

**Honeywell  
Controls**

**NEW  
Automated  
Logic Controls**

**Johnson  
Controls**

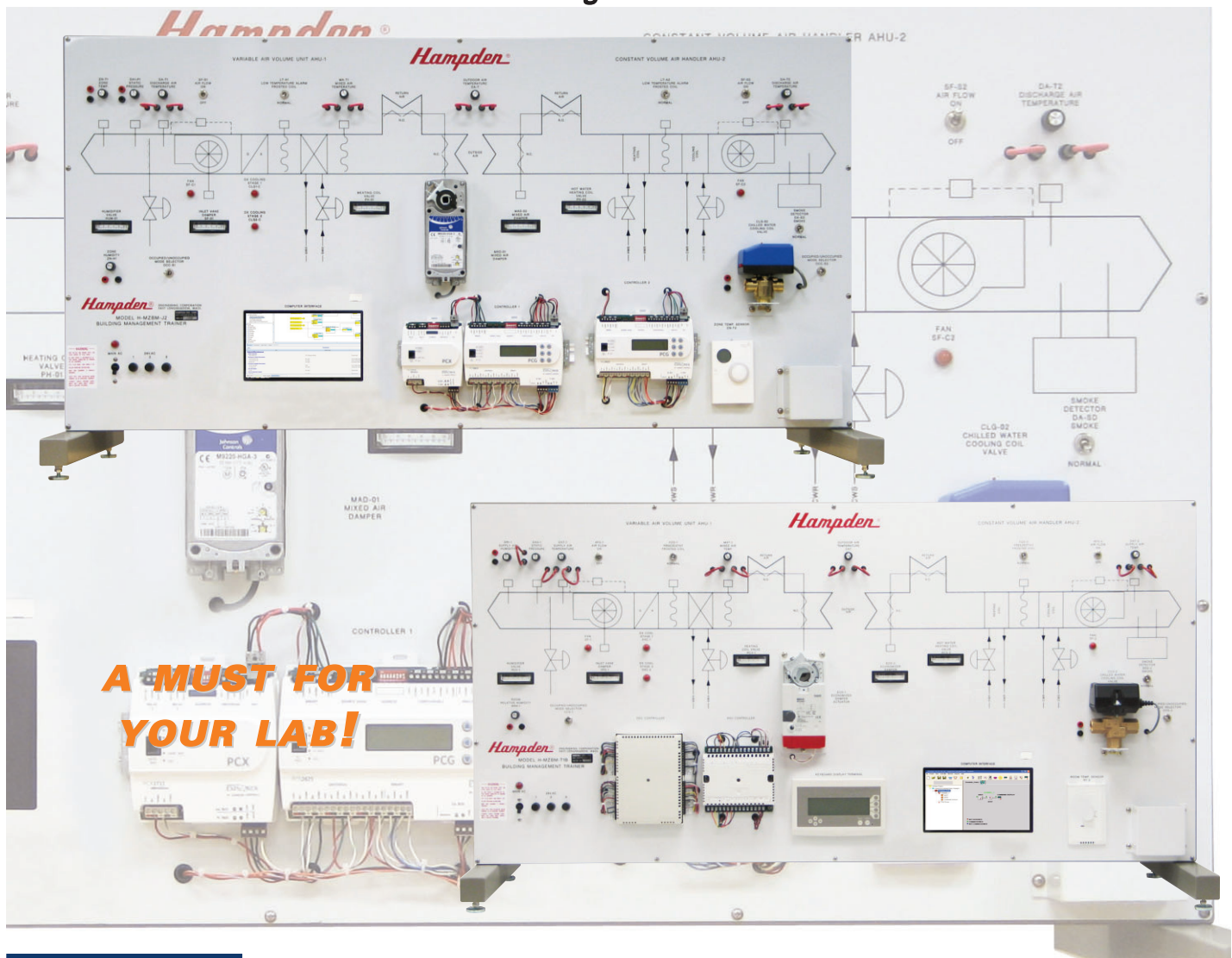
**NEW  
Carrier Controls**

**NEW  
Reliable Controls**

**DDC**

**DIRECT DIGITAL CONTROL**

*Used throughout the World*



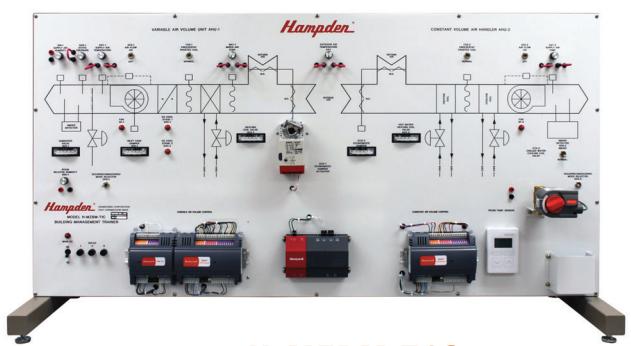
**A MUST FOR  
YOUR LAB!**



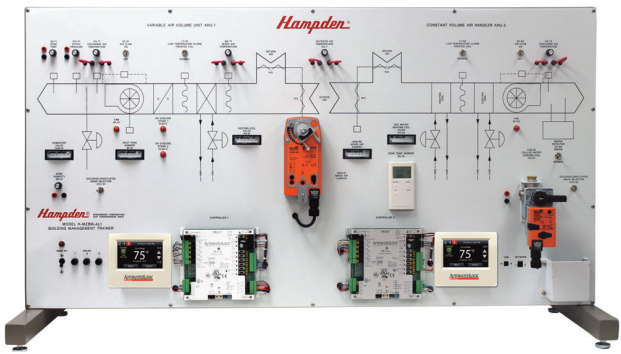
**Hampden®**  
ENGINEERING CORPORATION



