# SIEMENS

Product data sheet

#### 3RA2337-8XB30-1NB3

REVERSING COMB., AC3:30KW/400V, 20-33V AC/DC, 3-POLE, SIZE S2 SCREW TERMINAL ELECTR. AND MECH. INTERLOCK 2NO INTEGR.

General technical data:		
product brand name		SIRIUS
Product function		Reversing contactor assembly
Size of contactor		S2
Protection class IP / on the front	_	IP20
Degree of pollution	_	3
Insulation voltage / with degree of pollution 3 / Rated value	V	690
Installation altitude / at height above sea level / maximum	m	2,000
Ambient temperature / during storage	°C	-55 +80
Ambient temperature / during operation	°C	-25 +60
Surge voltage resistance / Rated value	kV	6
Active power loss / per conductor / typical	W	3.8
Manufacturer article number		
1 / of the supplied contactor		<u>3RT2037-1NB30</u>
2 / of the supplied contactor		<u>3RT2037-1NB30</u>
of the supplied RS assembly kit	_	3RA2934-2BB1
Mechanical service life (switching cycles)		
of the contactor / typical		10,000,000
of the contactor with added auxiliary switch block / typical		10,000,000
Communication/ Protocol:		
Product function		
Bus communication		No
Control circuit interface with IO link		No
Protocol / is supported / AS-interface protocol		No
Main circuit:		
Number of poles / for main current circuit		3
Number of NC contacts / for main contacts		0
Number of NO contacts / for main contacts		3
Operating voltage / at AC-3 / Rated value / maximum	V	690
Operating current		

• at AC-1 / at 400 V		
• at ambient temperature 40 °C / Rated value	А	80
• at ambient temperature 60 °C / Rated value	А	70
• at AC-2 / at 400 V / Rated value	А	65
• at AC-3 / at 400 V / Rated value	А	65
• at AC-4 / at 400 V / Rated value	А	55
• with 1 current path / at DC-1		
• at 24 V / Rated value	А	55
• at 110 V / Rated value	А	4.5
• with 2 current paths in series / at DC-1		
• at 24 V / Rated value	А	55
• at 110 V / Rated value	А	25
• with 3 current paths in series / at DC-1		
• at 24 V / Rated value	А	55
• at 110 V / Rated value	А	55
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / Rated value	А	35
• at 110 V / Rated value	А	2.5
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / Rated value	А	55
• at 110 V / Rated value	А	25
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / Rated value	А	55
• at 110 V / Rated value	А	55
Operating power		
• at AC-2 / at 400 V / Rated value	kW	30
• at AC-3		
• at 400 V / Rated value	kW	30
• at 690 V / Rated value	kW	30
• at AC-4 / at 400 V / Rated value	kW	30
No-load switching frequency	1/h	1,500
Operating frequency		
• at AC-1 / maximum	1/h	800
• at AC-2 / maximum	1/h	400
• at AC-3 / maximum	1/h	700
• at AC-4 / maximum	1/h	200
Control circuit/ Control:		
Type of voltage / of the control supply voltage		AC/DC
Control supply voltage / 1		

• for DC	V	20 33
• with AC		
• at 50 Hz	V	20 33
• with AC		
• at 60 Hz	V	20 33
Operating range factor control supply voltage rated value / of the magnet coil		
• with AC / at 50 Hz		0.8 1.1
• with AC / at 60 Hz		0.8 1.1
• for DC		0.8 1.1
Apparent pick-up power / of the magnet coil / with AC		
• at 50 Hz	V-A	40
• at 60 Hz	V·A	40
Inductive power factor / with closing power of the coil		
• at 50 Hz		0.64
• at 60 Hz		0.5
Apparent holding power / of the magnet coil / with AC		
• at 50 Hz	V·A	2
• at 60 Hz	V·A	2
Inductive power factor / with the holding power of the coil		
• at 50 Hz		0.36
• at 60 Hz		0.39
Closing power / of the magnet coil / for DC	W	23
Holding power / of the magnet coil / for DC	W	1

