## **SIEMENS**

Data sheet 3RT2036-1NE30



CONTACTOR,AC3:22KW/400V, 1NO+1NC, 48 - 80V AC/DC, WITH VARISTOR, 3-POLE, SIZE S2, SCREW TERMINAL

Figure similar

product brand name	SIRIUS
Product designation	3RT2 contactor

Inculation voltage			
Insulation voltage			
Rated value	V	690	
Degree of pollution		3	
Surge voltage resistance Rated value	kV	6	
Mechanical service life (switching cycles)			
<ul> <li>of the contactor typical</li> </ul>		10 000 000	
<ul> <li>of the contactor with added electronics- compatible auxiliary switch block typical</li> </ul>		5 000 000	
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>		10 000 000	
Thermal short-time current restricted to 10 s	Α	420	
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	

<ul><li>at AC-3 Rated value maximum</li></ul>	V	690
Operating current		
• at AC-1		
— at 400 V at ambient temperature 40 °C Rated value	Α	70
— up to 690 V at ambient temperature 40 °C Rated value	Α	70
— up to 690 V at ambient temperature 60 °C Rated value	Α	60
• at AC-2 at 400 V Rated value	Α	51
• at AC-3		
— at 400 V Rated value	Α	51
— at 500 V Rated value	Α	50
— at 690 V Rated value	Α	24
• at AC-4 at 400 V Rated value	Α	41
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	Α	60
— 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	60
— 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
— at 440 V Rated value	Α	0.27
— at 600 V Rated value	Α	0.16
Operating current with 3 current paths in series		

● 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	46
• at AC-2 at 400 V Rated value	kW	22
• at AC-4 at 400 V Rated value	kW	22
Operating power		
• at AC-1		
— at 230 V at 60 °C Rated value	kW	23
— at 230 V Rated value	kW	26
— at 400 V at 60 °C Rated value	kW	39
— at 690 V at 60 °C Rated value	kW	68
— at 690 V Rated value	kW	79
• at AC-3		
— at 230 V Rated value	kW	15
— at 400 V Rated value	kW	22
— at 500 V Rated value	kW	30
— at 690 V Rated value	kW	22
Operating power for ≥ 200000 operating cycles at AC-4		
• at 400 V Rated value	kW	12.6
• at 690 V Rated value	kW	18.2
Operating frequency		
• at AC-3 maximum	1/h	1 000
Control circuit/ Control:		

Control circuit/ Control:		
Type of voltage of the control supply voltage		AC/DC
Control supply voltage with AC		
● at 50 Hz Rated value	V	48 80
• at 60 Hz Rated value	V	48 80
Control supply voltage for DC		
Rated value	V	48 80

Operating range factor control supply voltage rated		
value of the magnet coil with AC		0.8 1.1
• at 50 Hz		0.8 1.1
• at 60 Hz		
Operating range factor control supply voltage rated value of the magnet coil for DC		0.8 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		
<ul> <li>for auxiliary contacts</li> </ul>		
— instantaneous contact		1
Number of NO contacts		
<ul> <li>for auxiliary contacts</li> </ul>		
<ul> <li>instantaneous contact</li> </ul>		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)
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
● at 480 V Rated value	Α	52

yielded mechanical performance [hp]		
<ul> <li>for single-phase AC motor at 110/120 V Rated value</li> </ul>	metric hp	3
<ul> <li>for single-phase AC motor at 230 V Rated value</li> </ul>	metric hp	10
<ul> <li>for three-phase AC motor at 200/208 V Rated value</li> </ul>	metric hp	15
<ul> <li>for three-phase AC motor at 220/230 V Rated value</li> </ul>	metric hp	15
<ul> <li>for three-phase AC motor at 460/480 V Rated value</li> </ul>	metric hp	40
• 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	
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
<ul> <li>— with type of assignment 1 required</li> </ul>	gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 200 A
<ul> <li>with type of assignment 2 required</li> </ul>	gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A
• for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 A
required	

	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
	Yes
mm	113.4
mm	55
mm	130
mm	0
mm	0
mm	0
mm	50
mm	6
	mm mm mm mm mm mm mm mm mm

— 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
<ul> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals
Type of connectable conductor cross-section		
• for main contacts		
<ul> <li>single or multi-stranded</li> </ul>		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)
<ul> <li>for AWG conductors for main contacts</li> </ul>		2x (18 2), 1x (18 1)
• for auxiliary contacts		
<ul> <li>single or multi-stranded</li> </ul>		2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		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		
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	%	40
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	%	73
Product function Mirror contact acc. to IEC 60947-4-1		Yes

Safety related data:		
Proportion of dangerous failures		
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	%	40
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	%	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		
<ul><li>during operation</li></ul>	°C	-25 +60
during storage	°C	-55 <b>+</b> 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

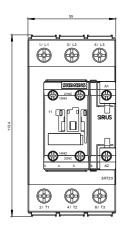
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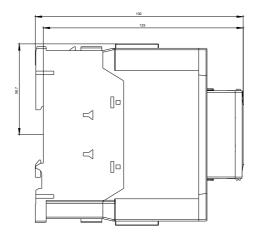
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT20361NE30

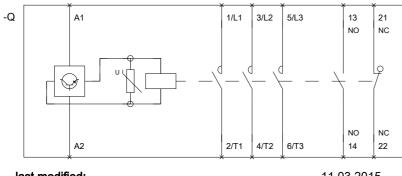
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RT20361NE30/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT20361NE30&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT20361NE30&lang=en</a>







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