STAR-DELTA (WYE-D.) COMBINATION AC3:37KW/400V 24V AC 50/60HZ SIZE S2, SCREW CONNECTION ELECTR. AND MECH. INTERLOCK 3NO+3NC INTEGR.,



General technical data:		
product brand name		SIRIUS
Product function		wye-delta combination
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	2.2
Manufacturer article number		
• of the supplied function module for wye-delta circuits		3RA2816-0EW20
• 1 / of the supplied contactor		3RT2035-1AC20
• 2 / of the supplied contactor		3RT2035-1AC20
• 3 / of the supplied contactor		3RT2027-1AC20
• of the supplied RS assembly kit		3RA2934-2BB1
Mechanical service life (switching cycles)		
of the contactor / typical		10,000,000

• 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		No
Protocol / is supported / AS-interface protocol		No
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	Α	60
• at ambient temperature 60 °C / Rated value	Α	55
• at AC-2 / at 400 V / Rated value	Α	80
• at AC-3 / at 400 V / Rated value	Α	80
Operating power		
• at AC-2 / at 400 V / Rated value	kW	37
• at AC-3		
• at 400 V / Rated value	kW	37
at AC-4 / at 400 V / Rated value	kW	40
No-load switching frequency	1/h	1,500
Operating frequency		
• at AC-1 / maximum	1/h	1,000
• at AC-2 / maximum	1/h	750
• at AC-3 / maximum	1/h	1,000
• at AC-4 / maximum	1/h	300
Control circuit/ Control:		
Type of voltage / of the control supply voltage		AC
Control supply voltage / 1		
• with AC / at 50 Hz / Rated value	V	24
• with AC / at 60 Hz / Rated value	V	24
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		0.85 1.1
Apparent pick-up power / of the magnet coil / with AC		

• at 50 Hz	V-A	210
• at 60 Hz	V-A	188
Inductive power factor / with closing power of the coil		
• at 50 Hz		0.69
• at 60 Hz		0.65
Apparent holding power / of the magnet coil / with AC		
• at 50 Hz	V-A	17.2
• at 60 Hz	V-A	16.5
Inductive power factor / with the holding power of the coil		
• at 50 Hz		0.36
• at 60 Hz		0.39

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
lagging switching		0
Number of NO contacts / for auxiliary contacts		
• instantaneous contact		3
leading contact		0
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	Α	10
• at AC-15		
• at 230 V	Α	6
• at 400 V	Α	3
• at DC-12		
• at 48 V	Α	6
• at 60 V	Α	6
• at 110 V	Α	3
• at 220 V	Α	1
• at DC-13		
• at 24 V	Α	10
• at 48 V	Α	2
• at 60 V	Α	2
• at 110 V	Α	1
• at 220 V	Α	0.3

Short-circuit:	
Design of the fuse link	

• for short-circuit protection of the main circuit

• with type of assignment 1 / required

• for short-circuit protection of the auxiliary switch / required

gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 200 A

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)
<ul> <li>finely stranded / with core end processing</li> </ul>	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)
<ul> <li>finely stranded / with core end processing</li> </ul>	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**



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)

http://www.siemens.com/industrymall

#### Cax online generator

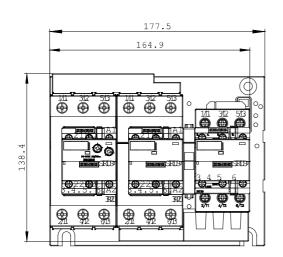
http://www.siemens.com/cax

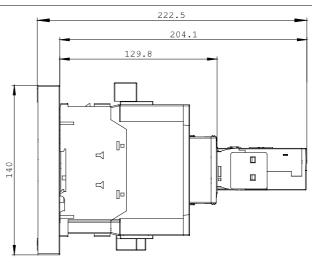
## Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

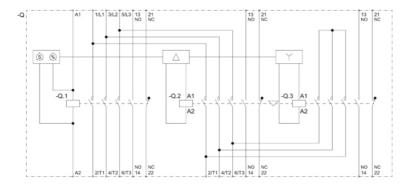
http://support.automation.siemens.com/WW/view/en/3RA2435-8XF32-1AC2/all

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

 $\underline{http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA2435-8XF32-1AC2}$ 







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