

*DESCRIPTION: Single Phase, Phase Angle Control*  
*APPLICATION: Constant Resistance Loads*

Model Number	Fuse Amps	kVA @ Max Rated Volts	Open Chassis Dimensions			Open Chassis List Price	Ventilated Dimensions H x W x D
			Inches Height	Inches Width	Inches Depth		
<b>SINGLE PHASE, 120 VAC INPUT, 0-118 VAC OUTPUT, 50/60Hz</b>							
18D-1-10i	10	1.2	6.25	3.5	3	107.00	10 6 6
18D-1-20i	20	2.4	6.25	3.5	3	129.00	10 6 6
18D-1-30i	30	3.6	6.25	3.5	4.1	146.00	10 6 6
18D-1-50	50	5.9	12	5.5	6	290.00	14 12 8
18D-1-80	80	9.4	12	5.5	6	313.00	14 12 8
18D-1-120	120	14.1	12.5	6.5	8	521.00	20 16 9
18D-1-150	150	17.7	15	9.5	8	532.00	20 16 9
18D-1-250	250	30.0	25	9.5	8	759.00	30 20 9
18D-1-350	350	41.3	21	13	10.5	852.00	36 24 12
<b>SINGLE PHASE, 240 VAC INPUT, 0-238 VAC OUTPUT, 50/60Hz (ALSO FOR 208/220/230 VAC INPUT)</b>							
18D-2-10i	10	2.4	6.25	3.5	3	130.00	10 6 6
18D-2-15i	15	3.6	6.25	3.5	3	137.00	10 6 6
18D-2-20i	20	4.8	6.25	3.5	3	155.00	10 6 6
18D-2-30i	30	7.2	6.25	3.5	4.1	190.00	10 6 6
18D-2-50	50	11.9	12	5.5	6	279.00	14 12 8
18D-2-80	80	19.0	12	5.5	6	313.00	14 12 8
18D-2-120	120	28.5	12.5	6.5	8	521.00	20 16 9
18D-2-150	150	35.7	15	9.5	8	532.00	20 16 9
18D-2-250	250	60.0	25	9.5	8	759.00	30 20 9
18D-2-350	350	83.3	21	13	10.5	852.00	36 24 12
<b>SINGLE PHASE, 480 VAC INPUT, 0-478 VAC OUTPUT, 50/60Hz (ALSO FOR 380/415/440 VAC INPUT)</b>							
18D-4-10	10	4.8	7	5.5	4.5	194.00	12 10 8
18D-4-20	20	9.6	7	5.5	4.5	204.00	12 10 8
18D-4-30	30	14.4	7	5.5	5.5	211.00	12 10 8
18D-4-50	50	24.0	12	5.5	6	315.00	14 12 8
18D-4-80	80	38.4	12	5.5	6	373.00	14 12 8
18D-4-120	120	57.6	12.5	6.5	8	521.00	20 16 9
18D-4-150	150	72.0	15	9.5	8	604.00	20 16 9
18D-4-250	250	120	25	9.5	8	759.00	30 20 9
18D-4-350	350	168	21	13	10.5	852.00	36 24 12
18D-4-450	450	215	27	17	10.5	944.00	36 24 12
18D-4-600	600	288	33	17	10.5	1168.00	42 30 12
18D-4-1200	1200	576	30	24	11	2485.00	42 30 12

**NOTES:**

- Standard units supplied with:
  - Manual control potentiometer on 2 feet of cable
  - Control isolation transformer (except where noted †)
  - Factory installed 2-millisecond fuses
- For recommended spare fuses, see FUSE CHART, Page 39. Use of any other fuse voids all warranties.
- Effective 8/90, 10-30 Amp sizes at 120 and 240 VAC replaced by 18D-i version (suffix "i" in Model number). 18D-i controls feature electrically isolated heatsink. To retrofit former 18D version, see Option 22.
- Enclosures supplied by others must be properly ventilated. See VENT SCHEDULE, Page 43.
- Dimensions are approximate, refer to unit drawing for construction.



OPTION NAME	OPTION ORDER No.	OPTION DESCRIPTION	
VOLTAGE LIMIT	9	RMS Output Voltage Limit (Field adjustable)	
MILLIAMP CONTROL	11A	closed-loop apps only	option
	11B	1-5 ma., ≤1000 Ω	21A 1-5 ma., ≤1000 Ω
	11C	2-10ma., ≤1000 Ω	21B 2-10 ma., ≤1000 Ω
	11D	4-20 ma., ≤600 Ω	21C 4-20 ma., ≤600 Ω
	11E	12-20 ma., ≤600 Ω	21D 12-20 ma., ≤600 Ω
	11F	10-50 ma., ≤300 Ω	21E 10-50 ma., ≤300 Ω
	11G	1-5 volts DC	
	11H	2-10 volts DC Other. Specify ma. range and input impedance.	
CURRENT LIMIT	12	RMS Output Current Limit (Field Adjustable, includes current transformer)	
VOLTAGE REGULATION	13	RMS Output Voltage Regulation. ± 1 % output variation with ± 10% input voltage variation	
ISOLATED CHASSIS	14A	For installation in non-vented enclosures.	
	14B	Electrically Isolated Chassis, 10-30A, 480 VAC only. (Std. on 10-30A, 120/240 VAC) Electrically Isolated Chassis, 50-80A	
THERMISTOR TEMPERATURE CONTROL	15A	Thermistor Bridge, Proportional, Automatic Temperature Control.	
	15B	Temperature Range 0-90°C Temperature Range 90-240°C	
SOFT START	19	1/2 second voltage ramp, to reduce inrush current.	
OPTICALLY ISOLATED ma. <b>EXTERNAL CONTROL CARD</b>	20A	Optically isolated. May be field installed. Suitable for open-loop control.	
	20B	1-5 ma., ≤1000 Ω	
	20C	2-10ma., ≤1000 Ω	
	20D	4-20 ma., ≤600 Ω	
	20E	12-20 ma., ≤600 Ω	
	20H	10-50 ma., ≤300 Ω	
	20H	Other. Specify ma. range and input impedance.	
RETROFIT	22	To physically replace units built prior to 8/90. 120, 240 VAC, 10-30 Amps only	
HEATSINK OVERTEMP SWITCH	24A	Overtemp trip of controller.	
	24B	For external indicating circuit or alarm.	
120V PILOT	28	120 VAC On/Off Pilot Control	
70-400Hz	30	For operation on power frequencies from 70-400Hz, and 16-2/3 or 25Hz.	
EXTERNAL POWER	33	External trigger circuit power. Specify voltage to be supplied.	
277 VAC INPUT	18D- <del>3</del> -etc.	Rated for 277 VAC Input. (Change Model No. from 18D-4-etc. to 18D-3-etc.)	
550 VAC INPUT	18D- <del>5</del> -etc.	Rated for 550 VAC Input. (Change Model No. from 18D-4-etc. to 18D-5-etc.)	
600 VAC INPUT	18D- <del>6</del> -etc.	Rated for 600 VAC Input. (May require size increase of base model.) (Change Model No. from 18D-4-etc. to 18D-6-etc.)	

**18D OPTION NOTES:**

- To order, specify option number separately, and add option price to control list price.
- See page 46 for detailed option description.
- Options must be ordered with control (except Option 20)
- Certain combinations of options may not be compatible. See page 47 or consult local representative or factory.
- Consult factory for option requirements not shown.

