

SJ300 Dynamic Braking Selection Chart

1/2 to 15 hp (0.4 to 11 kW)

Voltage Class	Model Number	Motor hp	Internal Resistor		With Optional External Resistor		Minimum Resistance		Minimum Resistance for 100% Braking Duty Cycle (ohms)
			Braking Unit	Braking Torque @ 60 Hz (Without External Resistor) (%)	External Resistance (ohms)	Braking Torque @ 60 Hz (%)	Minimum Resistance (ohms)	Maximum Braking Duty Cycle (%)	
200	SJ300-004LFU	1/2	Built in	50	50	200	50	10	150
	SJ300-007LFU	1	Built in	50	50	200	50	10	150
	SJ300-015LFU	2	Built in	50	35	200	35	10	100
	SJ300-022LFU	3	Built in	20	35	160	35	10	100
	SJ300-037LFU	5	Built in	20	35	100	35	10	100
	SJ300-055LFU	7.5	Built in	20	17	80	17	10	50
	SJ300-075LFU	10	Built in	20	17	80	17	10	50
	SJ300-110LFU	15	Built in	10	17	70	17	10	50
400	SJ300-007HFU	1	Built in	50	100	200	100	10	300
	SJ300-015HFU	2	Built in	50	100	200	100	10	300
	SJ300-022HFU	3	Built in	20	100	200	100	10	300
	SJ300-040HFU	5	Built in	20	100	140	70	10	200
	SJ300-055HFU	7.5	Built in	20	70	100	70	10	200
	SJ300-075HFU	10	Built in	20	70	100	50	10	150
	SJ300-110HFU	15	Built in	10	70	70	50	10	150

SJ300 Dynamic Braking Selection Chart

20 to 200 hp (15 to 150 kW)

Voltage Class	Model Number	Motor hp	Braking Torque Without External Braking Unit (%)	Applicable External Braking Unit Model	Minimum Resistance (ohms)	Maximum Braking Duty Cycle (%)	Minimum Resistance for 100% Braking Duty Cycle (ohms)	Applicable External Braking Unit Model	Minimum Resistance (ohms)	Maximum Braking Duty Cycle (%)	Minimum Resistance for 100% Braking Duty Cycle (ohms)
200	SJ300-150LFU	20	10	BRD-E2	17	10	46	BRD-E2-30K	4	20	6
	SJ300-185LFU	25	10	BRD-E2	17	10	46	BRD-E2-30K	4	20	6
	SJ300-220LFU	30	10	BRD-E2	17	10	46	BRD-E2-30K	4	20	6
	SJ300-300LFU	40	10	BRD-E2-30K	2	20	4				
	SJ300-370LFU	50	10	BRD-E2-55K	2	20	4				
	SJ300-450LFU	60	10	BRD-E2-55K	2	20	4				
	SJ300-550LFU	75	10	BRD-E2-55K	2	20	4				
400	SJ300-150HFU	20	10	BRD-EZ2	20	10	34	BRD-EZ2-30K	10	10	24
	SJ300-185HFU	25	10	BRD-EZ2	20	10	34	BRD-EZ2-30K	10	10	24
	SJ300-220HFU	30	10	BRD-EZ2	20	10	34	BRD-EZ2-30K	10	10	24
	SJ300-300HFU	40	10	BRD-EZ2-55K	6	20	12				
	SJ300-370HFU	50	10	BRD-EZ2-55K	6	20	12				
	SJ300-450HFU	60	10	BRD-EZ2-55K	6	20	12				
	SJ300-550HFU	75	10	BRD-EZ2-55K	6	20	12				
	SJ300-750HFU	100	10	BRD-EZ2-55K	6	20	12				
	SJ300-900HFU	125	10	BRD-EZ2-55K	6	20	12				
	SJ300-1100HFU	150	10	BRD-EZ2-55K	6	20	12				
	SJ300-1320HFU	175	10	BRD-EZ2-55K	6	20	12				
	SJ300-1500HFU	200	10	BRD-EZ2-55K	6	20	12				

