SIEMENS

Data sheet

3RA2337-8XB30-1AL2



Reversing contactor assembly AC-3,30 kW/400 V,AC230V 50/60Hz 3-pole, Size S2 screw terminal electrical and mechanical Interlock 2 NO integrated

product 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 • 3RT2037-1AL20 • 2 of the supplied contactor product extension auxiliary switch shock resistance at rectangular impulse • at AC • at AC 11.8g / 5 ms, 11.6g / 10 ms shock resistance with sine pulse • at AC at AC 18.5g / 5 ms, 11.6g / 10 ms shock resistance with sine pulse • of the contactor typical • 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 Qubstance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of NC contacts for main current circuit 3 number of NC contacts for main contacts 0 operating voltage at AC-3 rated value maximum eat 400 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • at 600 V rated value	product brand name	SIRIUS
manufacturer's article number • 1 of the supplied contactor • 2 of the supplied contactor • 3RT2037-1AL20 • of the supplied contactor • of the supplied RS assembly kit 3RA2933-2AA1 General technical data size of contactor S2 product extension auxiliary switch • at AC shock resistance at rectangular impulse • at AC at AC mechanical service life (switching cycles) • of contactor typical • 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 Main circuit number of POC contacts for main contacts number of POC contacts for main contacts 0 operating voltage at AC-3 rated value maximum operating power • at AC-3 • at 400 V rated value • at 500 V rated value	product designation	Reversing contactor assembly
• 1 of the supplied contactor • 2 of the supplied RS assembly kit • 2 of the supplied RS assembly kit General technical data size of contactor size of contactor sphock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC 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 operation • during storage ### AC #### AC ##### AC ##### AC ##### AC ##### AC ##### AC ##### AC ###### AC ####### AC ##########	product type designation	3RA23
of the supplied contactor of the supplied RS assembly kit 3RA2933-2AA1 General technical data size of contactor product extension auxiliary switch shock resistance at rectangular impulse	manufacturer's article number	
of the supplied RS assembly kit Size of contactor product extension auxiliary switch shock resistance at rectangular impulse at AC	 1 of the supplied contactor 	3RT2037-1AL20
S2	 2 of the supplied contactor 	3RT2037-1AL20
size of contactor product extension auxiliary switch shock resistance at rectangular impulse at AC shock resistance with sine pulse at AC shock shock resistance with sine pulse at AC shock resistance with sine pulse at AC shock s	 of the supplied RS assembly kit 	3RA2933-2AA1
product extension auxiliary switch shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC mechanical service life (switching cycles) • of contactor typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Quuring storage of utring operation of utring operation of utring storage operating voltage at AC-3 rated value operation act 400 V rated value operating power out 100 V rated value operation at AC-3 — at 400 V rated value — at 500 V rated value 310 000 000 10 000 000 10 000 000 10 000 00	General technical data	
shock resistance at rectangular impulse	size of contactor	S2
• at AC shock resistance with sine pulse • at AC 18.5g / 5 ms, 11.6g / 10 ms mechanical service life (switching cycles) • of contactor typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical orderence 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 Ambier of NO contacts for main current circuit number of poles for main current circuit 3 number of NO contacts for main contacts 0 operating voltage at AC-3 rated value maximum e) at 400 V rated value • at 500 V rated value • at 65 A • at 690 V rated value • at AC-3 — at 400 V rated value • at S00 V rated value • at S00 V rated value • at AC-3 — at 400 V rated value • at S00 V rated value • at S00 V rated value • at AC-3 — at 400 V rated value • at S00 V rated value • at AC-3 — at 400 V rated value • at S00 V rated value	product extension auxiliary switch	Yes
shock resistance with sine pulse	shock resistance at rectangular impulse	
• at AC mechanical service life (switching cycles) • of contactor typical • 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 during storage -25 +60 °C • during storage -25 +80 °C Main circuit number of poles for main current circuit 3 number of NC contacts for main contacts 0 operating voltage at AC-3 rated value maximum operating voltage at AC-3 • at 400 V rated value • at 65 A • at 690 V rated value • at 600 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value • at S00 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value — at 500 V rated value 30 kW — at 500 V rated value 31 kW	• at AC	11.8g / 5 ms, 11.6g / 10 ms
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 during operation during storage -25 +60 °C -55 +80 °C Main 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 maximum operational current at AC-3 o at 400 V rated value of AC-3 - at 400 V rated value operating power o at 400 V rated value - at 500 V rated value - at 400 V rated value - at 400 V rated value - at 400 V rated value - at 500 V rated value	shock resistance with sine pulse	
