# **SIEMENS**

#### Data sheet

### 3RT2035-1AP00-1AA0



CONTACTOR,AC3:18.5KW/400V, 1NO+1NC, 230V AC 50HZ, 3-POLE, SIZE S2, SCREW TERMINAL UPRIGHT MOUNTING POSITION

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)		
<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	А	400
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		

А	60
A	60
А	55
А	40
А	40
А	40
А	24
А	35
_	
А	55
А	4.5
А	2
А	0.4
А	0.25
А	35
А	2.5
А	2
А	0.1
А	0.06
_	
А	55
А	45
А	5
А	1
А	0.8
А	25
А	5
А	55
А	0.27
А	0.16

• 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		
<ul> <li>at AC-1 at 400 V Rated value</li> </ul>	kW	39
<ul> <li>at AC-2 at 400 V Rated value</li> </ul>	kW	18.5
• at AC-4 at 400 V Rated value	kW	18.5
Operating power	-	
● at AC-1		
— at 230 V at 60 °C Rated value	kW	21
— at 230 V Rated value	kW	23
— at 400 V at 60 °C Rated value	kW	36
— at 690 V at 60 °C Rated value	kW	62
— at 690 V Rated value	kW	68
● at AC-3		
— at 230 V Rated value	kW	11
— at 400 V Rated value	kW	18.5
— at 500 V Rated value	kW	22
— at 690 V Rated value	kW	22
Operating power for ≥ 200000 operating cycles at AC-4		
• at 400 V Rated value	kW	11.6
• at 690 V Rated value	kW	16.8
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

A 111		
Auxiliary circuit: Number of NC contacts		
for auxiliary contacts		1
— instantaneous contact		1
Number of NO contacts		
for auxiliary contacts		
— instantaneous contact		1
Product expansion Auxiliary switch		Yes
Operating current at AC-15	•	40
• at 230 V Rated value	A	10
• at 400 V Rated value	A	3
• at 690 V Rated value	A	1
Operating current		
• at DC-12 at 125 V Rated value	A	2
<ul> <li>at DC-12 at 220 V Rated value</li> </ul>	A	1
• at DC-12 at 600 V Rated value	А	0.15
• at DC-13 at 125 V Rated value	А	0.9
<ul> <li>at DC-13 at 220 V Rated value</li> </ul>	А	0.3
<ul> <li>at DC-13 at 600 V Rated value</li> </ul>	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	40
• at 600 V Rated value	А	41
yielded mechanical performance [hp]		
• for single-phase AC motor at 110/120 V Rated	metric	3
value	hp	
<ul> <li>for single-phase AC motor at 230 V Rated value</li> </ul>	metric hp	7.5
• for three-phase AC motor at 200/208 V Rated	metric	10

• for three-phase AC motor at 220/230 V Rated value

value

15

hp

hp

metric

<ul> <li>for three-phase AC motor at 460/480 V Rated value</li> </ul>	metric hp	30
<ul> <li>for three-phase AC motor at 575/600 V Rated value</li> </ul>	metric hp	40
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>		
— with type of assignment 1 required		gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 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
Installation/ mounting/ dimensions:		
mounting position		standing, on horizontal 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:		

### Connections/ Terminals:

### Type of electrical connection

<ul> <li>for main current circuit</li> </ul>		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)
— finely stranded with core end processing		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>		
— 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)
<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	190
Safety related data:		
Proportion of dangerous failures		
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	%	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		
during operation	°C	-25 +60
<ul> <li>during storage</li> </ul>	°C	-55 +80
Certificates/ approvals:		
General Product Approval		other
	UL	Environmental Confirmations

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