

Ratings and Specifications

Ratings

◆ Single-phase, 100 VAC

Model SGD7S-		R70F	R90F	2R1F	2R8F
Maximum Applicable Motor Capacity [kW]		0.05	0.1	0.2	0.4
Continuous Output Current [Arms]		0.66	0.91	2.1	2.8
Instantaneous Maximum Output Current [Arms]		2.1	3.2	6.5	9.3
Main Circuit	Power Supply	100 VAC to 120 VAC, -15% to +10%, 50/60 Hz			
	Input Current [Arms]*	1.5	2.5	5	10
Control Power Supply		100 VAC to 120 VAC, -15% to +10%, 50/60 Hz			
Power Supply Capacity [kVA]*		0.2	0.3	0.6	1.4
Power Loss*	Main Circuit Power Loss [W]	5.3	7.8	14.2	26.2
	Control Circuit Power Loss [W]	12	12	12	12
	Total Power Loss [W]	17.3	19.8	26.2	38.2
Regenerative Resistor	Minimum Allowable External Resistance [Ω]	40	40	40	40
Overvoltage Category		III			

* This is the net value at the rated load.

◆ Three-phase, 200 VAC

Model SGD7S-		R70A	R90A	1R6A	2R8A	3R8A	5R5A	7R6A	120A	180A	200A	330A	
Maximum Applicable Motor Capacity [kW]		0.05	0.1	0.2	0.4	0.5	0.75	1.0	1.5	2.0	3.0	5.0	
Continuous Output Current [Arms]		0.66	0.91	1.6	2.8	3.8	5.5	7.6	11.6	18.5	19.6	32.9	
Instantaneous Maximum Output Current [Arms]		2.1	3.2	5.9	9.3	11	16.9	17	28	42	56	84.0	
Main Circuit	Power Supply	200 VAC to 240 VAC, -15% to +10%, 50 Hz/60 Hz											
	Input Current [Arms]*	0.4	0.8	1.3	2.5	3.0	4.1	5.7	7.3	10	15	25	
Control Power Supply		200 VAC to 240 VAC, -15% to +10%, 50 Hz/60 Hz											
Power Supply Capacity [kVA]*		0.2	0.3	0.5	1.0	1.3	1.6	2.3	3.2	4.0	5.9	7.5	
Power Loss*	Main Circuit Power Loss [W]	5.1	7.3	13.5	24.0	20.1	43.8	53.6	65.8	111.9	113.8	263.7	
	Control Circuit Power Loss [W]	17	17	17	17	17	17	17	22	22	22	27	
	Built-in Regenerative Resistor Power Loss [W]	-	-	-	-	8	8	8	10	16	16	36.0	
	Total Power Loss [W]	22.1	24.3	30.5	41.0	45.1	68.8	78.6	97.8	149.9	151.8	326.7	
Regenerative Resistor	Built-In Regenerative Resistor	Resistance [Ω]	-	-	-	-	40	40	40	20	12	12	8
		Capacity [W]	-	-	-	-	40	40	40	60	60	60	180
	Minimum Allowable External Resistance [Ω]	40	40	40	40	40	40	40	40	20	12	12	8
Overvoltage Category		III											

* This is the net value at the rated load.

SERVOPACKs

Σ-7S Single-axis Analog Voltage/Pulse Train Reference SERVOPACKs

Model SGD7S-		470A	550A	590A	780A
Maximum Applicable Motor Capacity [kW]		6.0	7.5	11	15
Continuous Output Current [Arms]		46.9	54.7	58.6	78.0
Instantaneous Maximum Output Current [Arms]		110	130	140	170
Main Circuit	Power Supply	200 VAC to 240 VAC, -15% to +10%, 50 Hz/60 Hz			
	Input Current [Arms] ^{*1}	29	37	54	73
Control Power Supply		200 VAC to 240 VAC, -15% to +10%, 50 Hz/60 Hz			
Power Supply Capacity [kVA] ^{*1}		10.7	14.6	21.7	29.6
Power Loss ^{*1}	Main Circuit Power Loss [W]	279.4	357.8	431.7	599.0
	Control Circuit Power Loss [W]	33	33	48	48
	External Regenerative Resistor Unit Power Loss [W]	180 ^{*2}	180 ^{*3}	350 ^{*3}	350 ^{*3}
	Total Power Loss [W]	312.4	390.8	479.7	647.0
External Regenerative Resistor Unit	External Regenerative Resistor Unit	Resistance [Ω]	6.25 ^{*2}	3.13 ^{*3}	3.13 ^{*3}
		Capacity [W]	880 ^{*2}	1760 ^{*3}	1760 ^{*3}
	Minimum Allowable External Resistance [Ω]	5.8	2.9	2.9	2.9
Overvoltage Category		III			

*1. This is the net value at the rated load.

