

Building blocks of building automation



KMD-7300/7400 Series Style Case

## KMD-7x00 Series Direct Digital Controllers

Four-input and four-output (PLC-8) controllers, designed for popular HVAC applications (VAV, FCU, AHU, RTU, and HPU)

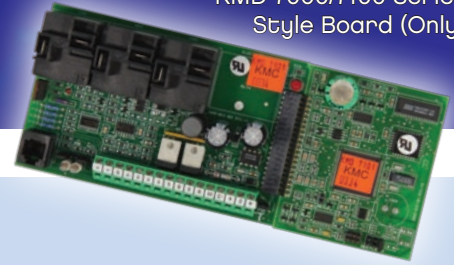




# KMD-7x00 Series

## 4 x 4 HVAC Direct Digital Controllers

\*\*KMD-7000/7100 Series  
Style Board (Only)



Big performers in small packages, these controllers can serve in stand-alone environments or in peer-to-peer networks with other KMDigital devices. As part of a complete building automation system, these Tier 2, 4 x 4 controllers provide precise monitoring and control of connected points, such as room temperature, humidity, and other building automation functions. (KMD-7101/7101Cs have only 3 outputs.)

The different controller models are suited for Variable Air Volume Terminals, Fan Coil Units, Air Handling Units, Roof Top Units, and Heat Pump Units. (See the Models chart for the relevant model functions.) The controllers come pre-programmed for such applications as (depending on the model) single duct heating/cooling VAV control, fan speed control, time proportional or 2-position hot and chilled water valve control, auxiliary heat control, economizer, freeze protection, staged heating or cooling, change-over, proportional reheat, staged electric reheat, and occupancy/night setback. These programs may be edited or rewritten for a particular application since the controllers are fully field programmable.

These controllers install and configure easily, are intuitive to program, and contain modular jacks for quick connections to KMD-1160/1180 series NetSensors®.

These robust controllers are built with exacting care. The quality processes of KMC Controls have been certified to ISO 9001 standards. Strict quality control ensures every component is properly designed and manufactured for long-term product reliability and performance.

(NOTE: For additional specifications, see the relevant model's data sheet.)

building your comfort zone™

### Specification Highlights

Models KMD-	Type	Inputs		Outputs					
		Universal	Air Flow Sensor	Universal	Triacs	Dual Staged Triacs	Tri-State Triacs	Relay	Three- Staged Relays
7011/7011C*	VAV**	3	1	4	0	0	0	0	0
7013/7013C*	VAV**	3	1	2	1	0	1	0	0
7101/7101C*	FCU**	4	0	0	2	(Note: Only 3 outputs)			1
7102/7102C*	FCU**	4	0	0	2	0	0	1	1
7301/7301C*	AHU	4	0	3	1	0	0	0	0
7302/7302C*	RTU	4	0	1	1	2	0	0	0
7401/7401C*	HPU	4	0	0	4	0	0	0	0

\*Note: "C" at the end of the model name designates a real time clock

#### Inputs (see chart for applicable models)

Universal inputs are software selectable as analog (0–5 VDC or 4–20 mA with an external resistor) or digital (On/off 0/5 VDC or dry contract closure)

Air flow sensor (KMD-7011/7011C/7013/7013C only), 0–3000 fpm, requires tubing and an SSS-1000 series flow pickup

#### Outputs (see chart for applicable models)

Universal outputs are software selectable as analog (0–10 VDC) or digital (0/12 VDC)—current limited to 100 mA per output (350 mA total)

Optically isolated triacs are single, dual, or tri-state, 30 VAC @ 1 A max.

Relays are form A (SPST, NO), 240 VAC @ 30 A max.

#### Features and Other Specifications

KMD-7300/7400 (AHU, RTU, and HPU) series have black flame-retardant plastic cases; KMD-7000/7100 (VAV\*\* and FCU\*\*) series are boards (only) that fit into Snap Track or HCO-1101 enclosures

Real-time clock in "C" model versions

32 variable points, software selectable as analog or digital

4 PID control loops, and 5 user-definable Control Basic programs

3 user-defined tables (e.g., for sensor conversion tables)

2 system groups for organizing up to 32 selected points each into a real-time display or color graphic

Weekly time schedule with holiday and special event overrides

2 trend logs (which trend 4 points each) and 2 runtime logs

EIA-485 network communicates with up to 124 (total) KMC Tier 2 controllers

Modular jack connection for KMD-1160/1180 series NetSensors

Supply voltage: 24 VAC (–15% /+20%), 60 Hz, 10 VA, Class 2 only

FCC Class B, Part 15, Subpart B

UL 916 Energy Management Equipment listed or recognized

