

TROL-A-TEMP®

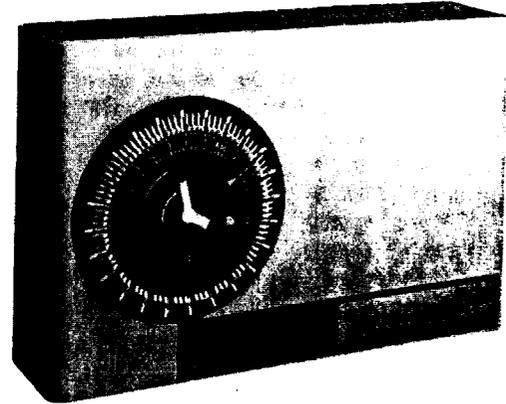
TMACII Timed Make-Up Air Control

PRODUCT DATA

- Meets State Required Ventilation Codes for New Homes in Washington, Oregon, and Montana
- Easy to Wire 24 Volt Control
- 24 Hour Timer Programmable to 15 Minute Intervals
- Remote Override Capability
- Additional Output Contacts for Auxiliary Controls

The Trol-A-Temp® Timed Make-Up Air Control, Model TMAC™ is designed to meet minimum ventilation requirements, including those specified in the Washington, Oregon, and Montana state ventilation codes. The TMAC™ is a self contained timer and relay panel with easy wiring terminal blocks and flip top wiring case. The built-in 24 hour timer can be set up in minimum 15 minute intervals to control the fresh air damper, furnace fan and where required, central exhaust or bath fan. The TMAC™ System, when utilized with the exhaust fan, meets Super Good Cents specifications for mechanical ventilation.

The TMAC™ System timer when programmed ON opens the fresh air damper, turns on the furnace fan, if not already on, and can also activate one or more exhaust fans. When the fresh air damper opens, outdoor air is drawn into the return air duct system by the furnace fan and circulated throughout the supply air system to each room in the home or office automatically. The TMAC™ System operates independently of the heating and cooling unit allowing your thermostat to still maintain your level of comfort. It also draws the outdoor air through your existing furnace filter or air cleaner providing clean, fresh air comfortably and quietly. When the timer is off, TMAC™ closes the fresh air damper and turns off the furnace fan, provided the thermostat is also not calling for the fan, and any other exhaust fans tied into the TMAC™ system.



The TMAC™ System, besides operating automatically from the timer, can also be operated manually by the override switch on the timer. The override switch allows the occupant to call for ventilation on demand. Other devices such as a humidity control, air quality sensors, etc., can control the TMAC™ to activate the system for ventilation.

The TMAC™ System is almost a necessity in today's modern energy efficient homes. Today's homes are well insulated and provide little chance of any outdoor ventilation without opening the windows. TMAC™ provides a perfect low cost solution for controlling indoor air pollution.

The TMAC™ has a flip top cover for easy access to the components and wiring terminals. The cover has a hole for the timer face to be visible at all times. The slim, compact design requires minimal space and measures 6" wide x 4" high x 1.5" deep.

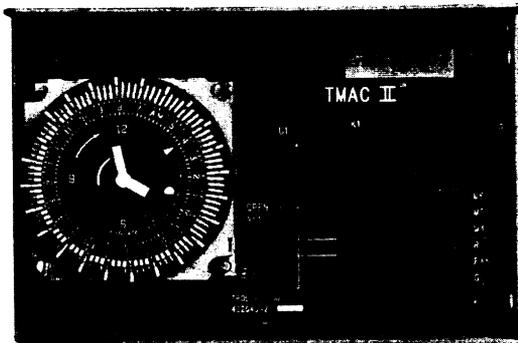
OPERATION

The TMAC™ uses the 24 hour timer to operate the self-contained relay. By setting the white timer levers out, this is the time when the relay will be energized. By setting the levers in, towards the clock face, this is the time for the relay to be de-energized. When the timer is set to be on and energize the relay, the TMAC™ provides 24 Volts to the M1 and M4 terminals to open the spring return damper. It