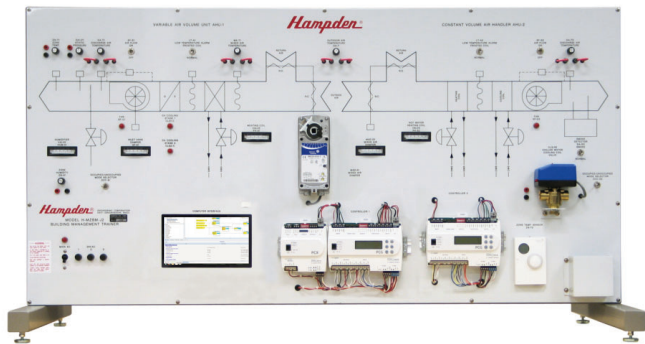
# DDC - DIRECT DIGITAL CONTROL



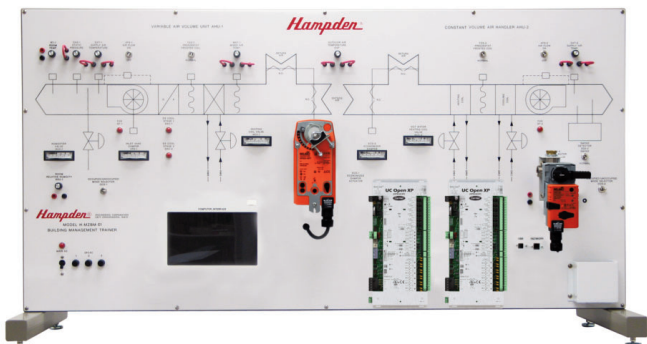
Hampden **H-MZBM-T1C**  
Multi-Zone Building Energy Management Trainer  
with state-of-the-art **HONEYWELL CONTROLS**



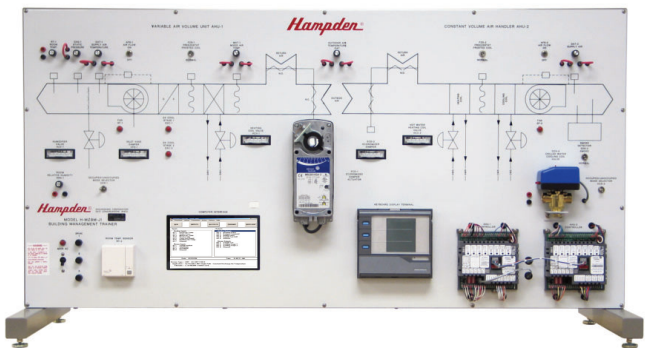
Hampden **H-MZBM-AL2**  
Multi-Zone Building Energy Management Trainer  
state-of-the-art **AUTOMATED LOGIC CONTROLS**



