SIEMENS

Product data sheet

3RA2437-8XE32-1NB3

ST.-D. (WYE-D.) COM. W I/O-LINK AC3:55KW/400V 24V DC SIZE S2, SCREW CONNECTION ELECTR. AND MECH. INTERLOCK 3NO+3NC INTEGR.,



General technical data:

General technical data:		
product brand name		SIRIUS
Product function		Star-delta combination with I/O-Link
Size of contactor		S2
Protection class IP / on the front		IP20
Degree of pollution		3
Insulation voltage / with degree of pollution 3 / Rated value	V	690
Installation altitude / at height above sea level / maximum	m	2,000
Ambient temperature / during storage	°C	-55 +80
Ambient temperature / during operation	°C	-25 +60
Surge voltage resistance / Rated value	kV	6
Active power loss / per conductor / typical	W	3.8
Manufacturer article number		
of the supplied function module for wye-delta circuits		3RA2711-1CA00
1 / of the supplied contactor		3RT2037-1NB30-0CC0
• 2 / of the supplied contactor		<u>3RT2037-1NB30</u>
• 3 / of the supplied contactor		<u>3RT2035-1NB30</u>
of the supplied RS assembly kit		3RA2934-2BB1
Mechanical service life (switching cycles)		
of the contactor / typical		10,000,000

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 of the contactor with added auxiliary switch block / typical 		10,000,000		
Communication/ Protocol:				
Product function				
Bus communication		No		
Control circuit interface with IO link		Yes		
Protocol / is supported / AS-interface protocol		No		
Main circuit:	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 / Rated value	А	80		
• at ambient temperature 60 °C / Rated value	А	70		
• at AC-2 / at 400 V / Rated value	А	115		
• at AC-3 / at 400 V / Rated value	А	115		
Operating power				
• at AC-2 / at 400 V / Rated value	kW	55		
• at AC-3				
• at 400 V / Rated value	kW	55		
• at AC-4 / at 400 V / Rated value	kW	48.5		
No-load switching frequency	1/h	1,500		
Operating frequency				
• at AC-1 / maximum	1/h	800		
• at AC-2 / maximum	1/h	400		
• at AC-3 / maximum	1/h	700		
• at AC-4 / maximum	1/h	200		
Control circuit/ Control:				
Type of voltage / of the control supply voltage		AC/DC		
Control supply voltage / 1				
• for DC	V	20 33		
• with AC				
• at 50 Hz	V	20 33		
• with AC				
• at 60 Hz	V	20 33		

