

INSTALLATION & SUBMITTAL DATA

Remote Monitoring Panel and Remote Damper Positioner gas-fired duct furnace/make-up air units model series: “D”, “H”, “I”, & “O”



Other panels are available if the standard panel does not meet all control/indication functions required. The following are available options:

Available Indicator Light Tags (panel holds 2 to 6 lights):

| | |
|------------------|-------------|
| Heat On | Cool On |
| Blower On | Evap On |
| Blower On (High) | Smoke Alarm |
| Blower On (Low) | Power On |
| Dirty Filters | |

Available Switch Tags (panel holds 1 to 3 switches):

| | |
|----------------------------|----------------------------|
| <u>2-Position Switches</u> | <u>3-Position Switches</u> |
| Day/Night | Heat/Vent/Cool |
| Occupied/Unoccupied | Summer/Off/Winter |
| On/Off | Heat/Off/Vent |
| Heat/Off | On/Auto/Off |
| High/Low | Cool/Auto/Off |
| Summer/Winter | |
| Heat/Cool | |
| Auto/Off | |

Other Devices Available:

Damper Positioner
Single-Stage Thermostat
Two-Stage Thermostat
Maxitrol Electronic Set Point Adjuster – TD121

AVAILABLE COMPONENTS

Lights: 24VAC, 50/60Hz, 1 Watt

Switches: DPDT (2 position) or DPDT with Center Off (3 position)

Ratings: 10A @ 250VAC, 15A @ 125VAC,
3/4HP 125-250VAC

Thermostats:

Single Stage:

Honeywell T822D1008 – 1A @ 30VAC, 55-95°F, or
Robertshaw CM-260 – 1.5A @ 30VAC, 45-75°F

Two Stage:

Honeywell T874F1015 w/Q674D1040 subbase, 42-88°F
Modulating:

Maxitrol TD121 Set Point Adjuster (requires the addition
of the Duct Sensor, Item code 32731)

Damper Positioner:

Belimo SGF24 Manual Positioner
Power Required: 24VAC, 50/60Hz
Output Voltage: 2-10VDC

Dirty Filter Switch:

Field adjustable switch setpoints between 0.17" and 5.0"
water column. Refer to Literature 5-572 or
MAS5-572 for additional information.

! WARNING

1. Disconnect power supply before making wiring connections to prevent electrical shock and equipment damage.
2. All units must be wired strictly in accordance with wiring diagram furnished with the unit. Any wiring different from the wiring diagram could result in a hazard to persons and property.
3. All wiring must be done with a wiring material having a temperature rating of at least 105°C.

IMPORTANT

The use of this manual is specifically intended for a qualified installation and service agency. All installation and service of these units must be performed by a qualified installation and service agency. Modine manuals may contain excerpts from component supplier literature adapted for Modine products. Any accompanying component supplier literature is for general information.

APPLICATION

The purpose of the remote monitoring panel is to offer control and/or indication of the current operating conditions of a heating/make-up air unit. The standard panel includes 2 lights (labeled “Heat On” and “Blower On”) and a Summer/Off/Winter switch.

INSTALLATION

The remote monitoring panel is to be mounted indoors in an environment free of excessive contaminants such as oil, moisture, and dirt. Mounting holes are provided in the rear of the enclosure for mounting to a wall, terminal box, etc. Conduit entrance knockouts are provided on the sides, bottom, and rear of the enclosure.

If the panel includes a thermostat, follow any accompanying component supplier literature for general installation instructions. The following general points should be observed for best performance:

- Mount the unit approximately 5ft. (1.5m) above the floor on an inside wall with good air circulation at average temperature.
- Mount the unit away from the following:
 - Drafty areas
 - Areas behind doors or in corners
 - Hot or cold air from ducts
 - Sources of radiant heat such as the sun, fireplaces, etc.
 - Concealed pipes or chimneys
 - Areas behind the thermostat that are unheated or uncooled (such as an outside wall)

WIRING

Installation of wiring must conform with local building codes, or in the absence of local codes, of the National Electric Code ANSI/NFPA 70 – Latest Edition. Unit must be electrically grounded in conformance to this code. In Canada, wiring must comply with CSA C22.1, Part 1, Electrical Code.

