

H-6642 Axial Fan Demonstrator

Purpose

The Hampden **Model H-6642** Axial Fan Demonstrator provides hands-on introduction to fan performance. The Trainer utilizes differential pressure transducers for flow rate and pressure across the fan, type T thermocouple to record air temperature and photo tachometer transducers to measure fan speed. Fan power is recorded when the unit is interfaced with the Hampden **Model H-6648** Control Interface Module.

Description

The Hampden **Model H-6642** Axial Fan Demonstrator is bench top mounted. It consists of a steel base with non-mar rubber feet, fan mount with axial fan, transparent plastic ducting, adjustable airflow adjuster, orifice plate and mounting for a tachometer transducer. When interfaced with the **Model H-6648** Control Interface Module, it can be linked to any PC compatible computer direct without any additional I/O cards via its USB port.

Experiment Capabilities

- Fan Air Density
- Fan Capacity
- Fan Total Pressure
- Fan Velocity Pressure
- Fan Static Pressure
- Fan Speed
- Fan Power Output
- Fan Total Efficiency
- Fan Static Efficiency



Specifications

Base:

14-gauge furniture stock steel finished in instrument tan texture

Feet:

Non-mar rubber

Panel:

11-gauge furniture stock steel finished in white

Nomenclature:

Silkscreened

Main:

1 Pole AC circuit breaker with power light

Power:

AC power cord 3/c #16
7' long w/ molded plug

Axial Fan:

- Cubic feet per minute (CFM): 100
- Watts: 4.00W

Duct:

Clear plastic, inlet and outlet

Flow:

Orifice Plate

Flow Control:

Variable air flow restrictor

Transmitters:

Differential pressure transmitters with 4-20mA output, 2-required

Sensors:

- Tachometer
- Thermocouple, type T
- Digital manometer

Accessories:

Interface cords for connection to the Hampden **Model H-6648** Control Interface Module.



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All Hampden units are available for operation at any voltage or frequency

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