SIEMENS

Data sheet

3RT2035-1AV00



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

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- 		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	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
1ain 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

 at AC-3 Rated value maximum 	V	690
Operating current		
• at AC-1		
— at 400 V at ambient temperature 40 °C	А	60
Rated value		
— up to 690 V at ambient temperature 40 $^\circ C$	А	60
Rated value		
— up to 690 V at ambient temperature 60 °C Rated value	A	55
• at AC-2 at 400 V Rated value	А	40
• at AC-3		
— at 400 V Rated value	А	40
— at 500 V Rated value	А	40
— at 690 V Rated value	А	24
• at AC-4 at 400 V Rated value	А	35
Operating current with 1 current path		
● at DC-1		
— at 24 V Rated value	А	55
— 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	55
— 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	39
 at AC-2 at 400 V Rated value 	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		100
• at 50 Hz Rated value	V	400
Operating range factor control supply voltage rated value of the magnet coil with AC		
• at 50 Hz		0.8 1.1

uxiliary 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)
IL/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 value	metric hp	3
 for single-phase AC motor at 230 V Rated value 	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

• for three-phase AC motor at 575/600 V Rated value metric hp 40 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 gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 / gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A • for short-circuit protection of the auxiliary switch required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A • 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 • Side-by-side mounting Yes Height mm 113.4 Width mm 55 Depth mm 130 Required spacing • with side-by-side mounting mm • with side-by-side mounting mm 0	value tact rating of the auxiliary contacts acc. to UL t-circuit: ign of the fuse link • for short-circuit protection of the main circuit — with type of assignment 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Illation/ mounting/ dimensions:		
Short-circuit: Design of the fuse link • for short-circuit protection of the main circuit - with type of assignment 1 required - with type of assignment 2 required • for short-circuit protection of the auxiliary switch required 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 • Side-by-side mounting Height mm 113.4 Width mm Depth mm iside-by-side mounting • with side-by-side mounting - forwards mm	t-circuit: ign of the fuse link • for short-circuit protection of the main circuit — with type of assignment 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Illation/ mounting/ dimensions:		
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with type of assignment 1 required with type of assignment 2 requiredgL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gL/gG: 10 AInstallation/ mounting/ dimensions:fuse gL/gG: 10 Amounting position+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surfaceMounting typescrew and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022• Side-by-side mountingYesHeightmmWidthmmDepthmm• with side-by-side mounting • with side-by-side mounting• with side-by-side mountingmm0	 with type of assignment 1 required with type of assignment 2 required for short-circuit protection of the auxiliary switch required Illation/ mounting/ dimensions: 		gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A
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Heightmm113.4Widthmm55Depthmm130Required spacing • with side-by-side mounting — forwardsmm0	inting type		
Width mm 55 Depth mm 130 Required spacing - forwards mm	 Side-by-side mounting 		Yes
Depth mm 130 Required spacing ************************************	yht	mm	113.4
Required spacing mm • with side-by-side mounting mm	th	mm	55
• with side-by-side mounting — forwards mm 0		mm	130
— forwards mm 0			
	 with side-by-side mounting 		
— Backwards mm 0	— forwards	mm	0
	— Backwards	mm	0
— upwards mm 0	— upwards	mm	0
— downwards mm 0	— downwards	mm	0
— at the side mm 0	— at the side	mm	0
• for grounded parts	 for grounded parts 		
— forwards mm 0	— forwards	mm	0
— Backwards mm 0	— Backwards	mm	0
— upwards mm 50	— upwards	mm	50
— at the side mm 6	— at the side	mm	6
- downwards mm 50	— downwards	mm	50
for live parts	 for live parts 		
— forwards mm 0	— forwards	mm	0
— Backwards mm 0	— Backwards	mm	0
— upwards mm 50		mm	50
— downwards mm 50	— upwards	mm	50
— at the side mm 6		mm	0

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	190
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		
 during operation 	°C	-25 +60
• during storage	°C	-55 +80
Certificates/ approvals:		
General Product Approval	oth	her
	(Confirmation Environmental
		Confirmations

Further information

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

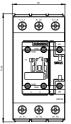
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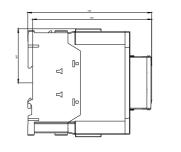
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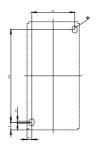
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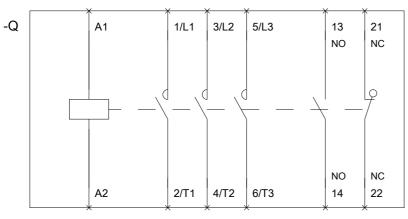
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RT20351AV00/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT20351AV00&lang=en









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