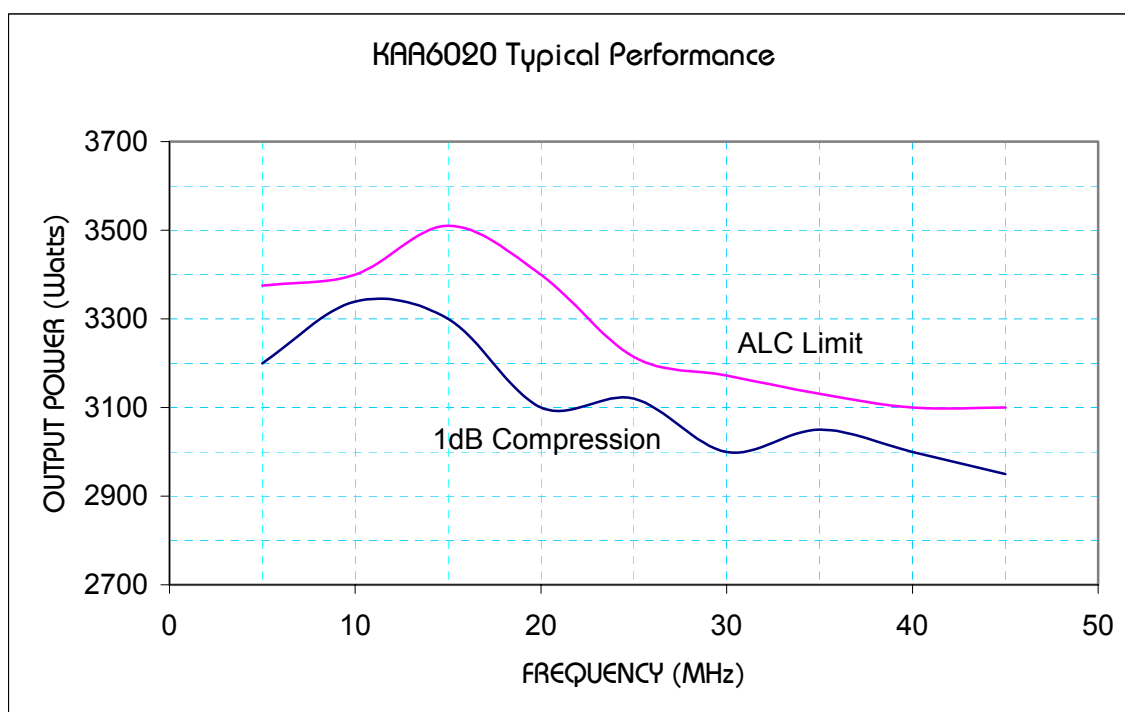


MODEL KAA6020
3000 WATTS CW
5 MHz - 45 MHz

The Model KAA6020 is a Class AB wideband RF power amplifier system delivering in excess of 3000 Watts CW power into a 50-Ohm load over the frequency range of 5 MHz to 45 MHz. Power gain is 54 ± 3 dB. GPIB control requires the optional IEEE488.2/RS232 Interface Controller Module.

The system features forward and reflected power indication on a front panel-mounted, analog meter; Automatic Level Control (ALC); RF gain control; overdrive protection; full VSWR protection; input blanking, and over-temperature protection. On the basic model these features, plus remote power on/off control, are accessible for hard-wire remote operation through a 25-pin, D-subminiature connector. For a detailed description of these features refer to "SPECIAL FEATURES – KAA & KAW-SERIES SINGLE BAND RF POWER AMPLIFIERS".

The amplifier comprises five units, a Power Controller Unit containing the driver amplifier module and RF control circuitry, two Power Amplifier Units that house the RF power amplifier modules, a Power Combiner Unit, and a Power Supply Unit. The units are mounted on telescoping slides in a standard 19-in equipment rack, 47" high and 31" deep. Construction is modular and all subassemblies are removable. Forced-air cooling is by highly reliable tube-axial fans. The amplifier operates from 187-265 V_{AC} 47-63 Hz line. Power consumption is 7.2 kVA maximum. The system may be placed in 'stand-by' mode with the BLANKING switch, greatly reducing energy consumption and heat.



SPECIFICATIONS

Model KAA6020

RATED POWER OUTPUT	3000 Watts
INPUT FOR RATED OUTPUT	23 mW maximum
POWER OUTPUT @ 1dB COMPRESSION	2900 Watts minimum
FLATNESS	± 2.0 dB maximum unleveled, ± 0.5 dB leveled
FREQUENCY RESPONSE	5 MHz - 45 MHz instantaneously
GAIN	54 ± 3 dB
GAIN ADJUSTMENT RANGE	30 dB typical
INPUT IMPEDANCE	50 Ohm nominal, VSWR 1.5:1 nominal
OUTPUT IMPEDANCE	50 Ohm nominal
MISMATCH TOLERANCE	infinite
PROTECTION	VSWR, over-temperature, overdrive
MODULATION CAPABILITY	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal
HARMONIC DISTORTION	-13 dBc maximum
SPURIOUS OUTPUTS	-70 dBc maximum
FRONT PANEL METER	0 - 3000 Watt forward power, top scale % limit SET point reflected power, bottom scale
CONTROLS	[AC LINE]ON/OFF, [RF CTRL]ON/OFF (blanking) [METER]FWD/REFL, [ALC]FAST/SLOW (Autom. Level Control) [VSWR]RESET MAN/AUTO, ALC, RF GAIN
INDICATORS	SYSTEM, BLANKING, [METER]MODE, [ALC] MODE, VSWR, TEMP, REMOTE ACTIVE
REMOTE INTERFACE (optional)	IEEE-488.2 & RS-232
RF CONNECTORS	Input: type N female, Output: 7/16 DIN
REMOTE CONTROL	IEEE488.2: 24-pin female, RS-232: 25-pin D-Subminiature female
REMOTE INTERLOCK	BNC female
OPERATING TEMPERATURE	-10 to 40 °C
COOLING	Forced air (self contained fans)
PRIMARY POWER	180 - 265 V _r , 47 - 63Hz, single-phase, 7.2 kVA maximum
SIZE (W x H x D)	55.9 x 119.4 x 78.8 cm, 22 x 47 x 31 in.
WEIGHT (approx.)	182 kg, 400 lb.

MODEL CONFIGURATIONS

MODEL NUMBER	OPTION
KAA6020	Standard
KAA6020M1	IEEE488.2/RS232