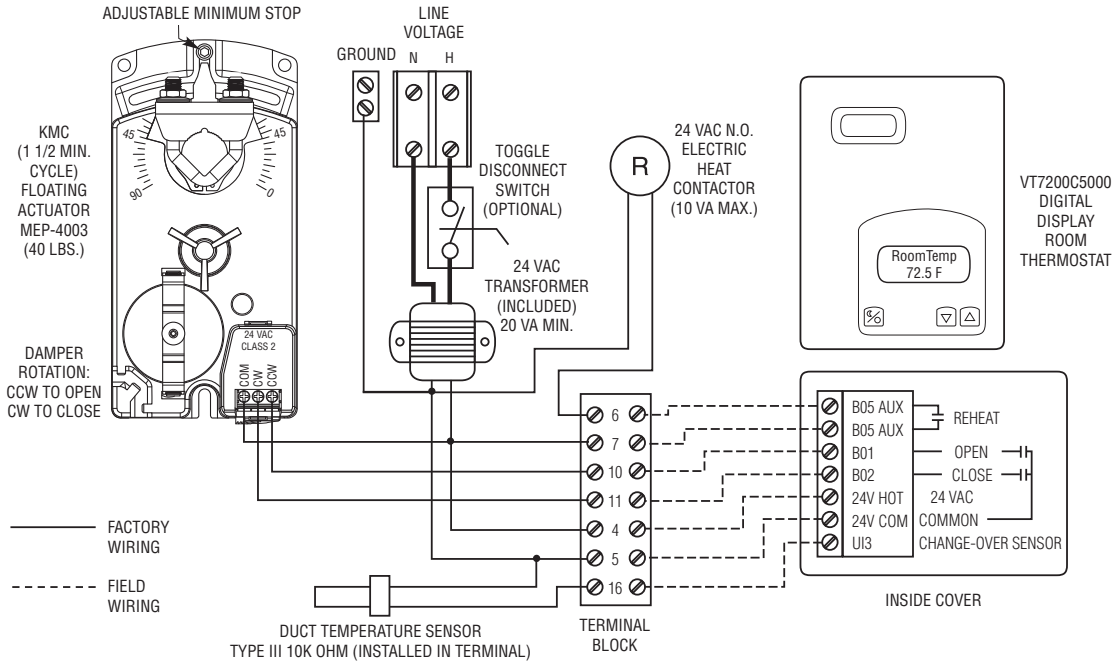




**ANALOG ELECTRONIC CONTROL
BYPASS TERMINAL UNIT
PRESSURE DEPENDENT
MODEL: A34RE E8**



**CONTROL SEQUENCE: E8
AUTOMATIC HEATING/COOLING CHANGEOVER WITH ONE STAGE
ELECTRIC REHEAT (VARIABLE AIR VOLUME)**

Advanced micro-computer electronics and PI control algorithms provide precise temperature control. The thermostat provides a true multi-position modulating output to a tri-state floating actuator. A time proportioning on/off output signal based on a 15 minute duty cycle controls the reheat. This eliminates wasted energy caused by typical on-off cycling with conventional thermostats resulting in significant energy savings and superior comfort. Control accuracy is $\pm 0.4^{\circ}\text{F}$ ($\pm 0.2^{\circ}\text{C}$) around set point. The room occupant is able to reduce the set point to the lowest comfortable setting. A mechanical air volume minimum stop is provided (field set).

Sequence of Operation:

This arrangement is for systems supplying cool air in summer and hot air in winter. A duct temperature sensor senses inlet temperature and automatically reverses control action when supply air is above 78°F (26°C).

Cooling Mode:

Supply air system in cooling mode (below 75°F (24°C)). On a rise in room temperature above set point, the bypass damper will modulate open, increasing the flow of cool air to the room, closing the bypass at the same time. On a fall in room temperature below set point, the bypass damper will modulate closed, reducing the flow of cool air into the room and opening the bypass at the same time. If room temperature continues to fall, the electric heat is energized.

Heating Mode:

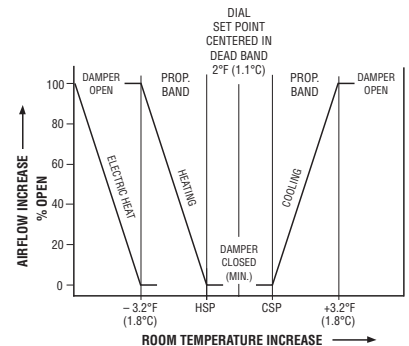
Supply air system in heating mode (above 78°F (26°C)). On a rise in room temperature above set point, the bypass damper will modulate closed, decreasing the flow of cool air to the room and opening the bypass at the same time. On a fall in room temperature below set point, the bypass damper will modulate open, increasing the flow of warm air into the room and closing the bypass at the same time. If room temperature continues to fall, the electric heat is energized.

Notes:

1. The adjustable minimum stop on the actuator must be field set to ensure sufficient airflow over the heating coil (70 cfm [33 l/s] per Kw minimum).
2. The room thermostat requires field configuration. See supplied VT7200 series installation guide.

Options and Accessories:

- Toggle disconnect switch
- Special features:



SCHEDULE TYPE:		Dimensions are in inches (mm).			
PROJECT:					
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:	3 - 22 - 16	3400	2 - 29 - 16	34RECD-E8	