

KMD-7002, 7052

Direct Digital VAV Controllers—Dual Duct Units

Description

The KMD-7002/7052 controllers are direct digital controllers, integrated into an actuator, designed primarily for Dual Duct VAV terminal units. This controller will operate independently in a stand-alone mode or jointly in a peer-to-peer network sharing system data and/or programs. Standard dual duct VAV control sequences have been incorporated to provide pressure independent control of a dual duct VAV unit.

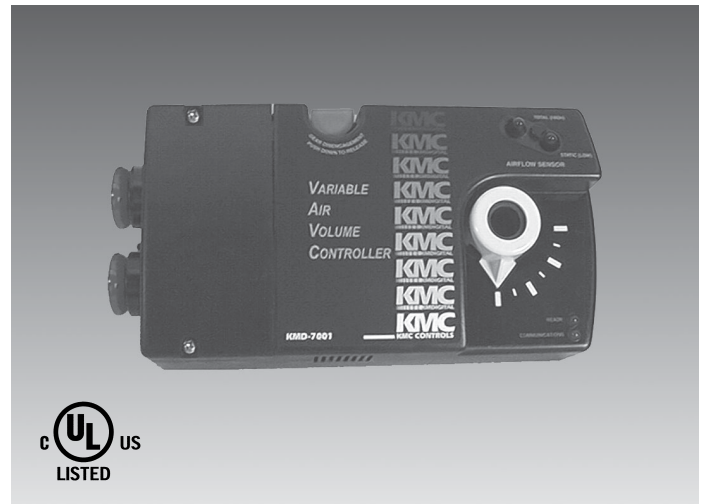
Accessible control basic programming allows customizing of the standard sequences for temperature setback, overrides, and other user defined sequences.

Each controller has an on board flow-through sensor for use with a single or multi-point differential pressure measuring station or Pitot tube. The sensor utilizes twin platinum-ceramic resistance temperature sensors for control accuracy to within 3% of setpoint.

Features

KMD-7002/7052 Controllers feature:

- 4 Inputs, software selected for analog or digital with one dedicated to the flow sensor.
- 4 Outputs, software selected for analog or digital with one dedicated to the actuator.
- 32 Variables, software selected for analog or digital.
- 4 P, PI, and/or PID controllers.
- 5 user defined control basic programming areas.
- 2 Trend Logs, each log storing up to 4 selected elements at user defined intervals.
- 2 Run-Time totalizer and event logs.
- 2 Control groups for organizing selected elements in real-time display.
- 3 Custom defined lookup Tables.
- Weekly schedule w/ Holiday/Special event overrides
- Password and security level protection.



Applications

The KMD-7002/7052 are designed to operate as the cold duct or master controller in conjunction with the TSP-6001, 6051 as the hot duct or slave controller. Typical applications include dual duct and tracking.

Accessories

The following accessories are available:

