## **SIEMENS**

Data sheet 3RT2036-3AP00



CONTACTOR,AC3:22KW/400V, 1NO+1NC, 230V AC 50HZ, 3-POLE, SIZE S2, SPRING-TYPE 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
<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:		
Type of voltage of the control supply voltage		AC
Control supply voltage with AC		
at 50 Hz Rated value	V	230
Operating range factor control supply voltage rated value of the magnet coil with AC		
● at 50 Hz		0.8 1.1

Auxiliary circuit:		
Number of NC contacts		
<ul> <li>for auxiliary contacts</li> </ul>		
— 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)
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	Α	52
● at 600 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
• for three-phase AC motor at 200/208 V Rated value	metric hp	15
• for three-phase AC motor at 220/230 V Rated value	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	
— with type of assignment 2 required		gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A	
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>		fuse gL/gG: 10 A	

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
<ul> <li>Side-by-side mounting</li> </ul>		Yes
Height	mm	113.4
Width	mm	55
Depth	mm	130
Required spacing		
<ul><li>with side-by-side mounting</li></ul>		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
<ul> <li>for grounded parts</li> </ul>		
— 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	
<ul> <li>for auxiliary and control current circuit</li> </ul>		spring-loaded 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)	
<ul> <li>for auxiliary contacts</li> </ul>			
<ul> <li>single or multi-stranded</li> </ul>		2x (0,5 2,5 mm²)	
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²)	
<ul> <li>finely stranded without core end processing</li> </ul>		2x (0.5 2.5 mm²)	
for AWG conductors for auxiliary contacts		2x (20 14)	
Apparent pick-up power of the magnet coil with AC			
● at 50 Hz	V·A	190	
Safety related data:			

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:		

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

 $\frac{\text{Environmental}}{\text{Confirmations}}$ 

## Further information

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

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

#### Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT20363AP00

# Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="http://support.automation.siemens.com/WW/view/en/3RT20363AP00/all">http://support.automation.siemens.com/WW/view/en/3RT20363AP00/all</a>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT20363AP00&lang=en







