SIEMENS

Product data sheet

3RT2035-1AC24



CONTACTOR,AC3:18.5KW/400V, 2NO+2NC, 24V AC 50/60HZ, 3-POLE, SIZE S2, SCREW TERMINAL

General technical data:		
product brand name		SIRIUS
Size of contactor		S2
Product expansion		
Auxiliary switch		No
function module for communication		No
Protection class IP / on the front		IP20
Degree of pollution		3
Installation altitude / at height above sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-55 +80
• during operation	°C	-25 +60
Surge voltage resistance / Rated value	kV	6
Insulation voltage / Rated value	V	690
maximum permissible voltage for safe isolation / between coil and main contacts / acc. to EN 60947-1	V	400
Mechanical service life (switching cycles)		
of the contactor / typical		10,000,000
of the contactor with added auxiliary switch block / typical		10,000,000
 of the contactor with added electronics-compatible auxiliary switch block / typical 		5,000,000

Main circuit:		
Number of NC contacts / for main contacts		0
Number of NO contacts / for main contacts		3
Connectable conductor cross-section / in main circuit		
• at AC-1		
• at 40 °C / minimum permissible	mm²	16
• at 60 °C / minimum permissible	mm²	25
Operating current		
• at AC-1 / up to 690 V		
• at ambient temperature 40 °C / Rated value	А	60
• at ambient temperature 60 °C / Rated value	А	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 / for \geq 200000 operating cycles / at AC-4		
• at 400 V / Rated value	А	22
• at 690 V / Rated value	А	18.5
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
• 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
• 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

Operating current		
• with 1 current path / 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
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / Rated value	А	55
• at 110 V / Rated value	А	25
• at 220 V / Rated value	А	5
• at 440 V / Rated value	А	0.27
• at 600 V / Rated value	А	0.16
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / Rated value	А	55
• at 110 V / Rated value	А	45
• at 220 V / Rated value	А	25
• at 440 V / Rated value	А	0.6
• at 600 V / Rated value	А	0.6
Operating power		
• at AC-1 / at 230 V / Rated value	kW	23
• at AC-1 / at 400 V / Rated value	kW	39
• at AC-1 / at 690 V / Rated value	kW	68
• at AC-2		
• at 400 V / Rated value	kW	18.5
• 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
• at AC-4		
• at 400 V / Rated value	kW	18.5
Dperating power / for \geq 200000 operating cycles / at AC-4		
• at 400 V / Rated value	kW	11.6
• at 690 V / Rated value	kW	16.8
Thermal short-time current / restricted to 10 s	А	400
Active power loss / at AC-3 / at 400 V / for rated value of the operating current / per conductor	W	2.2
No-load switching frequency		
• with AC	1/h	5,000

Operating frequency		
• at AC-1 / maximum	1/h	1,200
• at AC-2 / maximum	1/h	750
• at AC-3 / maximum	1/h	1,000
• at AC-4 / maximum	1/h	300
Control circuit/ Control:		
Type of voltage / of the control supply voltage		AC
Control supply voltage		
• with AC / at 50 Hz / Rated value	V	24
• with AC / at 60 Hz / Rated value	V	24
Operating range factor control supply voltage rated value / of the magnet coil	_	
• with AC / at 50 Hz		0.8 1.1
• with AC / at 60 Hz		0.85 1.1
Apparent pick-up power / of the magnet coil / with AC		
• at 50 Hz	V·A	210
• at 60 Hz	V·A	188
Apparent holding power / of the magnet coil / with AC		
• at 50 Hz	V·A	17.2
• at 60 Hz	V·A	16.5
Closing delay		
• with AC	ms	10 80
Opening delay		
• with AC	ms	10 18
Arcing time	ms	10 20
Auxiliary circuit:		
Number of NC contacts / for auxiliary contacts / instantaneous contact		2
Number of NO contacts / for auxiliary contacts / instantaneous contact		2
Operating current		
• at AC-12 / maximum	А	10
• at AC-15		
• at 230 V / Rated value	А	6
• at 400 V / Rated value	А	3
• at 500 V / Rated value	А	2
• at 690 V / Rated value	А	1
Operating current / at DC-12		
• at 24 V / Rated value	А	10