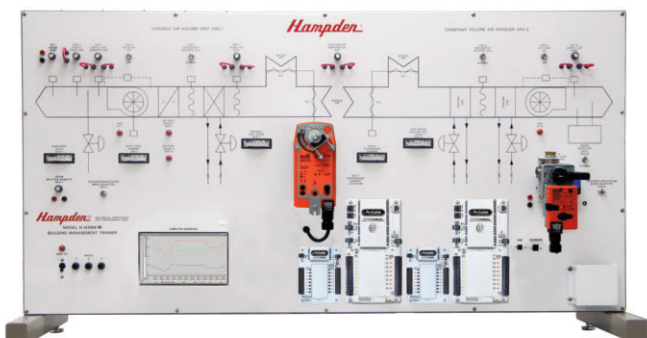
Hampden **H-MZBM-J2**  
Multi-Zone Building Energy Management Trainer  
with state-of-the-art **JOHNSON CONTROLS**



Hampden **H-MZBM-C1**  
Multi-Zone Building Energy Management Trainer  
state-of-the-art **CARRIER CONTROLS**



Hampden **H-MZBM-J1**  
Multi-Zone Building Energy Management Trainer  
with industry standard **JOHNSON CONTROLS**



Hampden **H-MZBM-R1**  
Multi-Zone Building Energy Management Trainer  
state-of-the-art **RELIABLE CONTROLS**

## Microprocessor Technology is the New Standard for HVAC Control!!!

### DDC Training at Your Fingertips

The Hampden **H-MZBM-T1C**, **H-MZBM-J1**, **H-MZBM-J2**, **H-MZBM-AL2**, **H-MZBM-C1**, and **H-MZBM-R1** Multi-Zone Building Energy Management Trainers have been designed to interface with many other Hampden products. The units provide training for the installation, operation, and troubleshooting of a variable air volume unit and a constant volume air handler.

The control systems allow on-screen programming via menu-prompting displays and operator responses. Clear English prompts permit control of every phase of the Energy Management process.

#### FEATURES

- State-of-the-art Honeywell or Johnson Components
- Remote Computer Communications
- Programmable
- Simulated Fault Conditions - Five Selectable
- Graphic Displays
- Selectable Loads and Environments
- Safety - Access to 24V AC only
- Courseware - Student & Instructor

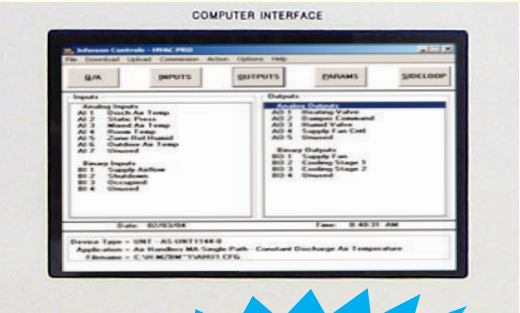
#### SIMULATED COMPONENTS

- Smoke Detector
- Fan on Indicators
- DX Cooling Coils
- Static Pressure Control
- Supply Air Temperature Control
- Air Flow Switches
- Freezstat Switches
- Mixed Air Temperature Controls
- Outdoor Air Temperature Control
- Supply Air Humidity Control
- Room Relative Humidity Control
- Occupied/Unoccupied Mode Switches
- Damper/Valve Position Indicators

#### REMOTE FACILITY MANAGEMENT

Today's faster microprocessors and new software products are providing fast, easy and efficient solutions for the complete management & control of new or existing heating and cooling operations. **Direct Digital Control (DDC)** refers to the application of microprocessor technology to building environment controls. With DDC, it is possible to control **heating** and **cooling** functions with software that takes into account a wide range of variables, thereby achieving greater efficiency. DDC systems handle inputs and outputs electronically while the software provides the logic. Within the controller, the analog signal enters the system (inputs) where it is converted to a digital form so the data can be acted upon according to a set of parameters or formulas (intelligence). The result is the execution of commands (outputs) directly to an end device (valve, actuator, sensor, etc.).

