

### Description

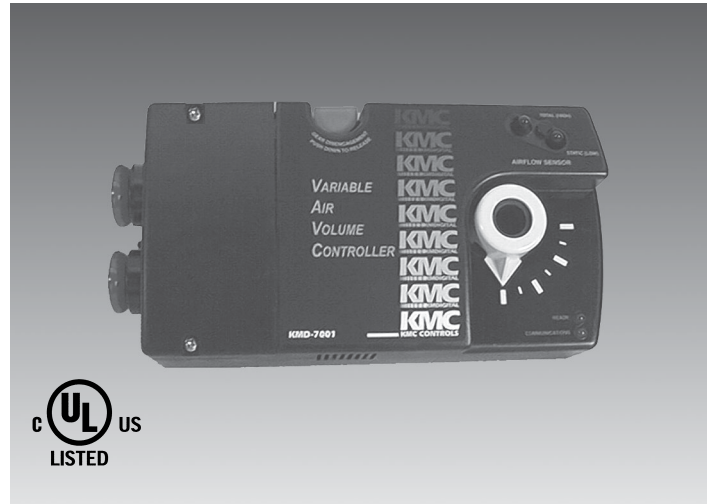
The KMD-7001 and 7051 are direct digital controllers, integrated into an actuator, designed primarily for VAV terminal units. This controller will operate independently in a stand-alone mode or jointly in a peer-to-peer network sharing system data and/or programs. Standard VAV control sequences have been incorporated to provide pressure independent control of a single duct VAV unit. Typical applications include cooling, heating, cooling w/heat change-over, cooling w/time proportional reheat or 3 stages of sequential reheat output. Accessible control basic programming allows customizing of the standard sequences for temperature setback, overrides, proportional wet reheat, dual duct and other user defined sequences.

The controller includes 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-7001/7051 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 totalizers 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-7001/7051 are designed to operate as VAV Terminal Units. The unit ships from the factory with programming sequences for three Single Duct VAV applications:

- ◆ Heating-cooling changeover
- ◆ VAV with time proportional reheat
- ◆ VAV with 3-stage reheat.

### Accessories

The following accessories are available:

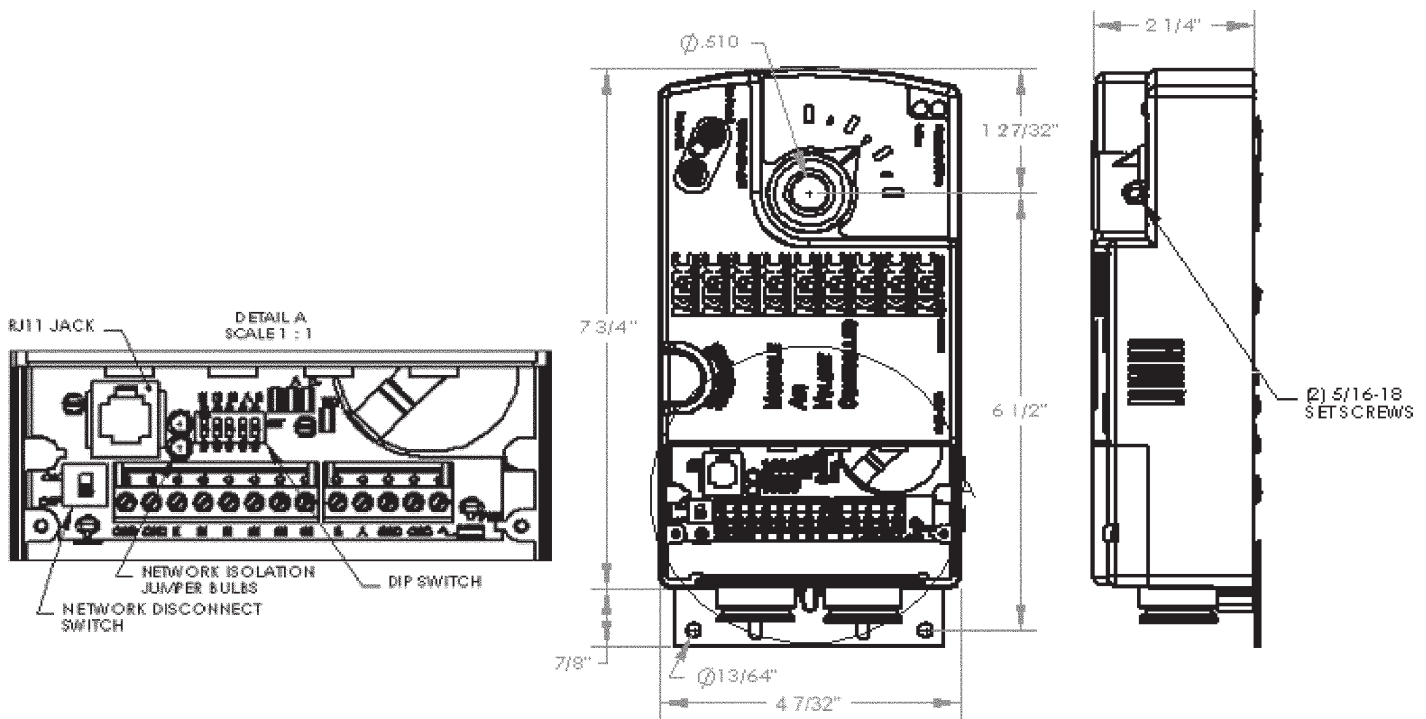
HFO-0011: 3/8" shaft adaptor

### Models

The following models are available:

KMD-7001	18°/minute actuator
KMD-7051	60°/minute actuator

## Details



## Specifications

<b>Supply Voltage</b>	24 VAC -15% / +20%, 10 VA	<b>Torque</b>	50 in.-lb. min. 70 in.-lb. max.
<b>Communications</b>	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)	<b>Angular Rotation</b>	0 to 95°, end stop adjustable @ 45/60/90° rotation
<b>Networked Points</b>	32 in / 32 out	<b>Motor Timing</b>	
<b>Inputs</b>	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	10KΩ	<b>Weight</b>	2.4 lbs. (1 kg)
<b>Outputs</b>	3 universal analog or digital	<b>Approvals</b>	UL 916 Energy Management Equipment, FCC & CE
Analog	0-10 VDC (30 ma max.)	<b>Ambient Limits</b>	
Digital	0/12 VDC (50 ma max.)	Operating	32°-120°F (-0°-49°C)
Short Protection	Yes	Shipping	-40°-140°F (-40°-60°C)
<b>Enclosure</b>	Black flame retardant polymer UL94-5V plenum rated	Humidity	0-95% RH, non-condensing
<b>Connections</b>	Wire clamp, 12-22 AWG, Cu		
<b>Velocity Sensor</b>	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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