*2. This value is for the optional JUSP-RA04-E Regenerative Resistor Unit.

*3. This value is for the optional JUSP-RA05-E Regenerative Resistor Unit.

◆ Single-phase, 200 VAC

Model SGD7S-		R70A	R90A	1R6A	2R8A	5R5A
Maximum Applicable Motor Capacity [kW]		0.05	0.1	0.2	0.4	0.75
Continuous Output Current [Arms]		0.66	0.91	1.6	2.8	5.5
Instantaneous Maximum Output Current [Arms]		2.1	3.2	5.9	9.3	16.9
Main Circuit	Power Supply	200 VAC to 240 VAC, -15% to +10%, 50 Hz/60 Hz				
	Input Current [Arms]*	0.8	1.6	2.4	5.0	8.7
Control Power Supply		200 VAC to 240 VAC, -15% to +10%, 50 Hz/60 Hz				
Power Supply Capacity [kVA]*		0.2	0.3	0.6	1.2	1.9
Power Loss*	Main Circuit Power Loss [W]	5.1	7.3	13.5	24.0	43.8
	Control Circuit Power Loss [W]	17	17	17	17	17
	Built-in Regenerative Resistor Power Loss [W]	-	-	-	-	8
	Total Power Loss [W]	22.1	24.3	30.5	41.0	68.8
Regenerative Resistor	Built-In Regenerative Resistor	Resistance [Ω]	-	-	-	40
		Capacity [W]	-	-	-	40
	Minimum Allowable External Resistance [Ω]	40	40	40	40	40
Overvoltage Category		III				

* This is the net value at the rated load.

◆ 270 VDC

Model SGD7S-		R70A	R90A	1R6A	2R8A	3R8A	5R5A	7R6A	120A
Maximum Applicable Motor Capacity [kW]		0.05	0.1	0.2	0.4	0.5	0.75	1.0	1.5
Continuous Output Current [Arms]		0.66	0.91	1.6	2.8	3.8	5.5	7.6	11.6
Instantaneous Maximum Output Current [Arms]		2.1	3.2	5.9	9.3	11.0	16.9	17.0	28.0
Main Circuit	Power Supply	270 VDC to 324 VDC, -15% to +10%							
	Input Current [Arms]*	0.5	1.0	1.5	3.0	3.8	4.9	6.9	11
Control Power Supply		270 VDC to 324 VDC, -15% to +10%							
Power Supply Capacity [kVA]*		0.2	0.3	0.6	1	1.4	1.6	2.3	3.2
Power Loss*	Main Circuit Power Loss [W]	4.6	6.3	11.7	20.2	16.9	37.9	46.0	53.2
	Control Circuit Power Loss [W]	17	17	17	17	17	17	17	22
	Total Power Loss [W]	21.6	23.3	28.7	37.2	33.9	54.9	63.0	75.2
Overvoltage Category		III							

* This is the net value at the rated load.

Model SGD7S-		180A	200A	330A	470A	550A	590A	780A
Maximum Applicable Motor Capacity [kW]		2.0	3.0	5.0	6.0	7.5	11.0	15.0
Continuous Output Current [Arms]		18.5	19.6	32.9	46.9	54.7	58.6	78.0
Instantaneous Maximum Output Current [Arms]		42.0	56.0	84.0	110	130	140	170
Main Circuit	Power Supply	270 VDC to 324 VDC, -15% to +10%						
	Input Current [Arms]*	14	20	34	36	48	68	92
Control Power Supply		270 VDC to 324 VDC, -15% to +10%						
Power Supply Capacity [kVA]*		4.0	5.9	7.5	10.7	14.6	21.7	29.6
Power Loss*	Main Circuit Power Loss [W]	95.8	87.6	163.7	203.4	261.2	246.6	346.5
	Control Circuit Power Loss [W]	22	22	27	33	33	48	48
	Total Power Loss [W]	117.8	109.6	190.7	236.4	294.2	294.6	394.5
Overvoltage Category		III						

* This is the net value at the rated load.