SJ300 Dynamic Braking Resistor Selection Chart

200 V Class

Model Number	JRB Series				SRB/NSRB Series				HRB Series				Available Braking Torque (%)
	Type (& Quantity)	Total Ohms	Total Watts	Max. Duty Cycle (%)	Type (& Quantity)	Ohms	Watts	Max. Duty Cycle (%)	Type (& Quantity)	Total Ohms	Total Watts	Max. Duty Cycle (%)	
SJ300-004LFU	120-3	50	120	1.5	300-1	50	300	7.5					200
SJ300-007LFU	120-3	50	120	1.5	300-1	50	300	7.5					200
SJ300-015LFU	120-4	35	120	1	400-1	35	400	7.5					200
SJ300-022LFU	120-4	35	120	1	400-1	35	400	7.5					160
SJ300-037LFU	120-4	35	120	1	400-1	35	400	7.5					100
SJ300-055LFU	120-4 x (2) in parallel	17.5	240	1	400-1 x (2) in parallel	17.5	800	7.5	HRB3	17	1200	10	80
SJ300-075LFU	120-4 x (2) in parallel	17.5	240	1	400-1 x (2) in parallel	17.5	800	7.5	HRB3	17	1200	10	80
SJ300-110LFU	120-4 x (2) in parallel	17.5	240	1	400-1 x (2) in parallel	17.5	800	7.5	HRB3	17	1200	10	70
Braking Characteristics using the following Resistors in conjunction with Braking Unit BRD-E2:													
SJ300-150LFU									HRB1	50	400	10	30
									HRB2	35	600	10	35
									HRB3	17	1200	10	60
SJ300-185LFU									HRB1	50	400	10	25
									HRB2	35	600	10	30
									HRB3	17	1200	10	50
SJ300-220LFU									HRB1	50	400	10	25
									HRB2	35	600	10	30
									HRB3	17	1200	10	45
Braking Characteristics using the Following PARALLEL Resistor Combinations in conjunction with Braking Unit BRD-E2-30K:													
SJ300-150LFU									(2) x HRB3	8.5	2400	20	110
									(3) x HRB3	5.7	3600	20	150
									(4) x HRB3	4.3	4800	20	200
SJ300-185LFU									(2) x HRB3	8.5	2400	20	90
									(3) x HRB3	5.7	3600	20	130
									(4) x HRB3	4.3	4800	20	170
SJ300-220LFU									(2) x HRB3	8.5	2400	20	80
									(3) x HRB3	5.7	3600	20	110
									(4) x HRB3	4.3	4800	20	150
SJ300-300LFU									(2) x HRB3	8.5	2400	20	55
									(3) x HRB3	5.7	3600	20	80
									(4) x HRB3	4.3	4800	20	110
SJ300-370LFU									(2) x HRB3	8.5	2400	20	45
									(3) x HRB3	5.7	3600	20	65
									(4) x HRB3	4.3	4800	20	90
SJ300-450LFU									(2) x HRB3	8.5	2400	20	35
									(3) x HRB3	5.7	3600	20	50
									(4) x HRB3	4.3	4800	20	75
SJ300-550LFU									(2) x HRB3	8.5	2400	20	30
									(3) x HRB3	5.7	3600	20	40
									(4) x HRB3	4.3	4800	20	60

