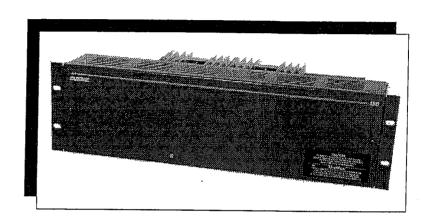
DUKANE

POWER AMPLIFIER



Features

- Broad Frequency Response
- · Low Distortion
- Dual Independent Electronic Protection Circuits
- Self-Resetting Heat Sink Thermal Cutout
- Self-Resetting Power Transformer Thermal Circuit Breaker
- UL 813 Listed
- Made in the United States



General Description

The Dukane Model 1A4125 Power Amplifier is rated at 125 watts (rms). The amplifier mounts in a standard 19-inch (48.3 cm) wide equipment rack and can be shipped mounted in a rack. The amplifier can be used in sound reinforcement, general paging, and school communication systems applications. The 1A4125 is UL 813 Listed.

Specifications

POWER OUTPUT

125 watts (rms)

FREQUENCY RESPONSE

(@ 9dB below rated output*)
20Hz to 20kHz (+0/-1dB)

POWER RESPONSE

45Hz to 20kHz, +0/-1dB (0dB = 125 watts), THD ® 0.5%

HARMONIC DISTORTION

®0.5%, 45Hz to 20kHz(bandwidth limited 20Hz to 30kHz)@ 1kHz at rated output

(THD typically <0.05%)

SIGNAL-TO-NOISE RATIO

Better than 92dB below rated output

INPUT SENSITIVITY

0.5V (rms) at 1kHz for rated output

INPUT IMPEDANCE

 $20k\Omega$

OUTPUTS

(All fully transformer isolated)

70.7V (40Ω) 25V (5Ω) balanced 25V center tap 8Ω (31.6V)

OUTPUT REGULATION

(no load to full load voltage change)

Better than 1dB

CONTROL

Rear panel input level control

*Per EIA Standard

(Specifications)

TERMINATIONS

FUSE

Screw terminal strips (w/ barriers and wire capture plates on outputs)

3A, slow-blow

INDICATOR

FINISH

Power-on LED

Baked charcoal enamel

POWER SOURCE

DIMENSIONS

120Vac, 60Hz

5-1/4" (13.3 cm) high, 19" (48.3 cm) wide, 6-1/4" (15.9 cm) deep

AC POWER REQUIRED

NET WEIGHT

2.8A (120Vac) at rated output

17 pounds (7.7 kg)

0.22A at idle

Engineers' Specifications

The power amplifier shall be Dukane Model 1A4125 or approved equal. It shall be capable of delivering 125 watts (rms) power with less than 0.5% harmonic distortion from 45Hz to 20kHz (measured at the 70.7V tap). The frequency response shall be 20Hz to 20kHz (+0/-1dB) per EIA Standard SE-101A. The signal-to-noise ratio shall be better than 92dB below rated output for the 20Hz to 20kHz bandwidth. Input sensitivity shall be 0.5V (rms) at 1kHz for rated output, and input impedance shall be 20k ohms. Output load shall be 83 ohms (70.7V), 5 ohms (25V), and 8 ohms (31.6V), and there shall be a 25V center tap. Output regulation shall be better than 1dB, no load to full load.

A rear mounted input level control shall be provided. The amplifier shall have dual independent electronic protection circuits as a safeguard against damage from overloads or shorted outputs. A self-restoring thermal circuit breaker shall be provided on the heat sink to open the primary power circuit, and a self-resetting thermal circuit breaker shall be contained within the unit's power transformer. The power source shall be 120Vac, 60Hz. The amplifier shall draw 2.8A at 120Vac. Terminations shall be to screw terminal strips (with barriers and wire capture plates on the output strip).

The power amplifier shall be 5-1/4 inches (13.3 cm) high by 19 inches (48.3 cm) wide and 6-1/4 inches (15.9 cm) deep, and shall be finished in baked charcoal enamel. Net weight shall not exceed 17 pounds (7.7 kg). The amplifier shall be UL 813 (Commercial and Sound Equipment Standard) Listed. The amplifier shall mount in any standard 19-inch (48.3 cm) wide equipment rack and be capable of shipment while mounted in such a rack without requiring any additional support.

Associated Equipment

Model 3A130 Input Transformer Model 3A230 Bridging Transformer Model 110-1188 Line Transformer Mounting Bracket

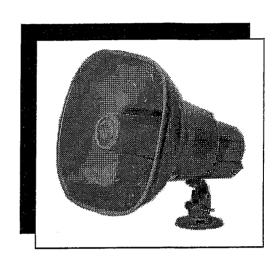
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DUKANE

HORN

Features

- Ideal for Indoor and Outdoor Installations
- High Intelligibility
- · Highly Directional
- Built-in 25-Volt and 70-Volt Transformer with Selector Switch



Specifications

POWER RATING

30W continuous, program input limited

to above 300Hz

DIMENSIONS

10" (25 cm) wide, 11" (28 cm) high, 10-1/2" (27 cm) deep

FREQUENCY RESPONSE

300Hz to 12,000Hz

FINISH

Beige baked epoxy

DISPERSION

100° at 1000Hz 60° at 2000Hz 35° at 4000Hz

WEIGHT

7 lb (3.2 kg)

IMPEDANCE

 $2500, 1300, 666, 333, 167, 89, 45\Omega$

MOUNTING

Three-way adjustable bracket

POWER TAPS

70V line: 2, 3.8, 7.5, 15, 30W 25V line: .9, 1.8, 3.7, 7.5, 15W

TERMINATIONS

Screw terminals with transparent cover and strain relief clamp

(Specifications)

SOUND PRESSURE

126dB (peak) at 3.3' (1 m) on axis with 30W input 121dB at 3.3' (1 m) (average) with 30W, 500 Hz to 4500Hz 108dB at 3.3' (1 m) (average) with 1W, 500Hz to 4500Hz

APPLICATIONS

High level voice paging (indoors, outdoors), for use in industrial warehouses, institutions, civic centers and recreational facilities when the sound must be concentrated in a small area

Engineers' Specifications

The Dukane Model 5A296 Re-entrant Trumpet, or approved equal, shall be furnished and installed as indicated on the plans. The unit shall have a power rating of 30 watts continuous. The frequency range shall be 300Hz to 12,000Hz. The trumpet shall have a screwdriver adjustable switch which can be set externally to select 30, 15, 7.5, 3.8, 2 watts on a 70-volt line, or 15, 7.5, 3.7, 1.8, .9 watts on a 25-volt line. Available impedances shall be 2500, 1300, 666, 333, 167, 89, and 45 ohms. The sound pressure level shall be 126dB (peak) at 3.3 feet (1 m) on axis with 30 watts input. Sound dispersion angle shall be 100° at 1000Hz (-6dB octave band), and 60° at 2000Hz (-6dB octave band).

The trumpet shall be 10 inches (25 cm) wide, 11 inches (28 cm) high, and 10-1/2 inches (27 cm) deep. The assembly weight shall not exceed 5 pounds (2.3 kg). The finish shall be beige, baked enamel. External connections shall be to screw terminals. The terminal housing and transparent cover shall function together as a cable strain relief. The trumpet shall be provided with a three-way adjustable mounting bracket.

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