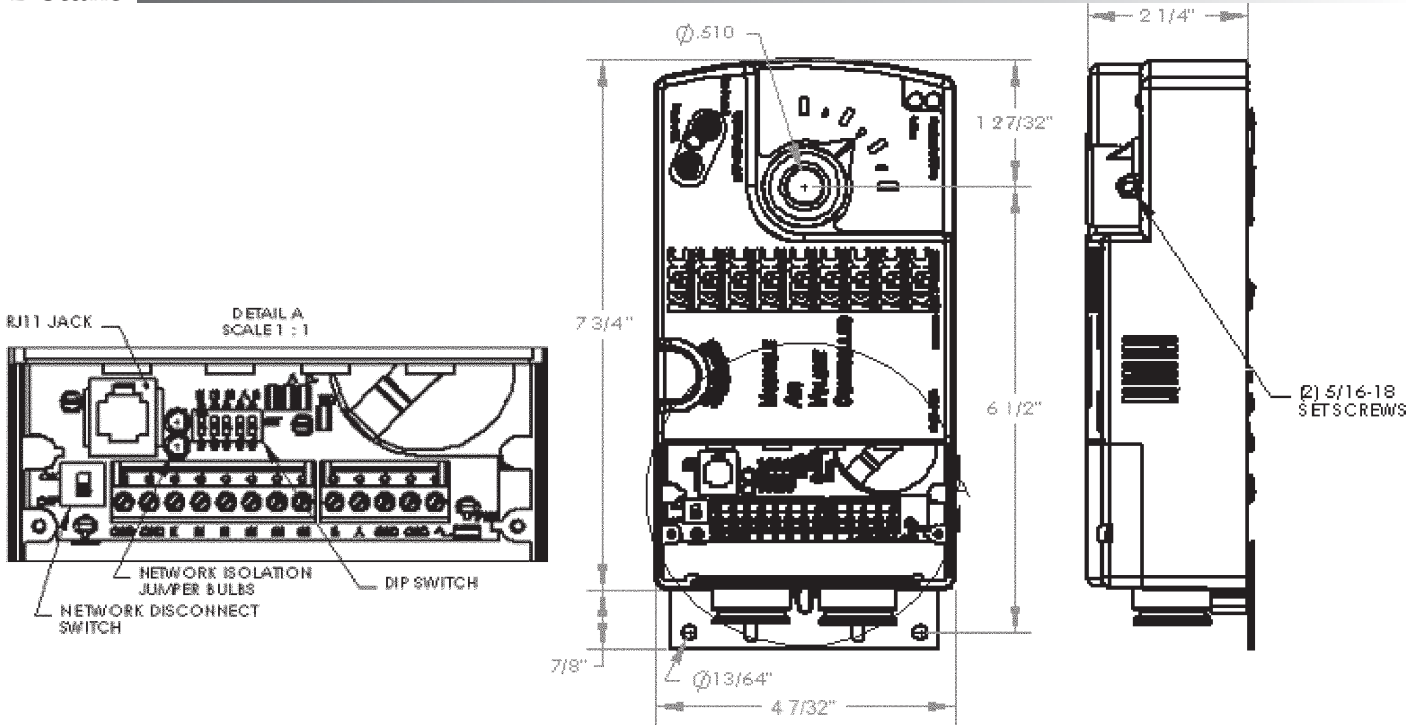
HFO-0011: 3/8" shaft adaptor

Models

The following controller models are available:

KMD-7002	18°/minute actuator
KMD-7052	60°/minute actuator

Details



Specifications

Supply Voltage	24 VAC -15% / +20%, 10 VA	Torque	50 in-lb. min.(5.7Nm), 70 in-lb. max.(7.9Nm)
Communications	RS-485 @ 38,400 baud maximum with Belden 82760 or equivalent 18 AWG twisted shielded, 5.5Ω /1,000 ft. and ≤ 51 pf/ft (maximum 4,000 feet w/o repeater)	Angular Rotation	0 to 95°, end stop adjustable @ 45/60/90° rotation
Networked Points	32 in / 32 out	Motor Timing	
Inputs	3 universal analog or digital	KMD-7001	18°/minute @ 60 Hz. 15°/minute @ 50 Hz.
Analog	0 to 5 VDC	KMD-7051	60°/minute @ 60 Hz. 50°/minute @ 50 Hz.
Digital	On/Off		
Impedance	10K Ω	Weight	2.4 lbs. (1 kg)
Outputs	3 universal analog or digital	Approvals	UL 916 Energy Management Equipment, FCC & CE
Analog	0-10 VDC (30ma max.)	Ambient Limits	
Digital	0/12 VDC (50ma max.)	Operating	32°-120°F (-0°-49°C)
Short Protection	Yes	Shipping	-40°-140°F (-40°-60°C)
Enclosure	Black flame retardant polymer UL94-5V plenum rated	Humidity	0-95% RH, non-condensing
Connections	Wire clamp, 12-22 AWG, Cu		
Velocity Sensor	Platinum-ceramic flow-through, 0 to 3000 FPM (15.24 m/s) using 24", 1/4 FR tubing and SSS-1000 series flow pickups. Range dependent upon DP pickup, tubing size/length and connections		

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