SLIMLINE

SHP-123

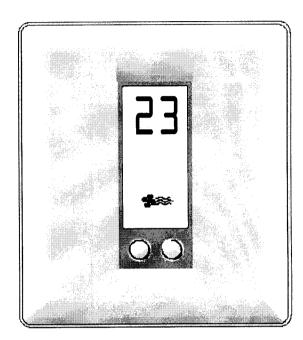


SINGLE COMPRESSOR AUTO CHANGEOVER HEAT PUMP MICROPROCESSOR BASED CONTROLLER 2 HEAT/1 COOL 3 SPEED FAN

GENERAL DESCRIPTION

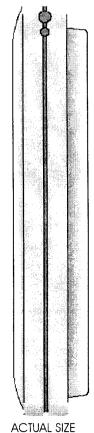
The SHP-123 single compressor Microprocessor based controller is designed for new or replacement residential /commercial heat pump applications. The SHP-123 represents the latest in solid-state surface mount electronics and manufacturing techniques incorporated into an extremely low-profile, ultra-slim white ABS plastic case.

The SHP-123 offers "user-friendly" control of the heat pump system with 3 speed fan, along with an easy-to-read vertical LCD that displays complete operating status. A direct-wire, easy-to-install subbase mounts directly on a standard vertical outlet box or any internal wall surface using supplied hardware provided.



STANDARD FEATURES

- Celcius temperature display
- •Fan selector 3 speed fan
- •Built-in short cycle protection
- •Electronic circuitry replaces conventional mechanical anticipator
- •Internal switch to lock-out the keypad to prevent unauthorized tampering
- •No battery required (always maintains program and mode of operation following power outage of any duration) Except for real time which is maintained for 30 min outage.
- •Copy feature to allow one program to be copied to subsequent days.
- •Smart fan function(fan control with time clock)
- Built-in auxiliary heat light indicator
- •7 day programming with 2 or 4 events per day (selectable)
- •3 hour override (1 hour if keypad disabled via dip switch)
- Continuos override (hold)
- •One free light indicator for HVAC equipment fault indication with switchable LCD icon
- Lockable access cover
- Selectable O or H1 reversing valve outputs
- •Automatic changeover Heat / Cool
- Built-in anticipation and droop
- •Independent circuit switching
- •Selectable minimum run on/off time (2 or 4 minutes)
- •HVAC equipment control using dry contact relays
- Remote indoor sensing modules
- •Optional two zone control with ISOPAC6V-123 control interface +sensor switching



SPECIFICATIONS

Rated Voltage: 20 to 30Vac, DC 24 nominal

Rated A.C. Current: 0.05 to 0.75 Amp continuous

per output, with surges to 3 Amps maximum

Rated D.C. Current: 0.0 to 0.75 Amp continuous

per output, with surges to 3 Amps maximum

Control Range: Heating: 6 to 30 degC in 1 degC steps

Cooling: 16 to 40deg C in 1 degC steps

Temperature Controller

Measurement Range: 0 to 48 degC

Control Accuracy: +/- 0.5 degC @ 20 degC

Minimum Deadband: (between heating and cooling) 1 deg C

Dimensions: 114mm x 102mm x 22mm

Equipment Terminations: R, O, H1,H2, Y,G1, G2, G3

Power Terminations: 24V - power, 24V(c) - power common

RS+V, RS1, RS2

Remote

Sensor Terminations:

┰ Note 1: The 'R' terminal may be ued to accommodate independent switching circuits (MAX 24 VOLTS). If the microprocessor based controller is also the switched voltage, add the jumper wire shown here SHP-123 AIR SWEEP 0000000 Note 1 00 LED Aux. Heat H2 Y G1 R 24\ C Compressor ISQ-3SP OPTIONAL 00 RS2 Õ 24V Neutral RS1 00 Reversing Valve Cool Reversing Valve Heat

OUTPUT TERMINAL FUNCTIONS

Y Compressor R Independant switching voltage

G1 Fan output 24VAC 24 Volts AC Active

G2 Fan output C 24 Volts AC Common

G3 Air sweep LED Free light for status indication (24vac)

H1 Energizes the reversing valve in heat mode RS2

H1 Energizes the reversing valve in heat mode RS2 RS1 Use to connect indoor sensor

O Energizes the reversing valve in cool mode RS+V

H2 Auxilary heat output

SPECIFICATION SUBJECT TO CHANGE WITHOUT NOTICE