3RA2325-8XB30-1AK6

Data sheet



Reversing contactor assembly AC-3, 7.5 kW/400 V 110 V AC 50 Hz/120 V 60 Hz, 3-pole Size S0, screw terminal electrical and mechanical Interlock 2 NO integrated

product type designation product type designation anufacturer's article number • 1 of the supplied contactor • 2 of the supplied contactor • 2 of the supplied contactor • 2 of the supplied contactor • 3RT2025-1AK60 • 3RT2	product brand name	SIRIUS
manufacturer's article number • 1 of the supplied contactor • 2 of the supplied contactor • of the supplied contactor • of the supplied RH assembly kit General technical data size of contactor S0 product extension auxiliary switch shock resistance at rectangular impulse • at AC • at DC shock resistance with sine pulse • at AC • at DC shock resistance with sine pulse • at AC • at DC mechanical service life (switching cycles) • of contactor lypical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Quut Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of NO contacts for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum • at 400 V rated value	product designation	Reversing contactor assembly
In the supplied contactor 2 of the supplied Contactor 3 of the supplied RH assembly kit 4 of the supplied RH assembly kit 4 of the supplied RH assembly kit 5 of the supplied RH assembly kit 6 of the supplied conditions 6 of the supplied can askin as RASemble RH assembly kit 6 of the supplied Resembly kit 6 of the supplied RH assembly kit 6 of the suppli	product type designation	3RA23
Of the supplied contactor of the supplied RH assembly kit 3RA2923-2AA1 Size of contactor product extension auxiliary switch shock resistance at rectangular impulse et at AC	manufacturer's article number	
of the supplied RH assembly kit General technical data size of contactor product extension auxiliary switch at DC at AC-3 at 40O V rated value at 680 V rated value at 680 V rated value at AC-3 at AC-3 at AC-3 at AC-3 at DC at AC-3	 1 of the supplied contactor 	3RT2025-1AK60
Section Sect	 2 of the supplied contactor 	3RT2025-1AK60
size of contactor product extension auxiliary switch shock resistance at rectangular impulse • at AC • at DC shock resistance with sine pulse • at AC • at DC 11,8g / 5 ms, 7,5g / 10 ms • at DC 15g / 5 ms, 10g / 10 ms mechanical service life (switching cycles) • of contactor rypical • of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Question of the contactor with added auxiliary switch block typical reference rode according to IEC 81346-2 Question of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Question of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Question of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Question of the contactor of the contact o	 of the supplied RH assembly kit 	3RA2923-2AA1
product extension auxiliary switch shock resistance at rectangular impulse at AC at DC 10g / 5 ms, 7,5g / 10 ms shock resistance with sine pulse at AC at DC 11,8g / 5 ms, 7,4g / 10 ms to at DC mechanical service life (switching cycles) of contactor typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Quul Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature oldring operation oldring storage Audin circuit number of poles for main current circuit number of NC contacts for main contacts number of NC contacts for main contacts operating voltage at AC-3 rated value at 690 V rated value at 690 V rated value at AC-3	General technical data	
shock resistance at rectangular impulse at AC at DC shock resistance with sine pulse at AC at DC to at DC shock resistance with sine pulse at AC at DC to at DC mechanical service life (switching cycles) of contactor typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Qu Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage Adin circuit number of NC contacts for main contacts number of NC contacts for main contacts operating voltage at AC-3 rated value at 690 V rated value operating power at AC-3	size of contactor	S0
at AC at DC at DC at DC at AC at DC at AC at DC at AC at DC at AC at DC	product extension auxiliary switch	Yes
at DC shock resistance with sine pulse at AC at DC shock resistance with sine pulse at AC at DC shock resistance with sine pulse at DC at DC shock resistance with sine pulse shock resistance service life (switching cycles) of contactor typical of the contactor with added auxiliary switch block typical shock representation of the contactor with added auxiliary switch block typical shock resistance resistance with added auxiliary switch block typical shock resistance resistance with added auxiliary switch block typical shock resistance with sine pulse resistance resistance with added auxiliary switch block typical shock resistance with sine pulse resistance resistance with shock resistance with shock resistance resistance resistance with shock resistance with shock resistance with shock resistance resistance with shock	shock resistance at rectangular impulse	
shock resistance with sine pulse at AC at DC to 15g / 5 ms, 7,4g / 10 ms bechanical service life (switching cycles) of contactor typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Quantition altitude at height above sea level maximum ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation oduring storage and in circuit number of NO contacts for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum at 500 V rated value at 690 V rated value at AC-3 operating power at AC-3	• at AC	7,5g / 5 ms, 4,7g / 10 ms
at AC at DC	• at DC	10g / 5 ms, 7,5g / 10 ms
