SIEMENS

Data sheet 3RT2037-1NF30



CONTACTOR,AC3:30KW/400V, 1NO+1NC, 84 - 155V AC/DC, WITH VARISTOR, 3-POLE, SIZE S2, SCREW TERMINAL

Figure similar

product brand name	SIRIUS
Product designation	3RT2 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- compatible auxiliary switch block typical 		5 000 000
 of the contactor with added auxiliary switch block typical 		10 000 000
Thermal short-time current restricted to 10 s	Α	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

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	Α	80
— up to 690 V at ambient temperature 40 °C Rated value	А	80
— up to 690 V at ambient temperature 60 °C Rated value	Α	70
• at AC-2 at 400 V Rated value	Α	65
• at AC-3		
— at 400 V Rated value	Α	65
— at 500 V Rated value	Α	65
— at 690 V Rated value	Α	47
• at AC-4 at 400 V Rated value	Α	55
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	Α	70
— at 110 V Rated value	Α	4.5
— at 220 V Rated value	Α	2
— at 440 V Rated value	Α	0.4
— at 600 V Rated value	Α	0.25
• at DC-3 at DC-5		
— at 24 V Rated value	Α	35
— at 110 V Rated value	Α	2.5
— at 220 V Rated value	Α	2
— at 440 V Rated value	Α	0.1
— at 600 V Rated value	Α	0.06
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	70
— at 110 V Rated value	Α	45
— at 220 V Rated value	Α	5
— at 440 V Rated value	Α	1
— at 600 V Rated value	Α	0.8
• at DC-3 at DC-5		
— at 110 V Rated value	Α	25
— at 220 V Rated value	Α	5
— at 24 V Rated value	Α	55
	Δ.	0.27
— at 440 V Rated value	Α	0.21

• at DC-1		
— at 24 V Rated value	Α	55
— at 110 V Rated value	Α	45
— at 220 V Rated value	Α	45
— at 440 V Rated value	Α	2.9
— at 600 V Rated value	Α	1.4
• at DC-3 at DC-5		
— at 110 V Rated value	Α	45
— at 220 V Rated value	Α	25
— at 24 V Rated value	Α	55
— at 440 V Rated value	Α	0.6
— at 600 V Rated value	Α	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/DC
Control supply voltage with AC		
● at 50 Hz Rated value	V	83 155
at 60 Hz Rated value	V	83 155
Control supply voltage for DC		
Rated value	V	83 155

Operating range factor control supply voltage rated value of the magnet coil with AC		
• at 50 Hz		0.8 1.1
• at 60 Hz		0.8 1.1
Operating range factor control supply voltage rated		0.8 1.1
value of the magnet coil for DC		0.0 1.1
Design of the surge suppressor		with varistor
Closing power of the magnet coil for DC	W	23
Holding power of the magnet coil for DC	W	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	Α	10
• at 400 V Rated value	Α	3
• at 690 V Rated value	Α	1
Operating current		
• at DC-12 at 125 V Rated value	Α	2
• at DC-12 at 220 V Rated value	Α	1
• at DC-12 at 600 V Rated value	Α	0.15
• at DC-13 at 125 V Rated value	Α	0.9
• at DC-13 at 220 V Rated value	Α	0.3
• at DC-13 at 600 V Rated value	Α	0.1
Operating current		
• at DC-12		
— at 60 V Rated value	Α	6
— at 110 V Rated value	Α	3
• at DC-13		
— at 24 V Rated value	Α	10
— at 60 V Rated value	Α	2
— at 110 V Rated value	Α	1
Contact reliability of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
JL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
at 490 V Poted value	۸	65

ou/coa raungs.		
Full-load current (FLA) for three-phase AC motor		
● at 480 V Rated value	Α	65
● at 600 V Rated value	Α	52

yielded mechanical performance [hp]		
● for single-phase AC motor at 110/120 V Rated value	metric hp	5
 for single-phase AC motor at 230 V Rated value 	metric hp	10
 for three-phase AC motor at 200/208 V Rated value 	metric hp	20
 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
— with type of assignment 2 required	gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 125 A
• for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 A
required	

mounting position		+/-180° rotation possible on vertical mounting
mounting position		
		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
— upwards	mm	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 		screw-type 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 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 conductors for auxiliary contacts 		2x (20 16), 2x (18 14)
Apparent pick-up power of the magnet coil with AC		
● at 50 Hz	V·A	40
● at 60 Hz	V·A	40
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
Due to attion a majurat all attional about		figures and culture to colored continuity from front and to

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 maximum	m	2 000
Ambient temperature		

maximum		
Ambient temperature		
during operation	°C	-25 + 60
during storage	°C	-55 + 80
Certificates/ approvals:		

General Product Approval

other







Confirmation

Environmental Confirmations

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

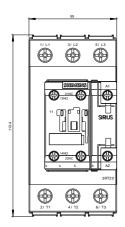
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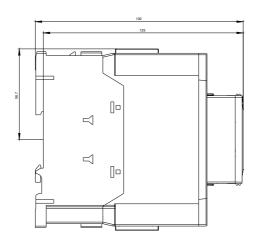
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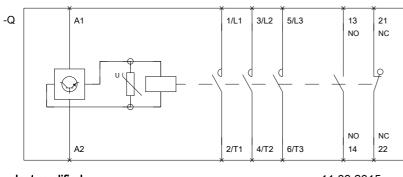
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RT20371NF30/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=3RT20371NF30&lang=en







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