Operating range factor control supply voltage rated value / of the magnet coil

• with AC / at 50 Hz		0.8 1.1
• with AC / at 60 Hz		0.8 1.1
• for DC		0.8 1.1
Apparent pick-up power / of the magnet coil / with AC		
• at 50 Hz	V·A	40
• at 60 Hz	V·A	40
Inductive power factor / with closing power of the coil		
• at 50 Hz		0.64
• at 60 Hz		0.5
Apparent holding power / of the magnet coil / with AC		
• at 50 Hz	V·A	2
• at 60 Hz	V·A	2
Inductive power factor / with the holding power of the coil		
• at 50 Hz		0.36
• at 60 Hz		0.39
Closing power / of the magnet coil / for DC	W	23
Holding power / of the magnet coil / for DC	W	1
Auxiliary circuit:		
Product expansion / Auxiliary switch		No
Contact reliability / of the auxiliary contacts		< 1 error per 100 million operating cycles
Number of NC contacts / for auxiliary contacts		
instantaneous contact		3
instantaneous contactlagging switching		3 0
lagging switching		
lagging switching Number of NO contacts / for auxiliary contacts		0
Iagging switching Number of NO contacts / for auxiliary contacts instantaneous contact		0 3
lagging switching Number of NO contacts / for auxiliary contacts instantaneous contact leading contact	A	0 3
lagging switching Number of NO contacts / for auxiliary contacts instantaneous contact leading contact Operating current / of the auxiliary contacts	A	0 3 0
lagging switching Number of NO contacts / for auxiliary contacts instantaneous contact leading contact Operating current / of the auxiliary contacts • at AC-12 / maximum	A	0 3 0
 lagging switching Number of NO contacts / for auxiliary contacts instantaneous contact leading contact Operating current / of the auxiliary contacts at AC-12 / maximum at AC-15 		0 3 0 10
 lagging switching Number of NO contacts / for auxiliary contacts instantaneous contact leading contact Operating current / of the auxiliary contacts at AC-12 / maximum at AC-15 at 230 V 	A	0 3 0 10 6
 lagging switching Number of NO contacts / for auxiliary contacts instantaneous contact leading contact Operating current / of the auxiliary contacts at AC-12 / maximum at AC-15 at 230 V at 400 V 	A	0 3 0 10 6
 lagging switching Number of NO contacts / for auxiliary contacts instantaneous contact leading contact Operating current / of the auxiliary contacts at AC-12 / maximum at AC-15 at 230 V at 400 V at DC-12 	A A	0 3 0 10 6 3
 lagging switching Number of NO contacts / for auxiliary contacts instantaneous contact leading contact deading current / of the auxiliary contacts at AC-12 / maximum at AC-15 at 230 V at 400 V at DC-12 at 48 V 	A A A	0 3 0 10 6 3
 lagging switching Number of NO contacts / for auxiliary contacts instantaneous contact leading contact operating current / of the auxiliary contacts at AC-12 / maximum at AC-15 at 230 V at 400 V at 400 V at 400 V at 48 V at 60 V 	A A A A	0 3 0 10 6 3 6 6
 lagging switching Number of NO contacts / for auxiliary contacts instantaneous contact leading contact beading current / of the auxiliary contacts at AC-12 / maximum at AC-15 at 230 V at 400 V at 400 V at DC-12 at 48 V at 60 V at 110 V 	A A A A	0 3 0 10 6 3 6 6 3
 lagging switching Number of NO contacts / for auxiliary contacts instantaneous contact leading contact Operating current / of the auxiliary contacts at AC-12 / maximum at AC-15 at 230 V at 400 V at 400 V at 48 V at 60 V at 110 V at 220 V 	A A A A	0 3 0 10 6 3 6 6 3
 lagging switching Number of NO contacts / for auxiliary contacts instantaneous contact leading contact Operating current / of the auxiliary contacts at AC-12 / maximum at AC-15 at 230 V at 400 V at 10 V at 220 V at 220 V at DC-13 	A A A A A	0 3 0 10 6 3 6 6 3 1

• at 60 V	А	2
• at 110 V	А	1
• at 220 V	А	0.3
Short-circuit:		
Design of the fuse link		
• for short-circuit protection of the auxiliary switch / required		fuse gL/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
Mounting type		screw fixing
Width	mm	177.5
Height	mm	142
Depth	mm	223
Connections/ terminals:		
Design of the electrical connection		
for main current circuit		screw-type terminals
 for auxiliary and control current circuit 		screw-type terminals
Type of connectable conductor cross-section		
for main contacts		
single or multi-stranded		2x (1 35 mm²), 1x (1 50 mm²)
 finely stranded / with core end processing 		2x (1 25 mm²), 1x (1 35 mm²)
for AWG conductors / for main contacts		2x (18 2), 1x (18 1)
Type of connectable conductor cross-section		
for auxiliary contacts		
single or multi-stranded		2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
 finely stranded / with core end processing 		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG conductors / for auxiliary contacts 		2x (20 16), 2x (18 14)
Certificates/ approvals:		
Declaration of Conformity		
EG-Konf.		
UL/CSA ratings:		

Contact rating / of the auxiliary contacts / acc. to UL	A600 / Q600
Safety related data:	
B10 value / with high demand rate	

• acc. to SN 31920		1,000,000
Failure rate [FIT] / with low demand rate		
• acc. to SN 31920	FIT	100
Proportion of dangerous failures		
• with low demand rate / acc. to SN 31920	%	40
• with high demand rate / acc. to SN 31920	%	73
T1 value / for proof test interval or service life		
• acc. to IEC 61508	а	20

Further information:

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

Industry Mall (Online ordering system)

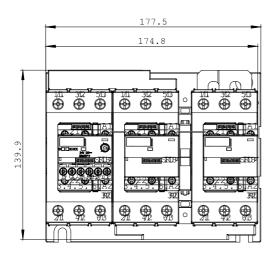
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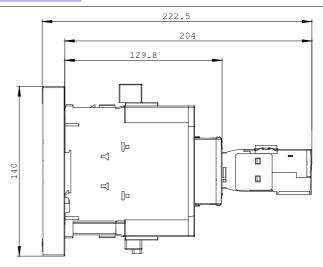
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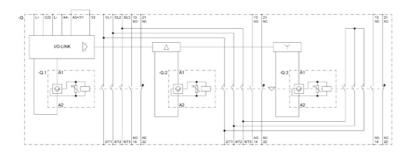
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA2437-8XE32-1NB3/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2437-8XE32-1NB3







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