

## C SERIES AC POWER SOURCES

TABLE 1-1. PERFORMANCE SPECIFICATIONS

INPUT POWER			
Voltage	117VAC or 234VAC ±10% single phase. (Note: AC input is wired for 117VAC. Internal jumpers must be changed for 234VAC operation.)		
Phase	Single, 2 wire with ground.		
Current (max.)	Model 251C, 5A & 2½A, respectively Model 501C, 10A & 5A, respectively Model 1001C, 20A & 10A respectively		
Frequency	47Hz to 63Hz		
OUTPUT POWER			
Power Rating	<u>251C</u> 0-250VA	<u>501C</u> 0-500VA	<u>1001C</u> 0-1000VA
Power Factor	Unity to ±.7 at full VA rating	Unity to ±.7 at full VA rating	Unity to ±.7 at full VA rating
Voltage Range	0-125VAC	0-125VAC	0-125VAC
Current Range	0-2A RMS 0-4 amp peak	0-4A RMS 0-8 amp peak	0-8A RMS 0-16 amp peak
Frequency	15 Hz - 10 kHz at full rated power.	15 Hz - 10 kHz at full rated power.	15 Hz - 10 kHz at full rated power.
TOTAL HARMONIC DISTORTION			
Tested Distortion	0.5% max., 45 Hz to 5 kHz 2% max., 5 kHz to 10 kHz & 15 Hz to 45 Hz		
Output Noise	70 dB below full output voltage, with output grounded.		
LINE REGULATION	±0.25%, 117VAC or 234VAC ±10%, at full load		
LOAD REGULATION (at rear output terminals)	±0.50%, no load to full load, 45 to 5 kHz; ±2% 5 kHz to 10 kHz & 15 Hz to 45 Hz.		
RESPONSE TIME	Less than 20 usec.		
OVERLOAD/SHORT CIRCUIT PROTECTION	Automatic current limiting (recovers immediately when overload removed).		
EFFICIENCY	Greater than 50% at full load and nominal input voltage.		
OPERATING TEMPERATURE RANGE	-20°C to +50°C		
NON OPERATING	-40°C to +85°C		
DIMENSIONS			
	<u>251C</u> 5¼"Hx19"Wx16"D	<u>501C</u> 5¼"Hx19"Wx16"D	<u>1001C</u> 8¾"Hx19"Wx17"D
WEIGHT			
	Approx. 34 lbs.	Approx. 46 lbs.	Approx. 76 lbs