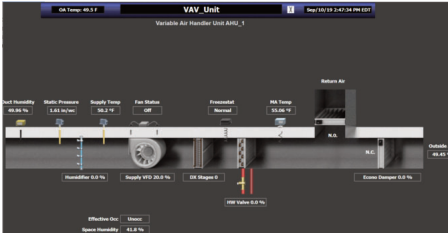
Controllers may function as stand-alone units or be incorporated into a PC based system as a host to provide additional functions.



**NEW!**  
Now available with touch screen incorporated into front panel design of MZBMs!



## DDC Provides...Speed, Precision, Flexibility & Reliability

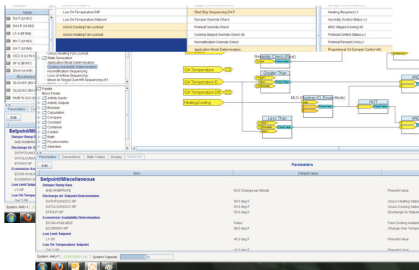
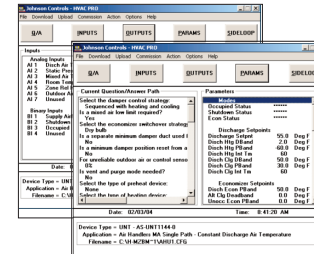


### Honeywell Portable Operator Niagara Framework® Webserver Access Included

The software included with the **H-MZBM-T1C** is an emulation utility and configuration package for use with the Honeywell WEB-8000 and Niagara Framework® series. The Web-8000 is an embedded IoT (Internet of Things) controller and server platform used for connecting multiple devices and subsystem. The Web-8000 streams data and graphical displays to a standard Web browser via WIFI or Ethernet allowing the monitoring of data points and the performance of experiments on the MZBM-T1C.

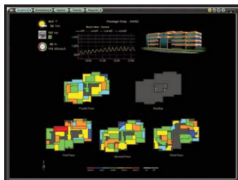
### Johnson Controls Metasys™ Software Included (HVAC Pro™)

The HVAC Pro™ software included with the **H-MZBM-J1** is a utility and configuration package for use with the UNT1100 series of controllers. The software allows monitoring of data points on the MZBM through a N2 communication bus to the controller. When connected, the PC can perform three main functions: configuration, downloading code, and data display/manipulation.



### Johnson Controls Facility Explorer Software Included (FX-PCT)

The Facility Explorer Programmable Controller Tool (FX-PCT) included with the **H-MZBM-J2** is used in conjunction with the PCG Facility Explorer Programmable Controllers. The software provides three main functions for the system; configuration, simulation, and commissioning. The software allows the user to monitor the status of the system remotely as well as being able to configure specific inputs and outputs of the controllers, along with the parameters associated with them.



### Automated Logic Control Software

WebCTRL500®, Automated Logic's, Software customer supplied with the **H-MZBM-AL2** is a building automation system

which delivers a total building solution that puts you in complete control of your energy program. There is no need for add-ons or third party software. Control your buildings with intelligent, energysaving strategies; reduce operating costs, maintain a comfortable and productive work environment, and back it up with data that proves you are on track with your sustainability goals.

### Reliable Control Software

Reliable Software included with the **H-MZBM-R1**

Recognized as the ultimate all-in-one BACnet Advanced Workstation (B-AWS), RC-Studio provides outstanding functionality, value, and ease of programming.



Hampden is committed to providing industry-leading technology.

For the latest from Hampden, visit our home page at <http://www.hampden.com> or e-mail us at [sales@hampden.com](mailto:sales@hampden.com)

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