SIEMENS

Data sheet

Contactor assembly for star-delta (wye-delta) start AC-3, 90 kW/400 V 110 V AC, 50/60 Hz Size S3, screw terminal electrical and mechanical interlock 3 NO+3 NC



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	3RT2046-1AG20
2 of the supplied contactor	3RT2046-1AG20
3 of the supplied contactor	3RT2037-1AG20
 of the supplied RS assembly kit 	3RA2943-2C
 of the supplied function module for wye-delta circuits 	3RA2816-0EW20
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
shock resistance with sine pulse	
• at AC	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
Weight	5.46 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	160 A
operating power	
• at AC-3	

— at 400 V rated value	90 kW
— at 400 V rated value — at 690 V rated value	132 kW
operating frequency	102 101
at AC-3 maximum	850 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage 1 at AC	
• at 50 Hz rated value	110 V
at 60 Hz rated value	110 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	698 VA
• at 60 Hz	594 VA
inductive power factor with closing power of the coil	0.62
• at 50 Hz	0.62
at 60 Hz apparent holding power of magnet cell at AC	0.55
apparent holding power of magnet coil at AC • at 50 Hz	52 VA
• at 50 Hz • at 60 Hz	38 VA
inductive power factor with the holding power of the coil	OU VA
at 50 Hz	0.35
• at 60 Hz	0.41
Auxiliary circuit	
number of NC contacts for auxiliary contacts	
instantaneous contact	3
number of NO contacts for auxiliary contacts	•
instantaneous contact	3
UL/CSA ratings	
OL/OOA Tallings	
contact rating of auxiliary contacts according to UL	A600 / Q600
	A600 / Q600
contact rating of auxiliary contacts according to UL	A600 / Q600
contact rating of auxiliary contacts according to UL Short-circuit protection	A600 / Q600
contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link	A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A
contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit	
contact rating of auxiliary contacts according to UL 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
contact rating of auxiliary contacts according to UL 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 assignment 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A
contact rating of auxiliary contacts according to UL 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 assignment 2 required • for short-circuit protection of the auxiliary switch required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and
contact rating of auxiliary contacts according to UL 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 assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
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— 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	No
Approvals Certificates	
General Product Approval	other Dangerous goods
Confirm	ation Confirmation Transport Information

Environment

Environmental Confirmations

Further information

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)

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2446-8XF32-1AG2

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2446-8XF32-1AG2

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

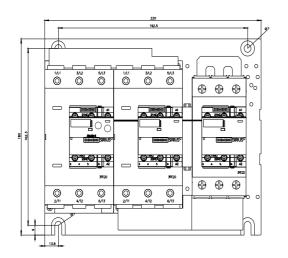
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2446-8XF32-1AG2&lang=en

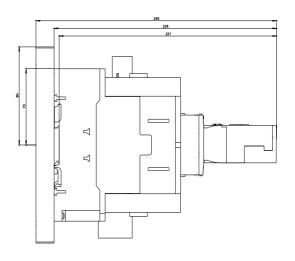
Characteristic: Tripping characteristics, I²t, Let-through current

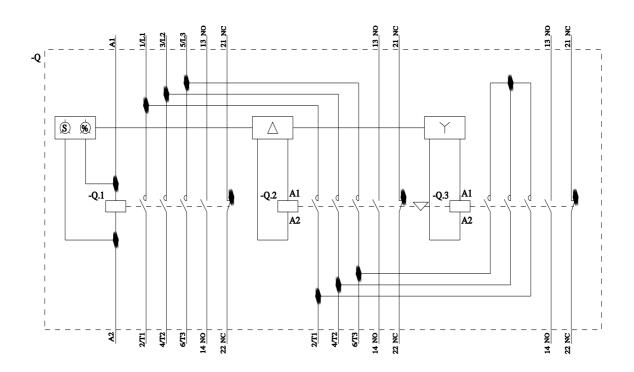
https://support.industry.siemens.com/cs/ww/en/ps/3RA2446-8XF32-1AG2/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2446-8XF32-1AG2&objecttype=14&gridview=view1







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