mm²)				
<ul> <li>finely stranded with core end processing</li> </ul>		2x (1 25 mm²), 1x (1 35 mm²)				
type of connectable conductor cross-sections	<b>3</b>					
<ul> <li>for auxiliary contacts</li> </ul>						
<ul> <li>solid or stranded</li> </ul>		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)				
<ul> <li>finely stranded with core end process</li> </ul>	sing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)				
<ul> <li>at AWG cables for auxiliary contacts</li> </ul>		2x (20 16), 2x (18 14)				
Safety related data						
B10 value with high demand rate according to SN	l 31920	1 000 000				
proportion of dangerous failures						
with low demand rate according to SN 31920		40 %				
with high demand rate according to SN 31920		73 %				
failure rate [FIT] with low demand rate according	to SN 31920	100 FIT				
T1 value for proof test interval or service life acco	ording to IEC	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

Confirmation Transport Information

## **Further information**

Siemens has decided to exit the Russian market (see here).

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$ 

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=3RA2435-8XF32-1AL2

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2435-8XF32-1AL2

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2435-8XF32-1AL2

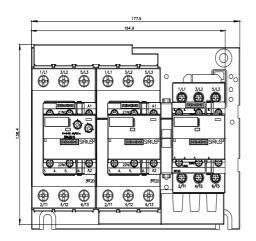
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

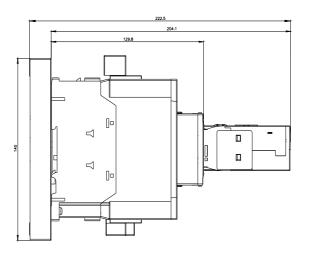
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2435-8XF32-1AL2&lang=en

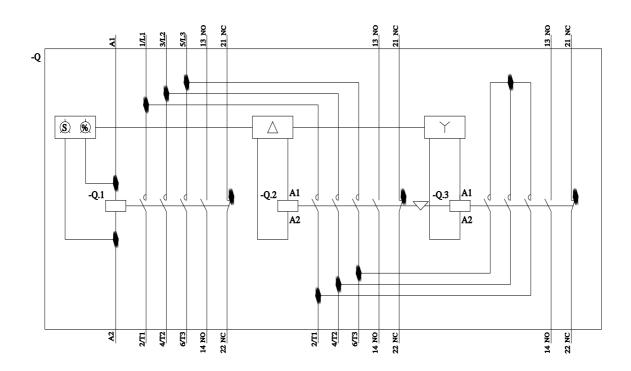
Characteristic: Tripping characteristics, I2t, Let-through current

 $\underline{https://support.industry.siemens.com/cs/ww/en/ps/3RA2435-8XF32-1AL2/char}$ 

Further characteristics (e.g. electrical endurance, switching frequency)







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