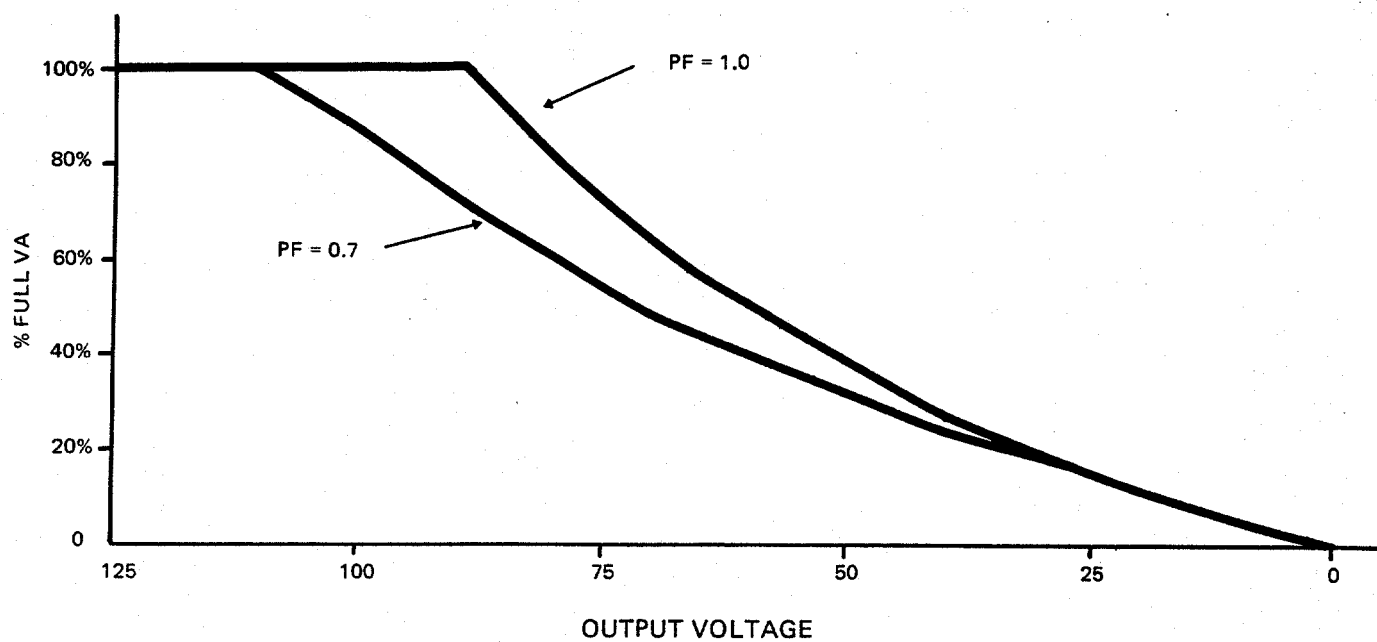


Figure 1-1. Derating Curve

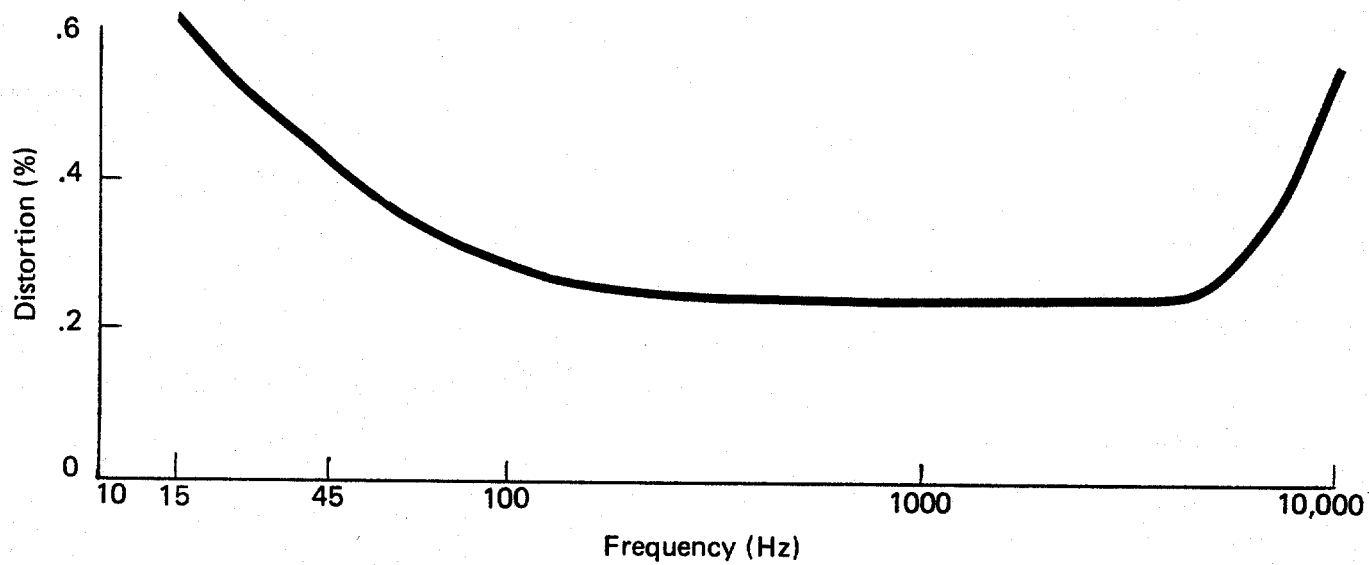


Figure 1-2. Harmonic Distortion

**NOTE**

Instruments with output autotransformers installed are not operable at output frequencies below 45 Hz.

1-13. In all cases, the total VA available from the instrument (VA from HI plus VA from tap) is equal to it's rating. Some autotransformers, however, have limited VA available at the tap connection.

TABLE 1-2. OPTIONAL AUTOTRANSFORMER MODEL DESIGNATIONS

MODEL	TAP VOLTAGE	VA AVAILABLE AT TAP	AUTOTRANSFORMER PART NUMBER
251C-101	0-26V	90	990-783-9X
251C-103	0-250V	250	990-784-9X
251C-104	0-72V	250	990-785-9X
501C-101	0-26V	180	990-720-9X
501C-103	0-250V	500	990-758-9X
501C-104	0-72V	500	990-786-9X
1001C-101	0-26V	360	990-787-9X
1001C-103	0-250V	1000	990-762-9X
1001C-104	0-72V	1000	990-788-9X