at DC mechanical service life (switching cycles) of contactor typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of uring operation of uring storage Main circuit number of Poles for main current circuit number of NC contacts for main contacts operating voltage at AC-3 rated value at 500 V rated value of at 4C-3 operating power of AC-3 operating power of AC-3 operating power of AC-3 operating power of AC-3	shock resistance with sine pulse	
mechanical service life (switching cycles) • of contactor typical • of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage -25 +60 °C • during storage -25 +80 °C Main circuit number of poles for main current circuit number of NC contacts for main contacts operating voltage at AC-3 rated value maximum • at 400 V rated value • at 690 V rated value	• at AC	11,8g / 5 ms, 7,4g / 10 ms
of contactor typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature o during operation o during storage -55 +60 °C during storage -55 +80 °C Main circuit number of NO contacts for main current circuit number of NC contacts for main contacts operating voltage at AC-3 rated value maximum e at 400 V rated value at 400 V rated value at 690 V rated value	• at DC	15g / 5 ms, 10g / 10 ms
of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage -25 +60 °C • during storage -25 +80 °C Main circuit number of poles for main current circuit number of NC contacts for main contacts perating voltage at AC-3 rated value maximum operational current at AC-3 • at 400 V rated value • at 500 V rated value • at 690 V rated value • at AC-3	mechanical service life (switching cycles)	
reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature • during operation • during storage -25 +60 °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 17 A • at 690 V rated value 17 A • at 690 V rated value 13 A operating power • at AC-3	 of contactor typical 	10 000 000
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Addin circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage at AC-3 rated value maximum operational current at AC-3 • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • at AC-3 operating power • at AC-3	•	10 000 000
installation altitude at height above sea level maximum ambient temperature • during operation • during storage -25 +60 °C -55 +80 °C Main circuit number of poles for main current circuit 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 17 A • at 500 V rated value 17 A • at 690 V rated value 13 A operating power • at AC-3	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum ambient temperature • during operation • during storage -25 +60 °C • during storage -55 +80 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage at AC-3 rated value maximum operational current at AC-3 • at 400 V rated value 17 A • at 500 V rated value 13 A operating power • at AC-3	Substance Prohibitance (Date)	10/01/2009
ambient temperature • during operation • during storage -25 +60 °C • during storage -55 +80 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage at AC-3 rated value maximum operational current at AC-3 • at 400 V rated value • at 500 V rated value 17 A • at 690 V rated value 13 A operating power • at AC-3	Ambient conditions	
 during operation during storage t-25 +60 °C during storage t-55 +80 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage at AC-3 rated value maximum operational current at AC-3 at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value at 690 V rated value Operating power at AC-3 at AC-3	installation altitude at height above sea level maximum	2 000 m
 during storage -55 +80 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage at AC-3 rated value maximum operational current at AC-3 at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value at AC-3 operating power at AC-3 operating power at AC-3 	ambient temperature	
Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage at AC-3 rated value maximum operational current at AC-3 • at 400 V rated value • at 500 V rated value • at 690 V rated value operating power • at AC-3	 during operation 	-25 +60 °C
number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage at AC-3 rated value maximum operational current at AC-3 • at 400 V rated value • at 500 V rated value 17 A • at 690 V rated value 13 A operating power • at AC-3	 during storage 	-55 +80 °C
number of NO contacts for main contacts number of NC contacts for main contacts operating voltage at AC-3 rated value maximum operational current at AC-3 ope	Main circuit	
number of NC contacts for main contacts operating voltage at AC-3 rated value maximum operational current at AC-3 • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value operating power • at AC-3	number of poles for main current circuit	3
operating voltage at AC-3 rated value maximum operational current at AC-3 • at 400 V rated value • at 500 V rated value 17 A • at 690 V rated value 13 A operating power • at AC-3	number of NO contacts for main contacts	3
operational current at AC-3 • at 400 V rated value • at 500 V rated value • at 690 V rated value 13 A operating power • at AC-3	number of NC contacts for main contacts	0
 at 400 V rated value at 500 V rated value at 690 V rated value 17 A at 690 V rated value 13 A operating power at AC-3 	operating voltage at AC-3 rated value maximum	690 V
 at 500 V rated value at 690 V rated value 13 A operating power at AC-3 	operational current at AC-3	
at 690 V rated value operating power at AC-3	• at 400 V rated value	17 A
operating power • at AC-3	• at 500 V rated value	17 A
• at AC-3	at 690 V rated value	13 A
	operating power	
— at 400 V rated value 7.5 kW	• at AC-3	
	— at 400 V rated value	7.5 kW