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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 oduring storage 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 at 690 V rated value ot 400 V rated value at 690 V rated value at 400 V rated value	mechanical service life (switching cycles)	
reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2014 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature	 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 -25 +60 °C -55 +80 °C Main 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 maximum • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 400 V rated value • at 690 V rated value • at 400 V rated value • at 690 V rated value		10 000 000
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 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 690 V rated value 30 kW operating power at AC-3 at 400 V rated value 30 kW - at 500 V rated value 37 kW	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum ambient temperature • during operation • during storage 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 AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value 30 kW — at 500 V rated value 37 kW	Substance Prohibitance (Date)	10/01/2014
ambient temperature • during operation • during storage -25 +60 °C • during storage -55 +80 °C Main circuit number of poles for main current circuit 3 number of NC 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 65 A • at 500 V rated value 65 A • at 690 V rated value 47 A operating power • at AC-3 — at 400 V rated value 30 kW — at 500 V rated value 37 kW		
 during operation 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 400 V rated value at 400 V rated value at 690 V rated value at 500 V rated value at AC-3 at 400 V rated value at AC-3 at 400 V rated value at AC-3 at 500 V rated value 30 kW at 500 V rated value 37 kW 	Ambient conditions	
 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 65 A at 690 V rated value operating power at AC-3 at AC-3 at 400 V rated value 30 kW at 500 V rated value 37 kW 		2 000 m
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 AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value 30 kW — at 500 V rated value 37 kW	installation altitude at height above sea level maximum	2 000 m
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 AC-3 - at 400 V rated value 30 kW - at 500 V rated value 37 kW	installation altitude at height above sea level maximum ambient temperature	
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 — at 400 V rated value 30 kW — at 500 V rated value 37 kW	installation altitude at height above sea level maximum ambient temperature • during operation	-25 +60 °C
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 47 A operating power • at AC-3 — at 400 V rated value 30 kW — at 500 V rated value 37 kW	installation altitude at height above sea level maximum ambient temperature • during operation • during storage	-25 +60 °C
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 47 A operating power • at AC-3 — at 400 V rated value 30 kW — at 500 V rated value 37 kW	installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit	-25 +60 °C -55 +80 °C
operational current at AC-3	installation altitude at height above sea level maximum ambient temperature	-25 +60 °C -55 +80 °C
 at 400 V rated value at 500 V rated value 45 A at 690 V rated value 47 A operating power at AC-3 at 400 V rated value at 500 V rated value 30 kW at 500 V rated value 37 kW 	installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts	-25 +60 °C -55 +80 °C 3 3
 at 500 V rated value at 690 V rated value 47 A operating power at AC-3 at 400 V rated value at 500 V rated value 30 kW at 500 V rated value 37 kW 	installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts	-25 +60 °C -55 +80 °C 3 3
● at 690 V rated value 47 A operating power ● at AC-3 — at 400 V rated value 30 kW — at 500 V rated value 37 kW	installation altitude at height above sea level maximum ambient temperature • during operation • during storage 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	-25 +60 °C -55 +80 °C 3 3
operating power	installation altitude at height above sea level maximum ambient temperature	-25 +60 °C -55 +80 °C 3 3 0 690 V
◆ at AC-3 — at 400 V rated value	installation altitude at height above sea level maximum ambient temperature	-25 +60 °C -55 +80 °C 3 3 0 690 V
 at 400 V rated value at 500 V rated value 30 kW 37 kW 	installation altitude at height above sea level maximum ambient temperature • during operation • during storage 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	-25 +60 °C -55 +80 °C 3 3 0 690 V 65 A 65 A
— at 500 V rated value 37 kW	installation altitude at height above sea level maximum ambient temperature • during operation • during storage 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	-25 +60 °C -55 +80 °C 3 3 0 690 V 65 A 65 A
	installation altitude at height above sea level maximum ambient temperature • during operation • during storage 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	-25 +60 °C -55 +80 °C 3 3 0 690 V 65 A 65 A
— at 690 V rated value 37 kW	installation altitude at height above sea level maximum ambient temperature	-25 +60 °C -55 +80 °C 3 3 0 690 V 65 A 65 A 47 A
	installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main 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 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 — at 400 V rated value	-25 +60 °C -55 +80 °C 3 3 0 690 V 65 A 65 A 47 A

