

TU-620 HVAC MOTOR & AIRFLOW TRAINING UNIT

The TU-620 allows students to experience how HVAC systems should operate under optimal conditions before introducing restrictions. It equips students with practical understanding of airflow management and motor efficiency.

Teach

- Airflow Characteristics
- Electrical Diagnostics
- Efficiency Dynamics

With 3 exchangeable motors:

- PSC
- ECM Constant Airflow
- ECM Constant Torque

Demonstrate Key Metrics:

- Static Pressure
- Airflow
- Amperage
- Wattage
- Resistance readings
- RPM
- Pressure Drop
- CFM
- Voltage
- Continuity
- Motor Winding Integrity
- Run Time
- Energy Cost

This is the ultimate tool for ensuring technicians are prepared to effectively diagnose and resolve airflow issues in real-world scenarios.

Revolutionizing HVAC Airflow Education with iConnect® Training



iConnect®

TRAINING

Electric: 240V; 30amp; 4wire
Dimensions: 70" L x 30" W x 70" H

Included tools: (1) manometer kit, (1) multimeter, (2) psychrometers

TU-620 LAB EXERCISES AVAILABLE ON THE LMS (LEARNING MANAGEMENT SYSTEM)

Airflow Characteristics

Lab 1: Understanding Blower Motor Types and Characteristics

Lab 2: Static Pressure Measurement in Low-Restriction Ducts

Lab 3: The Impact of Return-Side Restrictions on Airflow

Lab 4: Supply-Side Restrictions and Blower Response

Lab 5: Filter Media Pressure Drop Analysis

Electrical Diagnostics and Efficiency Dynamics

Lab 6: Measuring Power Usage Across Blower Motor Types

Lab 7: Static Pressure vs. Power Consumption

Lab 8: Understanding Efficiency Loss in PSC Motors

Lab 9: Constant Torque Motor Response to Static Pressure Changes

Lab 10: Diagnosing ECM Motor vs. Module Failures

Lab 11: Proper Procedures to Ohm out PSC and ECM Motors

Lab 12: Power Curve Analysis for ECM Constant Airflow Motors

Lab 13: Calculating Wattage and Energy Cost Implications

Lab 14: Power vs. Airflow Efficiency Analysis

Lab 15: Diagnosing System Performance Through Power Metrics

Lab 16: Impact of Filter Restrictions on Power Usage

Lab 17: Comparing Energy Efficiency with Combinations of Real-Time Scenarios