SJ300 Dynamic Braking Resistor Selection Chart

400 V Class

Model Number	JRB Series				SRB/NSRB Series				HRB Series				Available Braking Torque (%)
	Type (& Quantity)	Total Ohms	Total Watts	Max. Duty Cycle (%)	Type (& Quantity)	Ohms	Watts	Max. Duty Cycle (%)	Type (& Quantity)	Total Ohms	Total Watts	Max. Duty Cycle (%)	
SJ300-007HFU	120-2	100	120	1.5	200-2	100	200	7.5					200
SJ300-015HFU	120-2	100	120	1.5	200-2	100	200	7.5					200
SJ300-022HFU	120-2	100	120	1.5	200-2	100	200	7.5					200
SJ300-040HFU	120-2	100	120	1.5	200-2	100	200	7.5	HRB1 x (2) in series	100	800	10	140
SJ300-055HFU	120-4 x (2) in series	70	120	1	400-1 x (2) in series	70	800	7.5	HRB2 x (2) in series	70	1200	10	100
SJ300-075HFU	120-4 x (2) in series	70	240	1	400-1 x (2) in series	70	800	7.5	HRB2 x (2) in series	70	1200	10	100
SJ300-110HFU	120-4 x (2) in series	70	240	1	400-1 x (2) in series	70	800	7.5	HRB2 x (2) in series	70	1200	10	70

Braking Characteristics using the following SERIES Resistor Combinations in conjunction with Braking Unit BRD-EZ2:

SJ300-150HFU									HRB1 x (2) in series	100	800	10	40
									HRB2 x (2) in series	70	1200	10	60
									HRB3 x (2) in series	34	2400	10	110
SJ300-185HFU									HRB1 x (2) in series	100	800	10	40
									HRB2 x (2) in series	70	1200	10	50
									HRB3 x (2) in series	34	2400	10	90
SJ300-220HFU									HRB1 x (2) in series	100	800	10	35
									HRB2 x (2) in series	70	1200	10	45
									HRB3 x (2) in series	34	2400	10	80

Braking Characteristics using the Following SERIES/PARALLEL Resistor Combinations in conjunction with Braking Unit BRD-EZ2-30K:

SJ300-150HFU									HRB4 x (4) (2) parallel (2) series	17	3200	10	190
									HRB3 x (6) (3) parallel (2) series	11.3	7200	10	200
SJ300-185HFU									HRB4 x (4) (2) parallel (2) series	17	3200	10	170
									HRB3 x (6) (3) parallel (2) series	11.3	7200	10	200
SJ300-220HFU									HRB4 x (4) (2) parallel (2) series	17	3200	10	150
									HRB3 x (6) (3) parallel (2) series	11.3	7200	10	200

Braking Characteristics using the Following SERIES/PARALLEL Resistor Combinations in conjunction with Braking Unit BRD-EZ2-55K:

SJ300-300HFU			HRB4 x (4) (2) parallel (2) series	17	3200	10	110
			HRB3 x (6) (3) parallel (2) series	11.3	7200	10	170
SJ300-370HFU			HRB4 x (4) (2) parallel (2) series	17	3200	10	90
			HRB3 x (6) (3) parallel (2) series	11.3	7200	10	150
SJ300-450HFU			HRB4 x (4) (2) parallel (2) series	17	3200	10	70
			HRB3 x (6) (3) parallel (2) series	11.3	7200	10	120
SJ300-550HFU			HRB4 x (4) (2) parallel (2) series	17	3200	10	60
			HRB3 x (6) (3) parallel (2) series	11.3	7200	10	100
SJ300-750HFU			HRB4 x (4) (2) parallel (2) series	17	3200	10	45
			HRB3 x (6) (3) parallel (2) series	11.3	7200	10	70
SJ300-900HFU			HRB4 x (4) (2) parallel (2) series	17	3200	10	40
			HRB3 x (6) (3) parallel (2) series	11.3	7200	10	60
SJ300-1100HFU			HRB4 x (4) (2) parallel (2) series	17	3200	10	30
			HRB3 x (6) (3) parallel (2) series	11.3	7200	10	50
SJ300-1320HFU			HRB4 x (4) (2) parallel (2) series	17	3200	10	25
			HRB3 x (6) (3) parallel (2) series	11.3	7200	10	40
SJ300-1500HFU			HRB4 x (4) (2) parallel (2) series	17	3200	10	20
			HRB3 x (6) (3) parallel (2) series	11.3	7200	10	35