SIEMENS

Data sheet

3RT2037-3AK60



CONTACTOR,AC3:30KW/400V, 1NO+1NC,110VAC 50HZ/120V 60HZ, 3-POLE, SIZE S2, SPRING-TYPE TERMINAL

product brand name		SIRIUS
Product designation	_	3RT2 contactor
Froduct designation		SR12 CONTACTOR
General technical data:		
Insulation voltage		
Rated value	V	690
Degree of pollution	_	3
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
 of the contactor typical 		10 000 000
 of the contactor with added electronics- 		5 000 000
compatible auxiliary switch block typical		
 of the contactor with added auxiliary switch 		10 000 000
block typical		
Thermal short-time current restricted to 10 s	А	520
Protection class IP		
• on the front		IP20
• of the terminal		IP00
Equipment marking		
• acc. to DIN EN 61346-2		Q
• acc. to DIN EN 81346-2		Q
Aain 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 $^\circ\mathrm{C}$	А	80
Rated value		
— up to 690 V at ambient temperature 40 °C	А	80
Rated value		70
— up to 690 V at ambient temperature 60 °C Rated value	A	70
• at AC-2 at 400 V Rated value	А	65
• at AC-3		
— at 400 V Rated value	А	65
— at 500 V Rated value	А	65
— at 690 V Rated value	А	47
• at AC-4 at 400 V Rated value	А	55
Operating current with 1 current path		
● at DC-1		
— at 24 V Rated value	А	70
— at 110 V Rated value	А	4.5
— at 220 V Rated value	А	2
— at 440 V Rated value	А	0.4
— at 600 V Rated value	А	0.25
● at DC-3 at DC-5		
— at 24 V Rated value	А	35
— at 110 V Rated value	А	2.5
— at 220 V Rated value	А	2
— at 440 V Rated value	А	0.1
— at 600 V Rated value	А	0.06
Operating current with 2 current paths in series		
● at DC-1		
— at 24 V Rated value	А	70
— at 110 V Rated value	А	45
— at 220 V Rated value	А	5
— at 440 V Rated value	А	1
— at 600 V Rated value	А	0.8
• at DC-3 at DC-5		
— at 110 V Rated value	А	25
— at 220 V Rated value	А	5
— at 24 V Rated value	А	55
— at 440 V Rated value	А	0.27
— at 600 V Rated value	А	0.16
Operating current with 3 current paths in series		

• at DC-1		
— at 24 V Rated value	А	55
— at 110 V Rated value	А	45
— at 220 V Rated value	А	45
— at 440 V Rated value	А	2.9
— at 600 V Rated value	А	1.4
• at DC-3 at DC-5		
— at 110 V Rated value	А	45
— at 220 V Rated value	А	25
— at 24 V Rated value	А	55
— at 440 V Rated value	А	0.6
— at 600 V Rated value	А	0.6
Operating power	-	
• at AC-1 at 400 V Rated value	kW	53
● at AC-2 at 400 V Rated value	kW	30
 at AC-4 at 400 V Rated value 	kW	30
Operating power	_	
• at AC-1		
— at 230 V at 60 °C Rated value	kW	26
— at 230 V Rated value	kW	30
— at 400 V at 60 °C Rated value	kW	46
— at 690 V at 60 °C Rated value	kW	79
— at 690 V Rated value	kW	91
• at AC-3		
— at 230 V Rated value	kW	18.5
— at 400 V Rated value	kW	30
— at 500 V Rated value	kW	37
— at 690 V Rated value	kW	37
Operating power for ≥ 200000 operating cycles at AC-4		
• at 400 V Rated value	kW	14.7
• at 690 V Rated value	kW	20
Operating frequency		
● at AC-3 maximum	1/h	700
Control circuit/ Control:		
Type of voltage of the control supply voltage		AC
Control supply voltage with AC		440
• at 50 Hz Rated value	V	110
at 60 Hz Rated value	V	120
Operating range factor control supply voltage rated value of the magnet coil with AC		
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		0.8 1.1
• at 50 Hz		0.8 1.1
• at 60 Hz		0.8 1.1
Auxiliary circuit:		
Number of NC contacts		
 for auxiliary contacts 		
— instantaneous contact		1
Number of NO contacts		
 for auxiliary contacts 		
— instantaneous contact		1
Product expansion Auxiliary switch		Yes
Operating current at AC-15		
• at 230 V Rated value	А	10
• at 400 V Rated value	А	3
• at 690 V Rated value	А	1
Operating current		
• at DC-12 at 125 V Rated value	А	2
• at DC-12 at 220 V Rated value	А	1
• at DC-12 at 600 V Rated value	А	0.15
• at DC-13 at 125 V Rated value	А	0.9
• at DC-13 at 220 V Rated value	А	0.3
• at DC-13 at 600 V Rated value	А	0.1
Operating current	-	
• at DC-12		
— at 60 V Rated value	А	6
— at 110 V Rated value	А	3
• at DC-13		
— at 24 V Rated value	А	10
— at 60 V Rated value	А	2
— at 110 V Rated value	А	1
Contact reliability of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
at 480 V Rated value	А	65
• at 600 V Rated value	A	52
yielded mechanical performance [hp]		
• for single-phase AC motor at 110/120 V Rated	metric	5
value	hp	
 for single-phase AC motor at 230 V Rated value 	metric hp	10
• for three-phase AC motor at 200/208 V Rated	metric	20

