

**2KVA (6KVA Single Phase)**

**3KVA (9KVA Single Phase)**

**THREE PHASE**

**Model: AFH 1S**

**60 HZ input – 45HZ-1KHZ output**

**Electronic Programmable AC Power Source**

**Description:**

The AFH1S programmable AC power source provides cost effective instrument grade AC Power. The unit is designed to be reconfigured for Three or Single Phase output, making the AFH1S highly versatile. The isolated AC output can be controlled manually using the front panel operator keypad, or remotely via GPIB/IEEE.448, RS232C or APG (Analog Programming) for fully automated computer controlled applications.

All models incorporate PWM technology for efficient power delivery, and DSP or 16 Bit methodology to provide precise high-speed measurement of the output.

The AFH1S is provided with a 5" LCD front panel display, built-in self diagnostics and protection including Overvoltage, Undervoltage, Overcurrent, Over Power, Short Circuit, Overtemperature and Fan Failure.

Each model is provided in a rack type enclosure with caster wheels and leveling jacks. For added safety, all input, output and interconnecting cable connections are contained within the enclosure behind removable access panels.

**Electrical Specifications:**

**INPUT**

**Voltage:** 190 – 250VAC, Three phase , three wire plus safety ground

**Frequency:** 47-63 Hz

**Power Factor:** 0.97 min @ full load

**OUTPUT**

**Frequency:** 45 – 1000Hz

**Voltage:** Three phase configuration L-N (L-L): 0-150VAC (0-259VAC), 0-300VAC (0-519VAC)

Single phase L-L: 0-150VAC, 0-300VAC.

**Connection:** Three phase: Wye, 4-Wires plus safety ground; Single phase paralleled, 2-Wires plus safety ground

**Phase Shift:** Each phase adjustable 0-360° with three phase configuration

**Resolution:** 0.1°

**MEASUREMENT (summary)<sup>i)</sup>**

**Voltage (RMS):**

**Accuracy:** 0.1%FS + 0.25% or better

**Resolution:** 0.1V

**Current (RMS):**

**Accuracy:** 0.15%FS + 0.4% or better

**Resolution:** 0.01A

**Power (RMS):**

**Accuracy:** 1% (CF<6)

**Resolution:** 0.01W for P<1000W, 0.1W for P>1000W or better

**Frequency:**

**Accuracy:** 0.1% + 2 count

**Resolution:** 0.1Hz

**Environmental Characteristics:**

**Temperature,** Operating: 0-40°C (32-104°F)

**Altitude:** 3,300 feet above sea level

**Humidity:** 0-95% Rh, (non-condensing)

**Location:** Indoor

**Options:**

GPIB cable (200CM)

GPIB cable (60CM)

i) Request 017-0035 data sheet for detailed Measurement Specifications.

**Three Phase Configuration**

MODEL	OUTPUT CAPACITY	OUTPUT FREQUENCY	OUTPUT FREQUENCY REGULATION	OUTPUT VOLTAGE RANGE L-N (L-L)	OUTPUT VOLTAGE REGULATION Temp Coefficient 0.02% per °C	OUTPUT LINE CURRENT (MAX) (NOTE 1)	OUTPUT DISTORTION (THD)	INPUT VOLTAGE	INPUT CURRENT (APPROX.) (NOTE 2)	DIMENSIONS HxWxD (in.)	WEIGHT (lbs)
AFH1S020	2KVA	45 – 1000Hz	Accuracy: 0.15%	0-150V (0-259V)	Accuracy: 0.2% FS.	L:20A H:10A	1%	190-250V, 3H	P:24	41.92x21.49x27.55	250
AFH1S030	3KVA		Resolution: 0.01Hz (45 – 99.9Hz), 0.1Hz (100-999.9Hz)	0-300V (0-519V)	Resolution: 0.1V	Line / Load: 0.1% / 0.8% (1Phase)			L:30A H:15A		

**Single Phase Configuration**

MODEL	OUTPUT CAPACITY	OUTPUT FREQUENCY	OUTPUT FREQUENCY REGULATION	OUTPUT VOLTAGE RANGE	OUTPUT VOLTAGE REGULATION Temp Coefficient 0.02% per °C	OUTPUT LINE CURRENT (MAX) (NOTE 1)	OUTPUT DISTORTION (THD)	INPUT VOLTAGE	INPUT CURRENT (APPROX.) (NOTE 2)	DIMENSIONS HxWxD (in.)	WEIGHT (lbs)
AFH1S020	6KVA	45 – 1000Hz	Accuracy: 0.15%	0-150V	Accuracy: 0.2% FS.	L:60A H:30A	1%	190-250V, 3H	P:24	41.92x21.49x27.55	250
AFH1S030	9KVA		Resolution: 0.01Hz (45 – 99.9Hz), 0.1Hz (100-999.9Hz)	0-300V	Resolution: 0.1V	Line / Load: 0.1% / 0.2%			L:90A H:45A		

NOTES: 1: L= Low Range 0-150V H= High Range 0-300V 2:P= 230V

Specifications subject to change without notice.  
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