• at 60 V / Rated value A 6 • at 60 V / Rated value A 3 • at 110 V / Rated value A 3 • at 125 V / Rated value A 2 • at 220 V / Rated value A 1 • at 220 V / Rated value A 0.3 • at 400 V / Rated value A 0.15 Operating current / at DC-13 - - • at 24 V / Rated value A 2 • at 60 V / Rated value A 6 • at 48 V / Rated value A 2 • at 40 V / Rated value A 2 • at 60 V / Rated value A 2 • at 22 V / Rated value A 2 • at 10 V / Rated value A 1 • at 220 V / Rated value A 0.9 • at 220 V / Rated value A 0.1 • at 400 V / Rated value A 0.1 • at 400 V / Rated value A 0.1 • at 100/120 V / Rated value A 0.1 • for single-phase AC motor - - • at 200 / Rated value hp	
• at 110 V / Rated value A 3 • at 125 V / Rated value A 1 • at 220 V / Rated value A 0.3 • at 400 V / Rated value A 0.3 • at 600 V / Rated value A 0.15 Operating current / at DC-13 - - • at 24 V / Rated value A 6 • at 48 V / Rated value A 2 • at 60 V / Rated value A 2 • at 60 V / Rated value A 0.1 • at 25 V / Rated value A 0.9 • at 25 V / Rated value A 0.3 • at 400 V / Rated value A 0.1 • at 440 V / Rated value A 0.1 • at 440 V / Rated value A 0.1 • at 440 V / Rated value A 0.1 • at 440 V / Rated value A 0.1 • at 440 V / Rated value A 0.1 • at 200 V / Rated value A 0.1 • at 200 V / Rated value A 1 • at 200 V / Rated value A 1 • at 200 / Rated value <td< td=""><td></td></td<>	
at 125 V / Rated valueA2at 220 V / Rated valueA1at 440 V / Rated valueA0.3at 600 V / Rated valueA0.15Operating current / at DC-13at 24 V / Rated valueA6at 24 V / Rated valueA2at 60 V / Rated valueA2at 60 V / Rated valueA1at 10 V / Rated valueA1at 125 V / Rated valueA0.9at 240 V / Rated valueA0.3at 240 V / Rated valueA0.14UVCSA ratingsyielded mechanical performance [hp]Image: Colspan="2">Image: Colspan="2" Image: Colspan="2" Image: Colspan="2" Image: Colspan="2" Image: Colspan="2" Image: Colspan="2" Image: Colspan="2"	
at 220 V / Rated valueA1• at 220 V / Rated valueA0.3• at 440 V / Rated valueA0.15Operating current / at DC-13V• at 24 V / Rated valueA6• at 24 V / Rated valueA2• at 60 V / Rated valueA2• at 60 V / Rated valueA1• at 220 V / Rated valueA1• at 20 V / Rated valueA1• at 20 V / Rated valueA0.9• at 10 V / Rated valueA0.9• at 220 V / Rated valueA0.14• at 220 V / Rated valueA0.14• at 600 V / Rated valueA0.1UL/CSA ratings:Vyielded mechanical performance [tp]9• for single-phase AC motor9• at 230 V / Rated value1• at 200 V / Rated value1• at 200 V / Rated value1• for three-phase AC motor9• at 200 V / Rated value1• at 200 V / Rated value1• at 200 V / Rated value1• for three-phase AC motor1• at 200 V / Rated value1• at 400 V / Rated value1<	
• at 440 V / Rated value A 0.3 • at 600 V / Rated value A 0.15 Operating current / at DC-13 - - • at 24 V / Rated value A 6 • at 24 V / Rated value A 2 • at 600 V / Rated value A 2 • at 60 V / Rated value A 2 • at 60 V / Rated value A 0.9 • at 110 V / Rated value A 0.3 • at 220 V / Rated value A 0.3 • at 600 V / Rated value A 0.14 • at 600 V / Rated value A 0.1 • at 600 V / Rated value A 0.1 • at 600 V / Rated value A 0.1 • at 600 V / Rated value A 0.1 • at 600 V / Rated value A 0.1 • for single-phase AC motor - - • for three-phase AC motor - - • for three-phase AC motor - - • at 200/208 V / Rated value hp 10 • at 200/208 V / Rated value hp 3 • at 400/480 V / Rat	
• at 600 V / Rated valueA0.15Operating current / at DC-13V• at 24 V / Rated valueA6• at 24 V / Rated valueA2• at 48 V / Rated valueA2• at 60 V / Rated valueA1• at 100 V / Rated valueA0.9• at 125 V / Rated valueA0.9• at 220 V / Rated valueA0.14• at 440 V / Rated valueA0.14• at 600 V / Rated valueA0.11UL/CSA ratings:Vyielded mechanical performance [hp]-• for single-phase AC motor-• at 230 V / Rated valuehp3• at 230 V / Rated valuehp7.5• for three-phase AC motor• at 200/208 V / Rated valuehp10• at 200/208 V / Rated valuehp15• at 200/208 V / Rated valuehp30• at 460/480 V / Rated valuehp30• at 575/600 V / Rated valuehp40	
Operating current / at DC-13A6• at 24 V / Rated valueA2• at 48 V / Rated valueA2• at 48 V / Rated valueA2• at 60 V / Rated valueA2• at 10 V / Rated valueA1• at 125 V / Rated valueA0.9• at 220 V / Rated valueA0.3• at 440 V / Rated valueA0.14• at 600 V / Rated valueA0.14• at 600 V / Rated valueA0.1UL/CSA ratings:yielded mechanical performance [hp]• for single-phase AC motorhp3• at 10/120 V / Rated valuehp7.5• for three-phase AC motorhp10• at 220/208 V / Rated valuehp15• at 200/208 V / Rated valuehp30• at 460/480 V / Rated valuehp30• at 575/600 V / Rated valuehp40	
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• at 110 V / Rated valueA1• at 125 V / Rated valueA0.9• at 220 V / Rated valueA0.3• at 420 V / Rated valueA0.14• at 600 V / Rated valueA0.14• at 600 V / Rated valueA0.1UL/CSA ratings:yielded mechanical performance [hp]• for single-phase AC motor-• at 110/120 V / Rated valuehp3• at 230 V / Rated valuehp7.5• for three-phase AC motor• at 200/208 V / Rated valuehp10• at 200/208 V / Rated valuehp15• at 200/208 V / Rated valuehp30• at 460/480 V / Rated valuehp30• at 575/600 V / Rated valuehp40	
· at 125 V / Rated valueA0.9· at 220 V / Rated valueA0.3· at 440 V / Rated valueA0.14· at 600 V / Rated valueA0.1· at 600 V / Rated valueA0.1UL/CSA ratings:Vielded mechanical performance [hp]· for single-phase AC motor-· at 110/120 V / Rated valuehp3· at 230 V / Rated valuehp7.5· for three-phase AC motor· at 200/208 V / Rated valuehp10· at 220/230 V / Rated valuehp15· at 460/480 V / Rated valuehp30· at 575/600 V / Rated valuehp40	
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UL/CSA ratings:yielded mechanical performance [hp]• for single-phase AC motorhp• at 110/120 V / Rated valuehp• at 230 V / Rated valuehp• for three-phase AC motor-• for three-phase AC motor-• for three-phase AC motor-• at 200/208 V / Rated valuehp• at 220/230 V / Rated valuehp• at 460/480 V / Rated valuehp• at 575/600 V / Rated valuehp• at 575/600 V / Rated valuehp	
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• for single-phase AC motorImage: height of the single	
• at 110/120 V / Rated valuehp3• at 230 V / Rated valuehp7.5• for three-phase AC motor• at 200/208 V / Rated valuehp10• at 220/230 V / Rated valuehp15• at 460/480 V / Rated valuehp30• at 575/600 V / Rated valuehp40	
• at 230 V / Rated valuehp7.5• for three-phase AC motorhp10• at 200/208 V / Rated valuehp15• at 220/230 V / Rated valuehp30• at 460/480 V / Rated valuehp40	
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• at 200/208 V / Rated value hp 10 • at 220/230 V / Rated value hp 15 • at 460/480 V / Rated value hp 30 • at 575/600 V / Rated value hp 40	
• at 220/230 V / Rated valuehp15• at 460/480 V / Rated valuehp30• at 575/600 V / Rated valuehp40	
• at 460/480 V / Rated value hp 30 · at 575/600 V / Rated value hp 40	
• at 575/600 V / Rated value hp 40	
· · · · · · · · · · · · · · · · · · ·	
Full-load current (FLA) / for three-phase AC motor	
• at 480 V / Rated value A 40	
• at 600 V / Rated value A 41	
Contact rating / of the auxiliary contacts / acc. to UL A600 / Q600	
Short-circuit:	
Design of the fuse link	
for short-circuit protection of the auxiliary switch / required fuse gL/gG: 10 A	
for short-circuit protection of the main circuit	
• with type of assignment 1 / required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 16	A
Installation/ mounting/ dimensions:	
mounting position +/-180° rotation possible on vertical mounting su can be tilted forward and backward by +/- 22.5° d vertical mounting surface	

Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Width	mm	55
Height	mm	113.4
Depth	mm	173.5
Spacing required / with side-by-side mounting	mm	0
Connections/ terminals:		
Design of the 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)
Type of connectable conductor cross-section		
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)
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
• positively driven operation acc. to IEC 60947-5-1		No
Certificates/ approvals:		
General Product Approval other		
Confirmation		

Further information:

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

Industry Mall (Online ordering system)

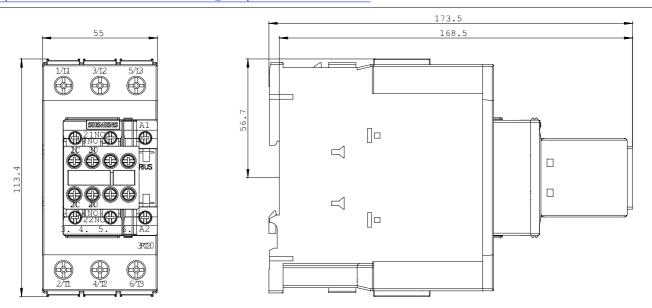
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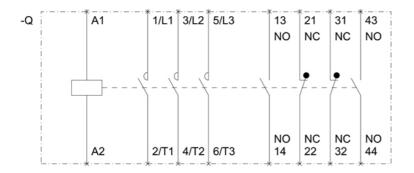
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2035-1AC24





last change:

Dec 17, 2014