



N506 BACnet DIGITAL THERMOSTAT 7-DAY PROGRAMMABLE SCHEDULE VARIABLE AIR VOLUME, MODULATING COOLING WITH PROPORTIONAL ELECTRIC HEAT • 2-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 the pre-set, but adjustable, discharge temperatures. On cooling, this controls humidity while on heating it controls occupant comfort.

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 minimum airflow. The chilled water valve will be off. The hot water valve or the electric heat relay will also be off.

Proportional Electric Heat

On a call for heat, the SCR controlled electric heater will proportionally increase the heat output to maintain a discharge air temperature of 90°F (32°C). Simultaneously, the fan will modulate from minimum airflow to maximum airflow in response to room demand. Upon a decrease in heating demand, the sequence will reverse.

Notes:

- EZstat is factory programmed for the specific sequence of operation.
- EZstat is also factory calibrated when airflow settings are provided for easy start-up.
- Field commissioning (password protected):
 - Max. and Min. airflow settings are field adjustable between the ranges on the unit's ECM fan curve calibration chart.
 - Deadband differential and other parameters are also adjustable.
 - Refer to EZstat Application Guide/IOM.
- 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:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimension are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
9 - 23 - 14	FCS	NEW	FCS-N506