• for three-phase AC motor at 200/208 V Rated value

hp

 for three-phase AC motor at 220/230 V Rated value 	metric hp	20
 for three-phase AC motor at 460/480 V Rated value 	metric hp	50
 for three-phase AC motor at 575/600 V Rated value 	metric hp	50
Contact rating of the auxiliary contacts acc. to UL		A600 / P600
	_	
Short-circuit: Design of the fuse link	_	
for short-circuit protection of the main circuit		
- with type of assignment 1 required		gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A
		gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 125 A
— with type of assignment 2 required		
 for short-circuit protection of the auxiliary switch required 		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 according to DIN EN 50022
Side-by-side mounting		Yes
Height	mm	113.4
Width	mm	55
Depth	mm	130
Required spacing	-	
 with side-by-side mounting 		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
 for grounded parts 		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— at the side	mm	6
— downwards	mm	50
 for live parts 		
— forwards	mm	0
— Backwards	mm	0
	mm	50
— upwards		50
— downwards	mm	50

— at the side	mm	6
Connections/ Terminals:		
Type of electrical connection		
• for main current circuit		screw-type terminals
 for auxiliary and control current circuit 		spring-loaded terminals
Type of connectable conductor cross-section		
• for main contacts		
— single or multi-stranded		2x (1 35 mm²), 1x (1 50 mm²)
— finely stranded with core end processing		2x (1 25 mm²), 1x (1 35 mm²)
 for AWG conductors for main contacts 		2x (18 2), 1x (18 1)
 for auxiliary contacts 		
— single or multi-stranded		2x (0,5 2,5 mm²)
— finely stranded with core end processing		2x (0.5 1.5 mm²)
— finely stranded without core end		2x (0.5 2.5 mm²)
processing		
 for AWG conductors for auxiliary contacts 		2x (20 14)
Apparent pick-up power of the magnet coil with AC		
● at 50 Hz	V·A	212
• at 60 Hz	V·A	188
Safety related data:		
Proportion of dangerous failures		
• with low demand rate acc. to SN 31920	%	40
• with high demand rate acc. to SN 31920	%	73
Product function Mirror contact acc. to IEC 60947-4-1		Yes
Protection against electrical shock		finger-safe when touched vertically from front acc. to IEC 60529
Mechanical data:		
Size of contactor		S2
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature	° C	25 100
during operation	°C °C	-25 +60
during storage	°C	-55 +80
Certificates/ approvals:		

General Product Approval other







Confirmation

Environmental Confirmations

urther information

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

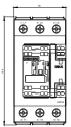
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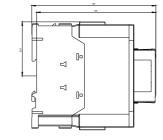
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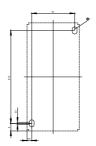
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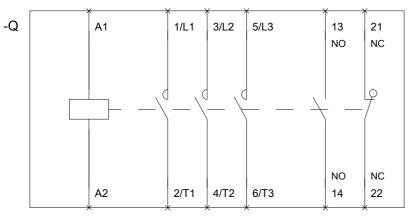
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RT20373AK60/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT20373AK60&lang=en









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