

star-delta (weye-delta) combination, IO-Link AC-3, 37 kW/400 V, 20-33 V AC/DC, 3-pole, size S2, screw terminal electrical and mechanical interlock 3 NO + 3 NC integrated



product brand name	SIRIUS
product designation	Contactor assembly for star-delta (weye-delta) start
product type designation	3RA24
manufacturer's article number	• 1 of the supplied contactor 3RT2035-1NB30-0CC0 • 2 of the supplied contactor 3RT2035-1NB30 • 3 of the supplied contactor 3RT2027-1BB40 • of the supplied RS assembly kit 3RA2933-2C • of the supplied function module for communication 3RA2711-1CA00
General technical data	
size of contactor	S2
product extension auxiliary switch	No
shock resistance at rectangular impulse	
• at DC	7.7g / 5 ms, 4.5g / 10 ms
shock resistance with sine pulse	
• at DC	12g / 5 ms, 7g / 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
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Melamine - 108-78-1
Weight	3.89 kg
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/DC
control supply voltage 1 at AC	
• at 50 Hz	20 ... 33 V
• at 60 Hz	20 ... 33 V
control supply voltage 1 at DC	20 ... 33 V
design of the surge suppressor	with varistor
apparent pick-up power of magnet coil at AC	
• at 50 Hz	82 VA
• at 60 Hz	82 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.64
• at 60 Hz	0.5
apparent holding power of magnet coil at AC	
• at 50 Hz	6 VA
• at 60 Hz	6 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.36
• at 60 Hz	0.39
closing power of magnet coil at DC	28 W
holding power of magnet coil at DC	4 W
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 — with type of coordination 2 required • for short-circuit protection of the auxiliary switch required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A 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 — backwards — upwards — downwards — at the side • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards	10 mm 0 mm 10 mm 10 mm 10 mm 10 mm 10 mm 0 mm 10 mm 10 mm 10 mm 10 mm

— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm

Connections/ Terminals

type of electrical connection	
• for main current circuit	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 (1 ... 35 mm ²), 1x (1 ... 50 mm ²)
• solid or stranded	2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²)
• finely stranded with core end processing	2x (1 ... 25 mm ²), 1x (1 ... 35 mm ²)
type of connectable conductor cross-sections	
• for auxiliary contacts	
— solid or stranded	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG cables for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14)

Safety related data

product function suitable for safety function	Yes
Electrical Safety	
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	Yes

Approvals Certificates

General Product Approval	Test Certificates	Maritime application	other
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[Type Test Certificates/Test Report](#)



other	Dangerous goods	Environment
Confirmation	Transport Information	Environmental Confirmations

Further information

Information on the packaging
<https://support.industry.siemens.com/cs/ww/en/view/109813875>
Information for data generation and storage
<https://support.industry.siemens.com/cs/ww/en/view/109995012>
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=3RA2435-8XE32-1NB3>
Cax online generator
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2435-8XE32-1NB3>
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2435-8XE32-1NB3>
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2435-8XE32-1NB3&lang=en
Characteristic: Tripping characteristics, I_t, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2435-8XE32-1NB3/char>
Further characteristics (e.g. electrical endurance, switching frequency)
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2435-8XE32-1NB3&objecttype=14&gridview=view1>



