

# ELECTRO MATE™

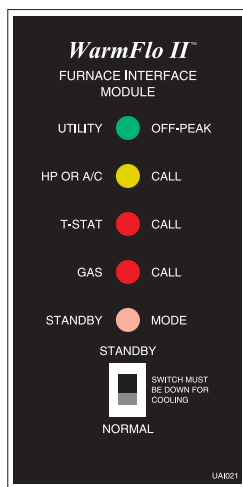
## WarmFlo®

# Heat Pump Package

Where only 5 kW or 10 kW is required with an air source heat pump and gas furnace **dual heat** arrangement, these special models represent a simplified, single enclosure package and easy installation.

The WarmFlo controller and its accompanying EZ3 interface module (sometimes called fossil fuel kit) represents the total electrical control and interface requirement for both the heat pump and gas furnace. Utility load control is also a feature of this system and there is a direct hookup provision.

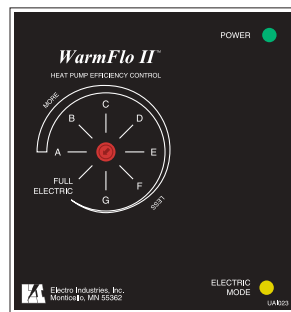
This simplified Electro-Mate unit has the built-in WF-EZ3 and is arranged for standard, 4-wire, heat/cool single stage thermostat. Multi-wire traditional heat pump thermostat is not required for this installation and, in fact, will not correctly operate the system.



FRONT PANEL STATUS LIGHTS

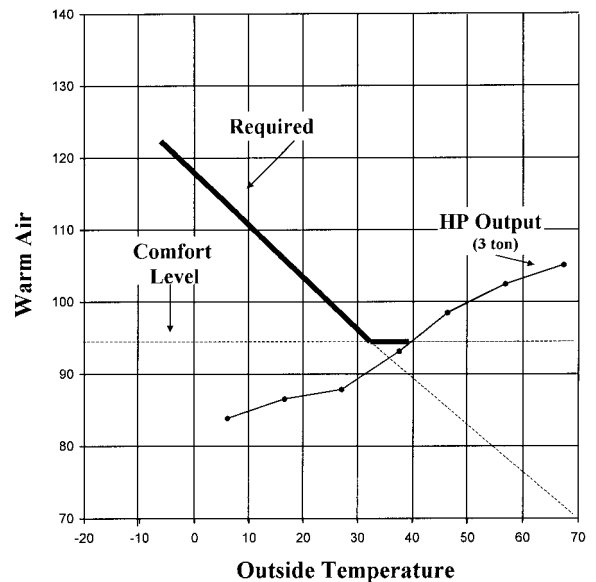
ALSO HAS ELECTRIC TO GAS OVERRIDE SWITCH

FRONT PANEL EFFICIENCY ADJUST



### Controller Logic

- > OUTDOOR AND DUCT SENSING
- > FULL ELECTRIC ELEMENT MODULATION
- > WARM AIR, COMFORT LEVEL SELECTION
- > PROPORTIONAL CONTROL - outlet temperature ramps up with decrease in outdoor temperature
- > FULL KW DEMAND - does not come on unless required by outdoor temperature



The WarmFlo package adds value to the heat pump and gas furnace providing substantial benefits to the traditional dual fuel system.

- ✓ OVERCOMES HEAT PUMP "COLD AIR SYNDROME"
- ✓ ADJUSTABLE MINIMUM WARM AIR TEMPERATURE
- ✓ AUTOMATICALLY TEMPERES THE HEAT PUMP WARM AIR TO THE USER'S DESIRED COMFORT LEVEL
- ✓ ALLOWS THE HEAT PUMP TO BE USED BELOW COMFORT BALANCE POINT
- ✓ PROVIDES A TECHNIQUE FOR UTILIZING THE HIGH EFFICIENCIES OF A HEAT PUMP DOWN TO AT LEAST 0° F
- ✓ GENERALLY PROVIDES \$200 TO \$400 ANNUAL OPERATING SAVINGS\* OVER A BASIC DUAL FUEL SYSTEM

\* Depends upon electric rate, gas fuel cost, etc. Electro Industries has a computer simulation program which can calculate the estimated savings for your specific application. Based upon 8250 degree days, 50,000 Btu/h heat loss, 3.4 cent electric, \$1.00 LP, and Trane XL1200 3-ton; the annual savings is \$446.

