

# CONTROLS



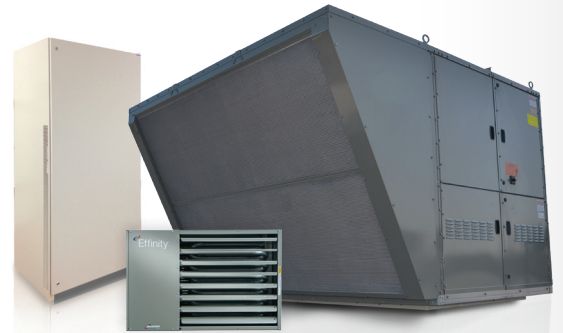
## INTELLIGENT CONTROL, SMART CONNECTIVITY

Controls are one of the most important – and overlooked – components of specialized HVAC equipment. It doesn't matter how advanced or efficient your HVAC products are, if they aren't equipped with customized controls you may not be getting the most out of your investment.

Modine Controls Systems give end users peace of mind in knowing their systems are equipped with a reliable, proven OEM controls platform.

The best part of the Modine Controls System is that it is designed around the equipment, not the other way around. Instead of building around an out-of-the-box control system, Modine Controls Systems are designed and engineered around the final product, ensuring maximized performance.

▼ Modine's experienced team of engineers program the Modine Controls System package at the factory, ensuring the product is set up to deliver optimum performance the moment it is turned on.





## THE MODINE CONTROLS SYSTEM ADVANTAGE

### Maximize Efficiency and Operation

- Controls are optimized for the equipment, eliminating the limitations of a non-OEM control system
- Energy efficiency is maximized through superior control and sequencing of all system components

### Application Flexibility

- Wide range of application driven control strategies, from space conditioning to heating/cooling/dehumidifying high volumes of outside air
- The Modine Controls System gives end users everything they want in one box from one company
- Third party control flexibility:
  - Compatible with major Building Management Systems such as BACnet MS/TP or IP and LonWorks
  - Allows either supervisory or full unit control
  - For full unit control, the Modine Control System maintains oversight of the system to ensure operation stays within the equipment's safe operating envelope

### Serviceability

- Easy-to-follow menu driven system that includes user level, service level, and manufacturer level password protection
- Hand-held user interface makes troubleshooting a breeze, reducing setup, diagnostics, and maintenance quick and easy. Can be mounted remote to minimize trips to the roof
- Operating hours by system (i.e. compressors, supply fan, etc.) along with easy to understand warnings and alarms greatly simplify equipment preventative maintenance
- Select models include advanced diagnostic capability with real time display of key refrigerant pressures, temperatures, condenser sub cooling temperature, and evaporator superheat temperature all but eliminates the need for a gauge set during troubleshooting

Modine Controls Systems can currently be found in products featuring the following labels:



Whether your need is an Airedale Classroom HVAC unit, or an Atherion Packaged Rooftop Ventilation System, you have the assurance of maximized performance thanks to the Modine Controls System.

- Follow us @ModineHVAC
- See us at YouTube.com/ModineHVAC
- www.facebook.com/ModineHVAC/
- www.linkedin.com/company/modinehvac/

To learn more visit [www.ModineHVAC.com](http://www.ModineHVAC.com) or call 1-800-828-HEAT.



Please reference MCP74-525

### MODINE CONTROLS SYSTEM MANUAL

#### Typical BMS System Variables - Analog

Variable Description	Variable Name	Read/Write	Data Type	BACnet	Lon Name	SMVT #	Direction
Supply Air Temperature	Supply_Temp_BMS	R	A	AV1	Supply_Temp	105	out
Space Temperature	spAD_Temp_BMS	R	A	AV2	spAD_Temp	105	out
Outside Air Temperature	OIA_Temp_BMS	R	A	AV3	OIA_Temp	105	out
Outside Air Humidity	OIA_Hum_BMS	R	A	AV4	OIA_Hum	81	out
CF Wheel Temperature	CF_Wheel_Temp_BMS	R	A	AV5	CF_Wheel_Tem	105	out
CF Wheel Humidity	CF_Wheel_Hum_BMS	R	A	AV6	CF_Wheel_Hum	81	out
Return Air Temperature	RA_Temp_BMS	R	A	AV7	-	-	-
Return Air Humidity	RA_Hum_BMS	R	A	AV8	-	-	-
OIA & RA Mixed Temperature	Mixed_Temp_BMS	R	A	AV9	Mixed_Temp	105	out
Mixed Air Humidity	MA_Hum_BMS	R	A	AV10	-	-	-
Temperature Off the Evaporator Coil	Evap_Coil_Temp_BMS	R	A	AV11	Evap_Coil_Temp	105	out
Building Pressure	Build_Press_BMS	R	A	AV12	Build_Press	8	out
Duct Static Pressure	Static_Pressure_BMS	R	A	AV13	Duct_Press	8	out
Temperature reading by serial probe 1	Serial_Probe_Temp_1_BMS	R	A	AV14	-	-	-
Temperature reading by serial probe 2	Serial_Probe_Temp_2_BMS	R	A	AV15	-	-	-
Temperature reading by serial probe 3	Serial_Probe_Temp_3_BMS	R	A	AV16	-	-	-



School service technicians need to only open the doors of their Airedale Classroom HVAC units to have easy access to the controls.

