

Table 1-1 Specifications  
DCR-T SPECIFICATIONS  
5K WATT SERIES

DCR-T Model	OUTPUT POWER			Regulation Line & Load			Constant Voltage Mode			Temp. Coeff. Voltage mV/°C	Voltage Drift % Eo Max. (Typ.)	Programming Constants Voltage Mode	
	Voltage (Vdc)	Current (Acd)		mV <sup>2</sup>	Ripple (PARD)		Resolution	Transient Response Time ms (Typ.)	Ohms/V			V/V	
		50°C	60°C		70°C	mV rms							p-p
4-800T1	0-4	800	680	440	2-4	30	100	Note 4	40	1.0	.05	2500	Note 4
8-400T1	0-8	400	340	220	4-8	30	100	Note 4	40	2.0	.05	1250	Note 4
16-310T1	0-16	310	266	188	8-16	30	100	Note 4	40	3.2	.05	625	Note 4
32-155T1	0-32	155	132	93	16-32	20	120	Note 4	40	6.4	.05	313	Note 4
55-90T1	0-55	90	74	54	27-55	20	120	Note 4	40	11.0	.05	182	Note 4
80-62T1	0-80	62	54	37	40-80	20	120	Note 4	40	16.0	.05	125	Note 4
110-45T1	0-110	45	38	27	55-110	40	140	Note 4	40	22.0	.05	91	Note 4
160-30T1	0-160	30	27	18	80-160	60	180	Note 4	40	32.0	.05	63	Note 4
300-16T1	0-300	16	14	10	150-300	100	300	Note 4	40	60.0	.05	33	Note 4
600-8T1	0-600	8	7	4.8	300-600	150	600	Note 4	40	120.0	.05	17	Note 4

NOTE 1: Regulation range as stated 0.1% of voltage or current, or stated range, whichever is greater.

NOTE 2: Line current at min. line voltage.

NOTE 3: Efficiency taken at max. power out. and nominal ac volts input.

NOTE 4: Contact factory.

**COMMON SPECIFICATIONS**

**DC OUTPUT CONSTANT VOLTAGE MODE:**

Voltage Regulation: Line Load combined: All models 0.1% of the voltage setting or specification in table, whichever is greater.  
 Temperature Coefficient: 0.2%/°C of Eo max.  
 Voltage Signal Programming: 100 mV per 1% of rated output.  
 (0-10V for 0-100% of rated output.)  
 Resistive Programming: 100 ohms per 1% of rated output. (0-10) k ohms for 0-100% of rated output.)  
 Stability: 0.1% Eo max. for 8 hours after 30 minute warm up with fixed line, load and temperature.  
 Remote Sensing: 3 to 10V max. drop + line. 0.75V max. drop - line.  
 Transient Response: 40 ms (typical) to return to ±1% band for a step load change of 50% to 100% or 100% to 50% of full load.

**INPUT:**

T1 - 208 Vac ± 10% @ 60Hz  
 T2 - 380 Vac ± 10% @ 50Hz  
 T3 - 405 Vac ± 10% @ 50Hz  
 T4 - 440 Vac ± 10% @ 60Hz  
 T5 - 480 Vac ± 10% @ 60Hz.

**OPERATING DATA:**

Efficiency: 60% to 80% of full rated output depending on model.  
 Series Operation: 200 Vdc maximum; consult factory for series operation of more than 2 units.  
 Parallel Operation: Direct paralleling of any number of units.  
 Overvoltage Protections: Standard.  
 Ambient Operating Temperature Range: 0 to 70°C.  
 Storage Temperature Range: -45°C to +70°C.  
 Cooling: Forced Air.

**DCR-T SPECIFICATIONS  
5KW SERIES**

DCR-T Model	Constant Current Mode			Temp. Coeff. Current mV/C	Current Drift % Io Max (Typ.)	Programming Constants		Standard Input Power (3 phase, 60 ± 1 Hz)		Power Factor (Typ.)		Efficiency %	Case Size
	Regulation mA'	Ripple (PARD) mA rms	Resolution (Typ.)			Ohms/V	V/V	V <sub>ac</sub>	I <sub>ac</sub> (Max.) <sup>2</sup>	Lead	Lag		
4-800T1	400-900	3000	Note 4	320	.05	Note 4	12.5	Note 4	187-229	26.0	.9	.2	II
8-400T1	200-450	3000	Note 4	200	.05	Note 4	25.0	Note 4	187-229	Note 4	.9	.2	II
16-310T1	155-310	1500	Note 4	200	.05	Note 4	32.0	Note 4	187-229	Note 4	.9	.2	II
32-155T1	80-155	1000	Note 4	100	.05	Note 4	64.0	Note 4	187-229	Note 4	.9	.2	II
55-90T1	48-90	600	Note 4	58	.05	Note 4	111.0	Note 4	187-229	Note 4	.9	.2	II
80-62T1	30-62	600	Note 4	40	.05	Note 4	161.0	Note 4	187-299	Note 4	.9	.2	II
110-45T1	22-45	500	Note 4	29	.05	Note 4	222.0	Note 4	187-299	Note 4	.9	.2	II
160-30T1	15-30	330	Note 4	20	.05	Note 4	333.0	Note 4	187-229	Note 4	.9	.2	II
300-16T1	8-16	200	Note 4	10	.05	Note 4	625.0	Note 4	187-229	Note 4	.9	.2	II
600-8T1	4-8	100	Note 4	5	.05	Note 4	1250.0	Note 4	187-299	Note 4	.9	.2	II

NOTE 1: Regulation range is 0.1% of voltage or current, or stated range, whichever is greater.

NOTE 2: Line current at min. line voltage.

NOTE 3: Efficiency taken at max. power out and nominal ac volts input.

NOTE 4: Contact factory.

**COMMON SPECIFICATIONS**

**CONSTANT CURRENT MODE:**

Current Regulation: Line and load combined: All models 0.1% Io max. of the output current setting or specification in table, whichever is greater.  
 Temperature Coefficient: 0.04%/°C of Io max.  
 Current Signal Programming: 100 mV per 1% of rated output.  
 (0-10V for 0-100% of rated output.)  
 Resistive Programming: 100 ohms per 1% of rated output. (0-10 kohms for 0-100% of rated load.)  
 Stability: 0.2% Io max. for 8 hours after 30 minute warm up with fixed line, load and temperature.

**DCR-T ACCESSORIES:**

Chassis Slides: Part No. 1060247-1 (Optional).  
 Digital Programmer: Available for all models in DCR-T Series. IEEE-488 Interface to GPIB Bus. Order Model 488 MICRO-DAP.

**OPTIONAL EQUIPMENT:**

OVP: OVP shutdown is standard.  
 Option: SCR crowbar M5.

**METERING:**

Digital: Standard  
 Analog: add M52

DCR-T INPUT VOLTAGE			
T1	208V	60HZ	STD. U.S. VOLTAGE
T2	380V	50HZ	STD. CONTINENTAL EUROPE VOLTAGE
T3	415V	50HZ	STD. BRITISH ISLES VOLTAGE
T5	480V	60HZ	STD. U.S. VOLTAGE

CASE SIZE	DIMENSIONS IN. (mm)			WEIGHT lb. (kg)
	HEIGHT	WIDTH	LENGTH	
II	8.75(222.3)	19(492.6)	24(609.6)	185(407)
III	12.25(311.2)	19(482.6)	24(609.6)	310(682)