ICM6501

Air Handling Controller
Replaces: ClimaTek/First Company CB201
UL File #: E340851

Mode of Operation

The **ICM6501** air handler control board operates with hot water heating systems. When the thermostat calls for Heat, the control will energize the Water Pump, Valve and Boiler. The blower will energize at the selected speed after 90 seconds to allow the coil to preheat.

Specifications

- **Input Voltage:** 24 VAC, 120/240 VAC, 50/60 Hz
- **Valve:** 24 VAC, 50/60 Hz, 5A
- **Hi/Lo Blower:** 120/240 VAC, 50/60 Hz, 9.8 FLA
- **Water Pump:** 120/240 VAC, 50/60 Hz, 1.5 FLA
- **Boiler:** 24 VAC, 50/60 Hz, 5A
- **Timing:**
  - **Fan on delay:** 0 seconds
  - **Fan off delay:** 45 seconds
  - **Heat fan on delay:** 90 seconds
  - **Heat fan off delay:** 20 seconds

Surrounding Air Temperature Rating:
-40°F to 167°F (-40°C to 75°C)

Jumper Selection

H/L (High/Low Blower speed)

H: Sets the heat blower speed to high.

L: Sets the heat blower speed to low.

⁂ ***Note:*** *This option only applies to the Heat Blower; a fan call will energize the High speed blower regardless of the selected blower speed.*

T/N Jumper (Test/Normal Mode)

T: Test mode, during test mode the pump and valve are energized, after 5 seconds the boiler is energized, 5 seconds after the boiler turns on; the low speed blower is energized, once the low blower turns off; the high speed blower is energized for 5 seconds. At the end of the sequence all outputs are de-energized and normal operation is resumed after 90 seconds.

⁂ ***Note:*** *Jumper must be placed on the test pins prior to applying power.*

N: Normal mode

Optional Switches

HB: If the HB switch closes; the high speed blower will be energized during a heat call regardless of the blower speed selected.

⁂ ***Note:*** *This option only applies to heat mode.*

FP: The FP switch closes if the water coil temperature falls below 40˚F, which energizes the pump, valve and boiler.

⁂ ***Note:*** *There's a 30 second off delay after the FP switch reopens.*

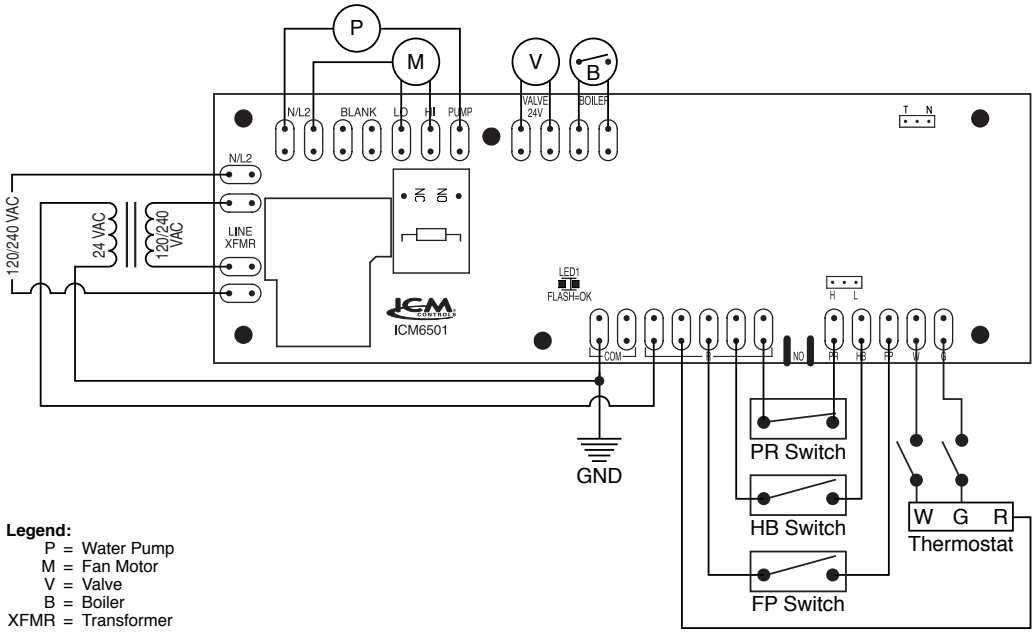
PR: If the PR switch opens during a heating call; the water pump, valve and boiler are turned off immediately. The blower fan is turned off after the 20 second off delay. The heat sequence will restart once the PR switch recloses.

⁂ ***Note:*** *The NO tab must be removed.*

LED Status Description

LED Status	Description
OFF	No Power
0.5 secs. ON, 0.5 secs. OFF	Normal Operation

Wiring Diagram



Legend:
P = Water Pump
M = Fan Motor
V = Valve
B = Boiler
XFMR = Transformer

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