140 4 1400 11 11 1	001111
at AC-4 at 400 V rated value	30 kW
operating frequency at AC-3 maximum	700 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	230 V
at 60 Hz rated value	230 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	0.00 1.1
• at 50 Hz	210 VA
• at 60 Hz	188 VA
	100 VA
inductive power factor with closing power of the coil	0.00
• at 50 Hz	0.69
• at 60 Hz	0.65
apparent holding power of magnet coil at AC	
• at 50 Hz	17.2 VA
• at 60 Hz	16.5 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.36
● at 60 Hz	0.39
Auxiliary circuit	
number of NC contacts for auxiliary contacts	
per direction of rotation	0
number of NO contacts for auxiliary contacts	•
per direction of rotation	1
·	2
instantaneous contact contact reliability of auxiliary contacts.	
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	65 A
at 600 V rated value	62 A
yielded mechanical performance [hp] for 3-phase AC motor	
• at 220/230 V rated value	20 hp
at 460/480 V rated value	50 hp
• at 575/600 V rated value	50 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	
	aG NH 3NA DIAZED 5SB NEOZED 5SE: 250 A
— with type of assignment 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A
— with type of assignment 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 125 A
 for short-circuit protection of the auxiliary switch required 	fuse gG: 10 A
Installation/ mounting/ dimensions	
	±/ 180° rotation possible on vertical mounting surfaces can be tilted
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	141 mm
width	120 mm
depth	130 mm
required spacing	
with side-by-side mounting	
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
activitatus	I V IIIIII

— at the side	10 mm
 for grounded parts 	
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— 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	Colon type terminale
• for main contacts	
— solid	2x (1 35 mm²), 1x (1 50 mm²)
solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)
finely stranded with core end processing	2x (1 25 mm²), 1x (1 35 mm²)
at AWG cables for main contacts	2x (18 2), 1x (18 1)
type of connectable conductor cross-sections	ZX (10 Z), 1X (10 1)
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	ZA (20 10), ZA (10 14)
	1,000,000
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	40.0/
with low demand rate according to SN 31920 with high demand rate according to SN 31939	40 %
with high demand rate according to SN 31920 failure and EFET with level demand and a second and a s	73 %
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	
	Doclaration of Conformity
General Product Approval	Declaration of Conformity



Confirmation









Test Certificates

Marine / Shipping











Marine / Shipping

other

Dangerous Good





Confirmation

<u>Transport Information</u>

Further information

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=3RA2337-8XB30-1AL2

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2337-8XB30-1AL2

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2337-8XB30-1AL2

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

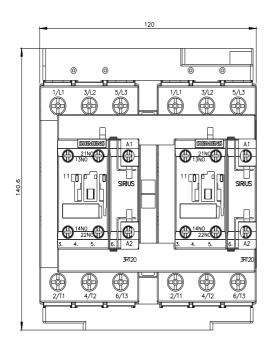
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2337-8XB30-1AL2&lang=en

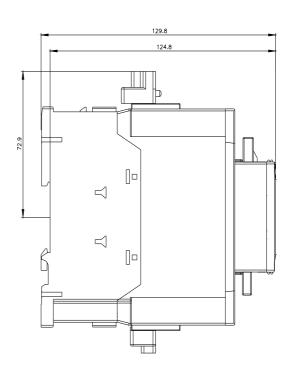
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2337-8XB30-1AL2/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2337-8XB30-1AL2&objecttype=14&gridview=view1





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