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Data sheet 3RA2446-8XE32-1NB3

Contactor assembly for star-delta (wye-delta) start with IO-Link, AC-3, 90 kW/400 V 20-33 V AC/DC Size S3, screw terminal electrical and mechanical interlock 3 NO+3 NC, integrated varistor



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	3RT2046-1NB30-0CC0
● 2 of the supplied contactor	3RT2046-1NB30
● 3 of the supplied contactor	3RT2037-1NB30
● of the supplied RS assembly kit	3RA2943-2C
● of the supplied function module for communication	3RA2711-1CA00
General technical data	
size of contactor	S3
product extension auxiliary switch	No
shock resistance at rectangular impulse	
● at AC	6.7 g / 5 ms, 4.0 g / 10 ms
● at DC	6.7 g / 5 ms, 4g / 10 ms
shock resistance with sine pulse	
● at AC	10.6 g / 5 ms, 6.3 g / 10 ms
● at DC	10.6 g / 5 ms, 6.3 g / 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)	03/01/2017
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Melamine - 108-78-1
Weight	5.853 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	0
number of NC contacts for main contacts	0
operating voltage	
● at AC-3 rated value maximum	690 V
operational current	

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● at AC-3	
— at 400 V rated value	160 A
operating power	
● at AC-3	
— at 400 V rated value	90 kW
— at 690 V rated value	132 kW
operating frequency	
● at AC-3 maximum	850 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	328 VA
● at 60 Hz	328 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.95
● at 60 Hz	0.95
apparent holding power of magnet coil at AC	
● at 50 Hz	8.2 VA
● at 60 Hz	8.2 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.95
● at 60 Hz	0.95
closing power of magnet coil at DC	154 W
holding power of magnet coil at DC	5.6 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	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A
— with type of coordination 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 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 and snap-on mounting onto 35 mm DIN rail
height	180 mm
width	220 mm
depth	244 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

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— 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	
● 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 or stranded	2x (2.5 ... 16 mm²), 2x (10 ... 50 mm²), 1x (10 ... 70 mm²)
● finely stranded with core end processing	2x (2.5 ... 35 mm²), 1x (2.5 ... 50 mm²)
● finely stranded without core end processing	2x (10 ... 35 mm²), 1x (10 ... 50 mm²)
type of connectable conductor cross-sections	
● for auxiliary contacts	
— solid or 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 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	other	Dangerous goods
CE EG-Konf. UK CA EAC 产品合格 QC PASS	Confirmation	Transport Information

Environment

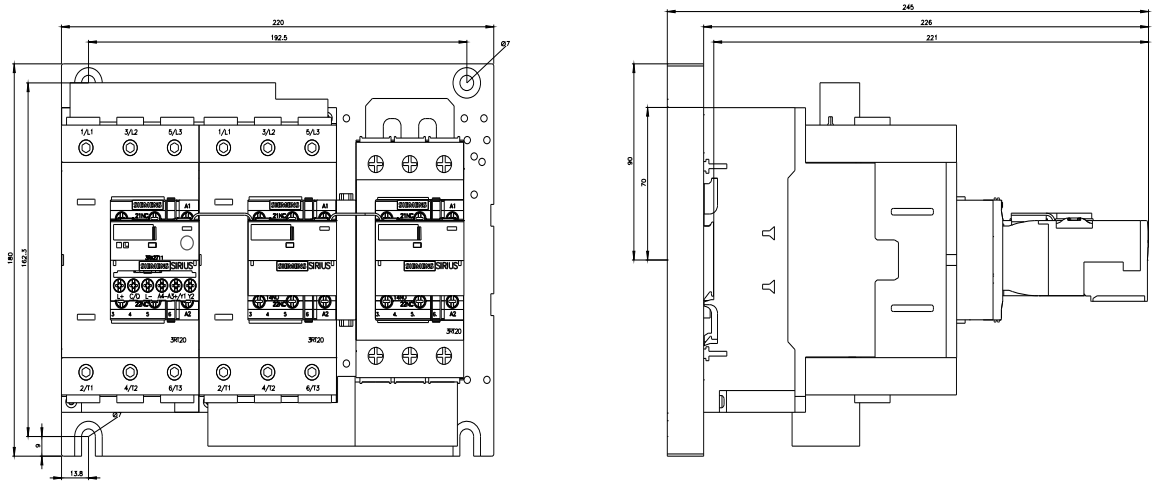
Environmental Confirmations

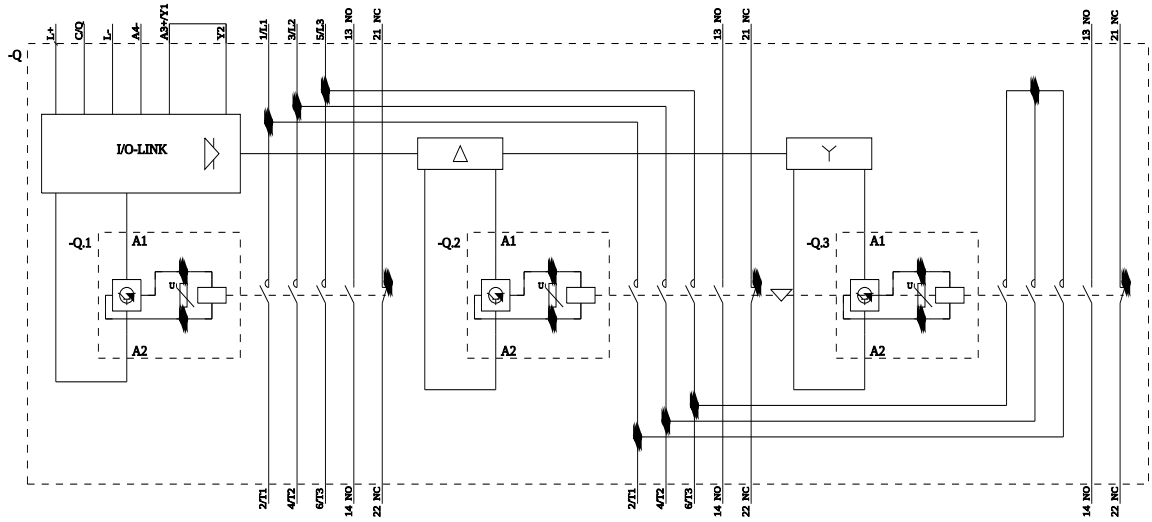
Further information

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=3RA2446-8XE32-1NB3
Cax online generator
https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2446-8XE32-1NB3
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RA2446-8XE32-1NB3
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2446-8XE32-1NB3&lang=en
Characteristic: Tripping characteristics, I²t, Let-through current
https://support.industry.siemens.com/cs/ww/en/ps/3RA2446-8XE32-1NB3/char

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Further characteristics (e.g. electrical endurance, switching frequency)
https://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2446-8XE32-1NB3&objecttype=14&gridview=view1





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