The remote monitoring panel components are designed to accept the following connections:

- Lights: 3/16" quick connect terminals
- Switches: 1/4" quick connect terminals
- Single or 2-stage thermostats: Screw terminals
- Maxitrol TD121 set-point adjuster: 1/4" quick connect terminals
- Belimo damper minimum positioner: Screw terminals

WIRING DIAGRAM SELECTION

- For system units (factory supplied blower), refer to the job specific unit wiring diagram provided with the unit.
- For deviations to these wiring diagrams or the job specific wiring diagrams, consult the factory.

Figure 2.1
Dimensions of Remote Monitoring Panel (inches)

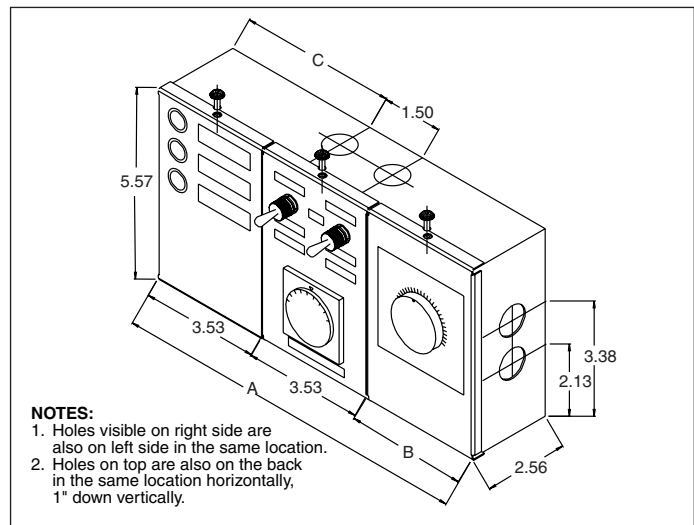


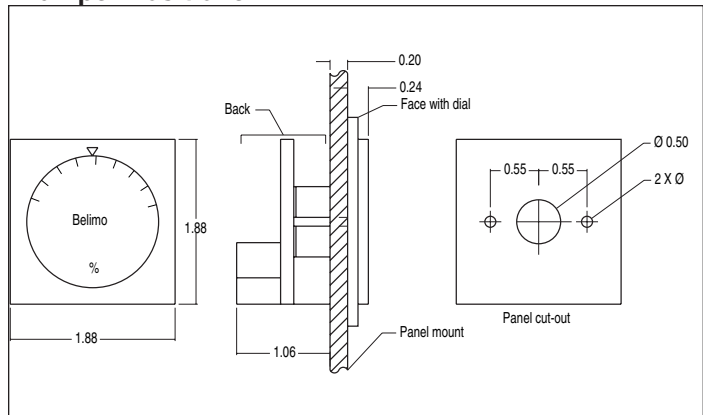
Table 2.1
Remote Panel Dimensions (All dimensions in Inches)

| Remote Panel Type | A | B | C |
|---|-------|------|------|
| Light and Switch Panels Only | 7.06 | – | 2.81 |
| Light and Switch Panels with Single Stage Thermostat or Electronic Set Point Adjustor | 10.60 | 3.53 | 4.58 |
| Light and Switch Panels with Two Stage Thermostat | 13.09 | 6.03 | 5.82 |

DAMPER POSITIONER SETTING INSTRUCTIONS

Damper Positioner (if supplied): The damper positioner (Figure 2.2) is used with a modulating damper actuator to set the minimum percentage of outside air. The damper positioner dial is manually set between 0 to 100% resulting in a 2 to 10 VDC signal being sent to the damper actuator. The control signal DIP switch must be in the 2 to 10VDC signal position. This switch is located on the back of the dial panel.

Figure 2.2
Damper Positioner



Note: For a Remote Damper Positioner (shipped loose), the panel cut-out drawing can be used to drill holes in the panel (by others).