REPLACES:
York: S1-331-03010-000 and S1-331-02956-000

ICM2808
FURNACE CONTROL MODULE

DANGER!

Only trained personnel should install or service heating equipment. When working with heating equipment, be sure to read and understandall precautions in the documentation, on labels, and on tags that accompany the equipment. Failure to follow all safety guidelines may result in damage to equipment, severe personal injury or death.

CAUTION!

Failure to turn off gas and electric supplies can result in explosion, fire, personal injury or death.

(ESD) PRECAUTIONS

Use caution when installing and servicing the furnace to avoid and control electrostatic discharge; ESD can impact electronic components. These precautions must be followed to prevent electrostatic discharge from hand tools and personnel. Following the precautions will protect the control from ESD by discharging static electricity buildup to ground.

1. Disconnect all power to the furnace. Do not touch the control or the wiring prior to discharging your body's electrostatic charge to ground.
2. To ground yourself, touch your hand and tools to a clean, metal (unpainted) furnace surface near the control board.
3. Service the furnace after touching the chassis. Your body will recharge with static electricity as you shuffle your feet or move around, and you must reground yourself.
4. Reground yourself if you touch ungrounded items.
5. Before handling a new control, reground yourself; this will protect the control. Store used and new controls in separate containers before touching ungrounded objects.
6. ESD damage can also be prevented by using an ESD service kit.

Specifications

ENVIRONMENT

Ambient Temperature:

• **Operating:** -40°F to 176°F • **Storage:** -40°F to 185°F

Humidity: 5% to 95% R.H. (non-condensing) @ +55°F

ELECTRICAL RATINGS

Voltage Range: Line (98 to 132 VAC) @ 60Hz

Control Voltage Range: 18-30 VAC @ 60Hz

Relay Outputs: Meets or exceeds O.E.M. board

TIMING

Heat Blower On Delay: 30 seconds

Heat Blower Off Delay: 90-180 seconds

Cool Blower On Delay: None

Cool Blower Off Delay: 60 seconds

Twinning Instructions

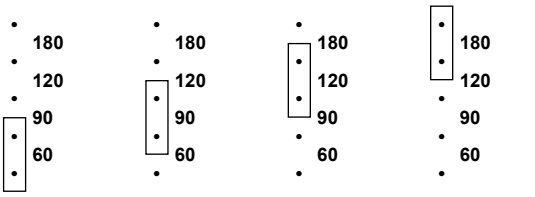
A 3/16" quick connect terminal is provided on the **ICM2808** control board for communication between another **ICM2808** control board for furnace twinning.

To configure your control boards for twinning:

1. Install each control board according to the installation instructions.
2. Connect the TWIN terminals together.
3. Connect the 24 VAC common together. (A common ground between the two furnaces is also required.)

If the 24 VAC supplies to the control are in phase, both furnaces will turn the blower on and off synchronously and at the same speed. If the 24 VAC supplies are not in phase, then neither control will respond to the thermostat commands and the status LED will flash rapidly.

Blower Delay



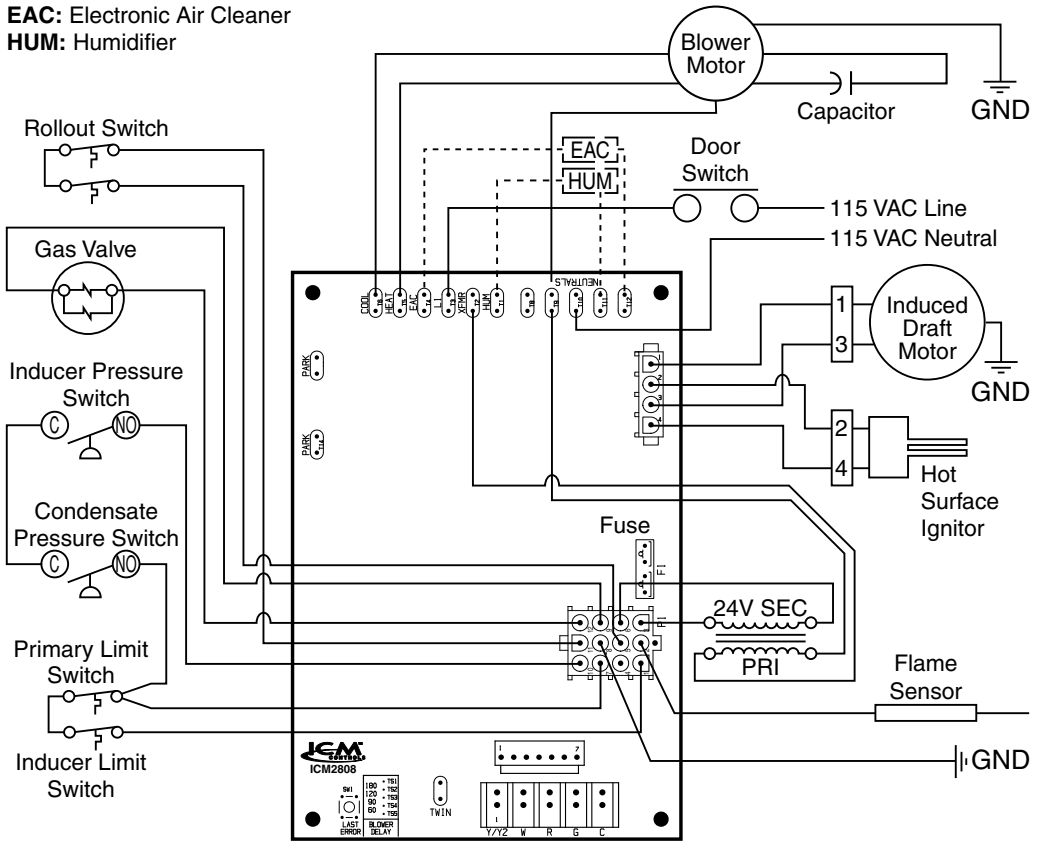
Fault Code Chart

The control has built-in self-diagnostic capability. If a system problem occurs, a blinking LED shows a fault code.

FAULT CODES		
LED Color	Flashes	Fault Condition
Green	Slow Green	Normal operation
Amber	Slow Amber	Normal operation with call for heat
	Rapid Amber	Low flame sense current
	4 Flashes	Y present with no G call
Red	1 Flash	Flame present with gas off
	2 Flashes	Pressure switch stuck closed
	3 Flashes	Pressure switch stuck open
	4 Flashes	Limit switch open / open fuse
	5 Flashes	Rollout switch open / open fuse
	6 Flashes	Pressure switch cycle lockout
	7 Flashes	Ignition lockout due to retries
	8 Flashes	Ignition lockout due to recycles
	9 Flashes	Grounding or line polarity fault
	10 Flashes	Gas flow with no call for heat
	11 Flashes	Limit switch open – blower failure
	Steady On Red	Control failure
	Rapid Red	Twinning error, incorrect 24V phasing

Wiring Diagram

EAC: Electronic Air Cleaner
HUM: Humidifier



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