**NOTES:**

1. 240VAC ELEMENT POWER IS CONNECTED DIRECTLY TO INSIDE TERMINAL BLOCK. (ONE CIRCUIT, UNDER 10KW, LOCAL DISCONNECT & FUSING NOT REQUIRED.)

2. BLUE WIRES, LOAD MANAGEMENT CONTROL CONNECTIONS, LOW VOLTAGE - EXTEND TO UTILITY CONTROL DEVICE (INTERRUPTS HEAT AND COOL.)

3. 24VAC, 40VA TRANSFORMER MUST BE PART OF A TYPICAL FAN CENTER. EXTEND R AND C TO THE EZ3 BOTTOM TERMINALS. CONNECT THE REMAINING FAN CENTER G AND W POINTS TO THE EZ3 BOTTOM G AND W.

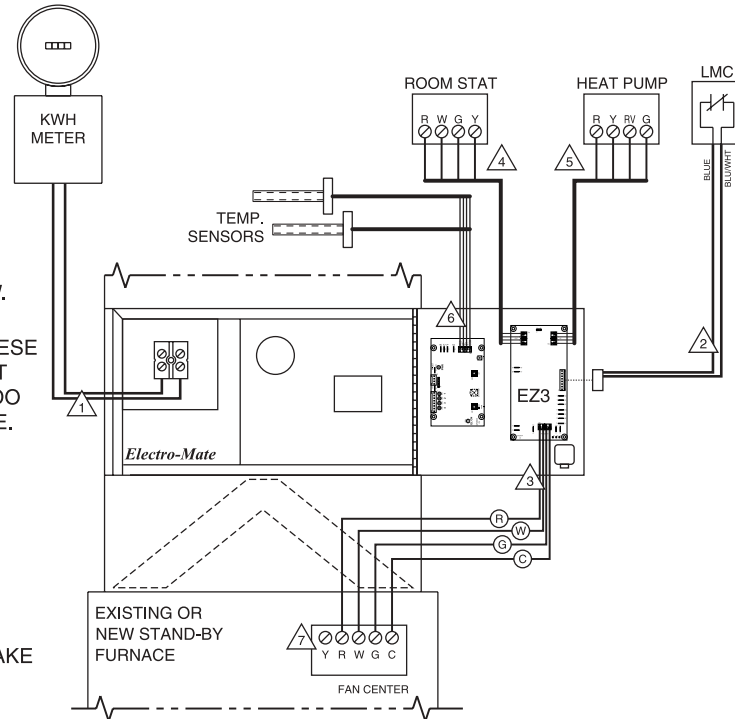
4. CONNECT ROOMSTAT TO EZ3 TOP LEFT TERMINALS - 4-WIRE, LETTER BY LETTER. THESE ARE THE ONLY T-STAT CONNECTIONS, DO NOT USE HP STAT, TWO STATS, OR 2-STAGE STAT. DO NOT RUN ANY T-STAT WIRES TO THE FURNACE. SET HEAT ANTICIPATOR TO 0.2.

5. HP, OUTDOOR UNIT, IS CONNECTED TO THE EZ3 TOP RIGHT TERMINALS - 4-WIRE IS ADEQUATE, LETTER BY LETTER (RV MEANS REVERSING VALVE, "O", OR ORANGE WIRE.)

6. TEMPERATURE SENSORS ARE CONNECTED TO WARMFLO BOARD AS RECEIVED. IF WIRES ARE REMOVED FROM TERMINAL BLOCK TO EASE INSTALLATION, MAKE SURE THEY ARE RETURNED TO THE SAME SCREW. SEE INSTALL MANUAL FOR DETAILS.

7. MULTI-SPEED BLOWER WILL REQUIRE AN ADDITIONAL JUMPER AND A WIRE TO FAN CENTER "Y", SEE INSTALL MANUAL.

**EM-WU\*\*\*H\* Series**  
Basic Hookup



04-07-03  
ES020



**Ordering Information**

<u>Upflow - 18"</u>	<u>Upflow - 15"</u>		<u>List</u>
EM-WU102H8	EM-WU102H5	10 kW	\$795
EM-WU051H8	EM-WU051H5	5 kW	745



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