



ICM716

ECM to PSC Motor Controller



ELECTRICAL SHOCK HAZARD – Before installing this unit, turn off power at the main service panel by removing the fuse or switching the appropriate circuit breaker to the OFF position.

DANGER!

Only trained personnel should install or service heating equipment. When working with heating equipment, be sure to read and understand all 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.

Specifications

- **Motor Voltage:** 120 VAC or 208-240 VAC
- **Input Control Voltage:** 24 VAC
- **Input Frequency:** 50-60 Hz
- **Maximum Blower HP:** 1 HP
- **Size:** 4.95" x 3.95"

Replaces

QwikSwapX3

Mode of Operation

Once all connections are made, the **ICM716** will take the signal outputs from an X13 or SelecTech constant torque ECM motor harness and output to a single phase PSC motor to run the motor. The technician can select a 60, 120 or 180 second off delay by placement of a Jumper on the

ICM716 in the desired location (factory default is 180 seconds).

Calls on pins 1 and 2 will activate the LOW speed winding of the PSC motor.

Calls on pin 3 will activate the MEDIUM speed winding of the PSC motor.

Calls on the pins 4 and 5 will activate the HIGH speed windings of the PSC motor.

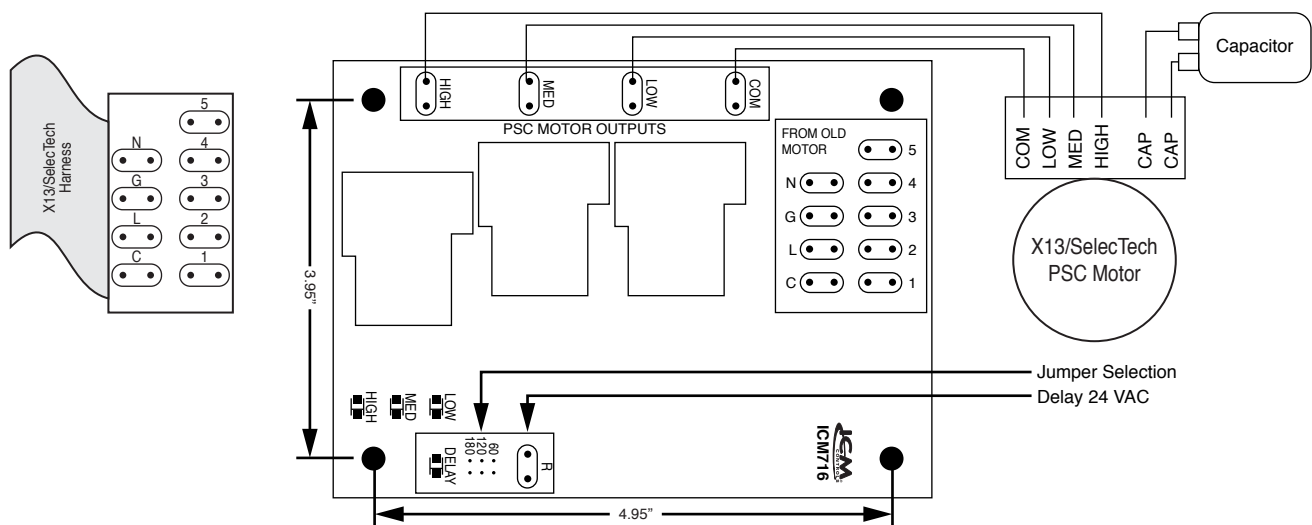
Installation

1. Drill four pilot holes using a #39 (7/64") drill bit. The 4 hole spacing as shown in the wiring diagram below.
2. Mount the **ICM716** circuit board using four #6 X 3/4" sheet metal screws.
3. Connect the X13/SelecTech harness to the **ICM716**.
4. Connect the Common wire of the PSC motor (COM) to the **COM** terminal of the **ICM716** with a 1/4" quick connect.
5. Connect the PSC motor wires according to the PSC motor manual to High, Medium and Low speed terminals on **ICM716** with 1/4 inch quick connects.
6. Wire the PSC motor's capacitor terminals to the appropriate size capacitor rated for the PSC motor.
7. Supply the 24 VAC "R" to the R terminal of the **ICM716** using a 1/4" quick connect if an off delay is desired.
8. Select whether or not you wish to have an off delay of 60, 120 or 180 seconds by placing a jumper in the desired time position and ensuring R is connected.

LED Indicators

- When the **LOW LED** is illuminated the LOW speed relay is activated and the PSC motor will run at Low speed.
- When the **MED LED** is illuminated, the Medium speed relay is activated and the PSC motor will run at Medium speed.
- When the **HIGH LED** is illuminated, the High speed relay is activated and the PSC motor will run at High speed.
- When the **DELAY LED** is illuminated, the OFF Delay on break (post purge) is activated.
- IF ALL LEDs are OFF, this indicates there are no thermostat calls on pins 1,2,3,4, or 5 and all outputs are OFF.

Wiring Diagram



Installation, Operation & Application Guide

LIAF283