### Auxiliary circuit:

Product expansion / Auxiliary switch		Yes
Contact reliability / of the auxiliary contacts		< 1 error per 100 million operating cycles
Number of NC contacts / for auxiliary contacts		
per direction of rotation		0
instantaneous contact		0
lagging switching		0
Number of NO contacts / for auxiliary contacts	-	
per direction of rotation		0
instantaneous contact		0
leading contact		0
Operating current / of the auxiliary contacts	-	
• at AC-12 / maximum	А	10
• at AC-15		
• at 230 V	А	6

• at 400 V	А	3
• at DC-12		
• at 48 V	А	6
• at 60 V	А	6
• at 110 V	А	3
• at 220 V	А	1
• at DC-13		
• at 24 V	А	10
• at 48 V	А	2
• at 60 V	А	2
• at 110 V	А	1
• at 220 V	А	0.3
Short-circuit:		
Design of the fuse link		
<ul> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>		fuse gL/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
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	120
Height	mm	141
Depth	mm	130
Connections/ terminals:		
Design of the electrical connection		
for main current circuit		screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals
Type of connectable conductor cross-section		
for main contacts		
single or multi-stranded		2x (1 35 mm²), 1x (1 50 mm²)
<ul> <li>finely stranded / with core end processing</li> </ul>		2x (1 25 mm²), 1x (1 35 mm²)
for AWG conductors / for main contacts		2x (18 2), 1x (18 1)
Type of connectable conductor cross-section		
for auxiliary contacts		
		$2x (0.5 - 1.5 mm^2) - 2x (0.75 - 0.5 mm^2)$
<ul> <li>single or multi-stranded</li> </ul>		2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
<ul> <li>single or multi-stranded</li> <li>finely stranded / with core end processing</li> </ul>		2x (0,5 1,5 mm <sup>2</sup> ), 2x (0,75 2,5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )

**Declaration of Conformity** 



UL/CSA ratings:		
yielded mechanical performance [hp]		
for single-phase AC motor		
• at 110/120 V / Rated value	hp	5
• at 230 V / Rated value	hp	10
for three-phase AC motor		
• at 220/230 V / Rated value	hp	20
• at 460/480 V / Rated value	hp	50
• at 575/600 V / Rated value	hp	50
Full-load current (FLA) / for three-phase AC motor		
• at 480 V / Rated value	А	65
• at 600 V / Rated value	А	62
Contact rating / of the auxiliary contacts / acc. to UL		A600 / Q600

Safety related data:		
B10 value / with high demand rate		
• acc. to SN 31920		1,000,000
Failure rate [FIT] / with low demand rate		
• acc. to SN 31920	FIT	100
Proportion of dangerous failures	-	
• with low demand rate / acc. to SN 31920	%	40
• with high demand rate / acc. to SN 31920	%	73
T1 value / for proof test interval or service life	-	
• acc. to IEC 61508	а	20

#### Further information:

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

# Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

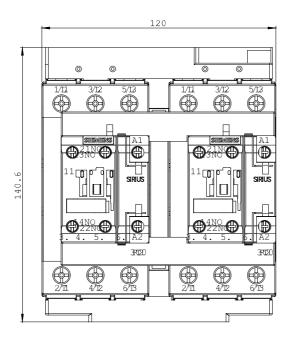
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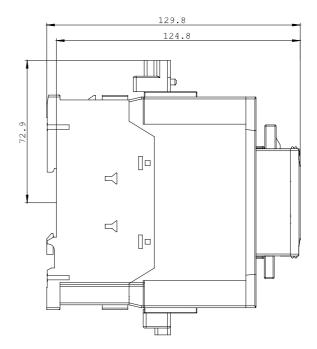
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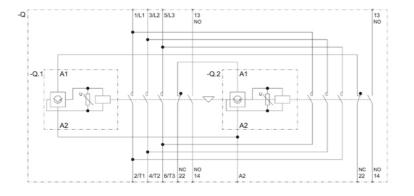
## Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

 $\underline{http://support.automation.siemens.com/WW/view/en/3RA2337-8XB30-1NB3/all}$ 

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA2337-8XB30-1NB3







last change:

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