

The 4CX12,000A/8989 is intended for use in VHF radio frequency applications. It features an internal mechanical structure which results in high RF operating efficiency. Low RF losses in this structure permit operation at full ratings up to 220 MHz. The 4CX12,000A/8989 has a gain of 18 dB in FM broadcast service, and is also recommended for RF linear amplifier service, and for VHF-TV linear amplifier service. The anode is rated for 12 kilowatts of dissipation with forced air-cooling and incorporates a new highly efficient cooler design, which significantly reduces air pressure and flow requirements and produces low acoustical noise.



## CHARACTERISTICS

Plate Dissipation (Max.)	12,000 Watts
Screen Dissipation (Max.)	300 Watts
Grid Dissipation (Max.)	150 Watts
Frequency for Max. rating (CW)	220 MHz
Amplification Factor	6.7
Filament/Cathode	Thoriated Tungsten
Voltage	6.5 Volts
Current	120 Amps
Capacitance	Grounded Cathode
Input	160.0 pf
Output	18.5 pf
Feedthrough	1.0 pf
Capacitance	Grounded Grid
Input	70 pf
Output	18.6 pf
Feedthrough	0.1 pf
Cooling	Forced Air
Base	Special, Coaxial
Air Socket	SK-300A
Boiler	---
Length	9.84 in; 24.99 cm
Diameter	7.76 in; 19.71 cm
Weight	19.2 lb; 8.75 kg

Class of Operation	Type of Service	MAXIMUM RATINGS		TYPICAL OPERATION				
		Plate Voltage (Volts)	Plate Current (Amps)	Plate Voltage (Volts)	Screen Voltage (Volts)	Plate Current (Amps)	Drive Power (Watts)	Output Power (kiloWatts)
C	RF amplifier, grid-driven	10,000	3.5	9,000	750	2.83	23	20.0
C	RF amplifier at 90.5 MHz	10,000	3.5	9,950	650	3.08	245	22.9
C	RF amplifier at 108.1 MHz	10,000	3.5	10,000	800	2.81	275	22.5

The values listed above represent specified limits for the product and are subject to change. The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.



**For information** on this and other CPI products, visit our website at: [www.cpii.com](http://www.cpii.com), or contact: CPI MPP Division, Eimac Operation, 607 Hansen Way, Palo Alto, CA 94303  
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