also breaks the FAN and G contacts and closes the R to G contacts to turn the furnace fan on. If it is necessary to activate additional ventilation fans an external low voltage relay can be energized off the 1 and M4 contacts, with a jumper across terminal 2 and M5, to switch their line voltage. The TMAC™ is made for low voltage and should not be used to control any line voltage device without an isolation relay. The timer can also be manually switched on by the manual switch on the timer face. Placing this switch to the 1 position turns the timer on continuously and keeps the TMAC™ energized until it is shut off. Placing this switch to the O position shuts the TMAC™ off. By placing this switch to the middle position, shown by a clock face symbol, the TMAC™ is activated automatically by the timer levers. The TMAC™ can also be remotely turned on by any set of switching contacts that are placed across terminals 2 and S.

When the TMAC™ timer is off the power is removed from the M1 and M4 terminals and the R and Fan contacts are opened and the Fan and G contacts are closed. The contacts across terminals M4 and M5 also open and M5 and M6 close.



INSTALLATION

After unpacking the TMAC™ from the box,

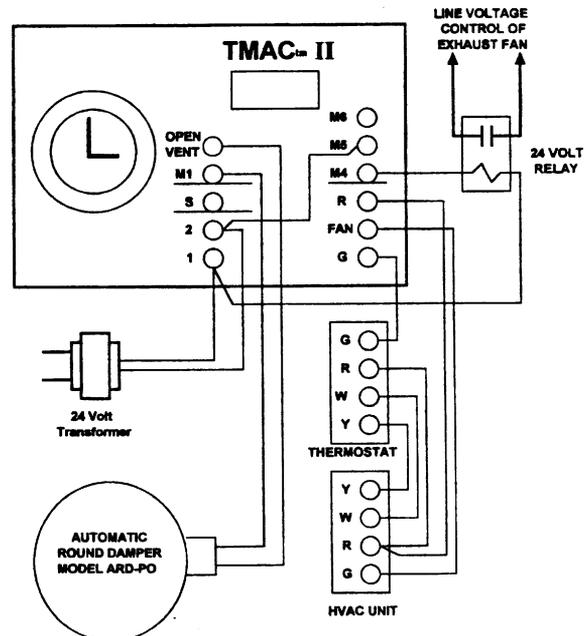
1. Remove the cover from the case.
2. Insert a small screwdriver in the side holes of the case. Lift up each corner of the circuit board to remove from the standoffs.
3. Insert two screws to mount case to any flat surface.
4. After securing, snap circuit board back into case and wire according to the wiring diagram.

CHECKOUT

The TMAC™ is a very simple control to check out only requiring a Volt/Ohm meter.

- 1) Check for 24 volts on terminals 1 and 2. If no voltage or less than 24 volts, check power transformer.
- 2) When time is set for on check for 24 volts on terminals M1 and M4. If no voltage, replace panel.
- 3) Check for continuity across terminals M4 and M5 and the G and Fan terminals. If no continuity, replace panel.
- 4) If timer does not keep proper time, replace timer.

WIRING DIAGRAM



The TMAC™ uses an existing forced air system to introduce fresh air into the system without uncomfortable drafts or unsightly outlets. The TMAC™ activates a 24 Volt damper in the fresh air duct to control when fresh air is induced into the system. It is recommended that 1/4" mesh cover the opening to outside to prevent bird and rodent entry. Do not use insect screen. The TMAC™ may also be wired to activate a central exhaust or bathroom to provide a balanced system.

Honeywell

Home and Building Control
 Honeywell Inc.
 Honeywell Plaza
 P.O. Box 524
 Minneapolis MN 55408-0524

Home and Building Control
 Honeywell Limited-Honeywell Limitée
 155 Gordon Baker Road
 North York, Ontario
 M2H 3N7