-1.500.1/	7.5 134
— at 500 V rated value	7.5 kW
— at 690 V rated value	11 kW
at AC-4 at 400 V rated value	7.5 kW
operating frequency at AC-3 maximum	1 000 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	120 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	65 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.82
apparent holding power of magnet coil at AC	
• at 50 Hz	8.5 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.25
Auxiliary circuit	
number of NO contacts for auxiliary contacts	
 per direction of rotation 	1
instantaneous contact	2
contact reliability of auxiliary contacts	< 1 error per 100 million operating cycles
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
 at 480 V rated value 	14 A
at 600 V rated value	17 A
yielded mechanical performance [hp] for 3-phase AC motor	
• at 220/230 V rated value	5 hp
• at 460/480 V rated value	10 hp
• at 575/600 V rated value	15 hp
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: 63 A
— with type of assignment 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
 for short-circuit protection of the auxiliary switch 	fuse gG: 10 A
required	
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 standard mounting rail
height	101 mm
width	90 mm
depth	97 mm
required spacing	
 with side-by-side mounting 	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm
for grounded parts	
— forwards	6 mm
— backwards	0 mm

— upwards	6 mm
— at the side	6 mm
— downwards	6 mm
for live parts	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 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 2.5 mm²), 2x (2.5 10 mm²)
— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
 at AWG cables for main contacts 	2x (16 12), 2x (14 8)
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)
 at AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14)
Safety related data	
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	75 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 y
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	Yes
protocol is supported AS-Interface protocol	No
product function control circuit interface with IO link	No
Certificates/ approvals	

General Product Approval

Declaration of Conformity



Confirmation







Test Certificates

Marine / Shipping

Special Test Certificate











Marine / Shipping other Railway





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=3RA2325-8XB30-1AK6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2325-8XB30-1AK6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2325-8XB30-1Ak

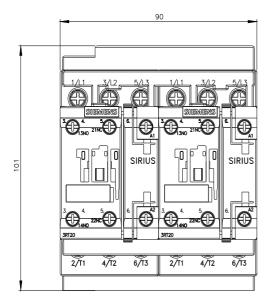
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

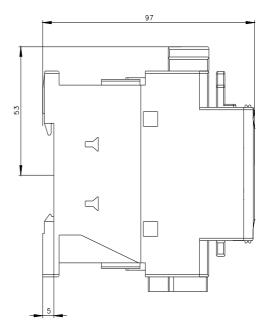
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2325-8XB30-1AK6&lang=en

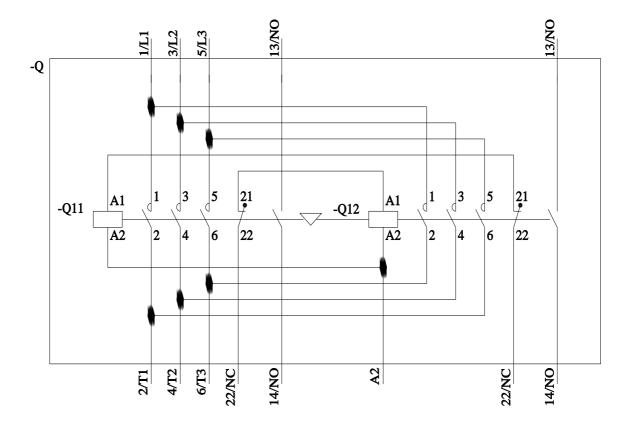
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2325-8XB30-1AK6/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2325-8XB30-1AK6&objecttype=14&gridview=view1







last modified: 2/8/2022 🖸