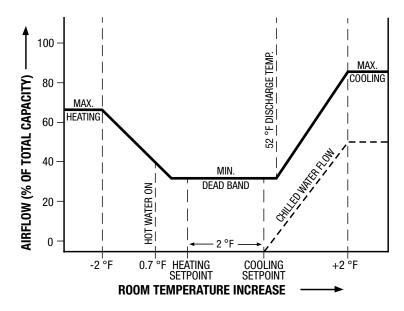


# **EZSTAT DIGITAL CONTROLS**

FAN COIL UNITS WITH EPIC ECM

MODEL SERIES: 35FH, 37FH AND 39 (TYPE ZW)

**CONTROL SEQUENCE: N507 (4-PIPE)** 



# N507 BACnet DIGITAL THERMOSTAT 7-DAY PROGRAMMABLE SCHEDULE VARIABLE AIR VOLUME, MODULATING COOLING WITH ON/OFF HEAT • 4-PIPE SYSTEM

#### **Discharge Air Temperature**

The Discharge Air Temperature sensor (DAT) provides the controller with the coil leaving air temperature (LAT). This is used to control the modulating valve to achieve a pre-set, but adjustable, discharge temperature. On cooling, this controls humidity.

### **SEQUENCE OF OPERATION:**

#### **Modulating Cooling**

On a call for cooling, the chilled water valve will begin to modulate open. The valve will continue to open until the discharge air temperature reaches 52°F (11°C). Simultaneously, the fan will modulate from minimum airflow to maximum airflow to achieve room set point. Upon a decrease in cooling demand, the sequence will reverse.

#### **Deadband**

With no demand in the space, there will be no call for heating or cooling. The fan will be at a deadband set airflow. The chilled water valve and electric heat relay will also be off.

## On/Off Heating

On a call for heating, the fan will ramp up to the maximum airflow setting and the hot water valve will open to achieve room set point. On a decrease in heating demand, the sequence will reverse.

#### Notes:

- EZstat is factory programmed for the specific sequence of operation.
- 2. EZstat is also factory calibrated when airflow settings are provided for easy start-up.
- 3. Field commissioning (password protected):
  - a. Max. and Min. airflow settings are field adjustable between the ranges on the unit's ECM fan curve calibration chart.
  - b. Deadband differential and other parameters are also adjustable.
  - c. Refer to EZstat Application Guide/IOM.
- 4. Remote mounted 24 VAC thermostat is field wired (by others). Refer to application specific wiring diagram.
- Thermostats baseplate mounts to a standard 2" (51) x 4" (102) vertical handy box.







SCHEDULE TYPE:	Dimension are in inches (mm).			
PROJECT:				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	9 - 23 - 14	FCS	NEW	FCS-N507