

Installation Instructions for **HMI** HOYME Adaptor 1102-TWP 120Vac Controlled Line Voltage to Switch 24Vac

Installation Of This Adaptor Shall Be In Accordance With The Requirements Of the Authorities Having Jurisdiction.

Refer also to HOYME Installation Instructions: Combustion Inlet Air Control Damper, Series HOM; Replacement/Ventilation Air Control Damper - HAC; ADP-1101-05A.

ADP-1102-TWP



4" x 5" x 2 1/2"
101 x 127 x 64 mm



This Adaptor is an automatic switch to open a **24Vac** Replacement/Ventilation damper during the **ventilation** cycle and/or during the **firing** cycle of the furnace. By connecting the Adaptor **120Vac** relay coil to the controlled line voltage of an exhaust fan and connecting the **24Vac** circuit to the furnace terminals, the exhaust fan, the furnace fan and the inlet damper will all operate simultaneously. The inlet damper will also open during the **firing cycle of the furnace by connecting 24Vac relay to "W" and to "C" of the furnace.**

Fitness of this Adaptor/Damper combination to satisfy air supply requirements for fuel fired appliances during operation of the interconnected exhaust fan(s) shall be investigated by the enforcing authorities.

Air intake duct installation shall be in accordance with: In Canada - CAN/CSA B149 & B139; In the USA – ANSI/NFPA 54, 2006, ANSI Z223.1 and/or

local codes including local codes relating to ventilation air duct installation.

I.D.: **ADP -1102 - TWP**;

- 1 - DPDT Relay Coil -120Vac Points 24Vac 5A
- 1 - SPDT Relay Coil - 24Vac Points 24Vac 5A

-Adaptor line voltage leads, connected to the exhaust fan controlled line, shall be suitably cabled, fastened and enclosed in suitable raceways.

-Always refer to local and applicable codes.

-Always conduct a thorough check-out after installation is complete.

-Affix appropriate labels and follow instructions and warnings on each label.

Connecting the Adaptor ADP-1102-TWP to a controlled 120Vac Designated Ventilation Exhaust Fan circuit, to the heating appliance and to a 24Vac Inlet damper:

1. Install motorized air control damper as per instructions supplied with it.
2. Turn off electrical power supply to appropriate appliance(s).
3. Connect Adaptor line voltage leads to the controlled exhaust fan circuit as per wiring diagram. Follow applicable codes.
4. Connect **Adaptor terminal #5** to furnace terminal 'R'.

Connecting Damper to Adaptor and Furnace:

5. **(a)** If the inlet damper is a **Power Close** type, connect one damper wire to **Adaptor terminal #2** and the other damper wire to furnace 'C'.

(b) If Inlet Damper is (**P**ower **O**pen) type, then connect one wire to **Adaptor terminal #1** and the other wire to furnace '**C**'.

CONNECTING FURNACE CIRCULATION FAN TO OPERATE DURING EXHAUST FAN CYCLE:
(This installation will not interfere with A/C circuits.)

6. (a) Disconnect the thermostat wire '**G**' (if used) from the furnace terminal '**G**' and connect it to the Adaptor terminal #3(**G_T**).

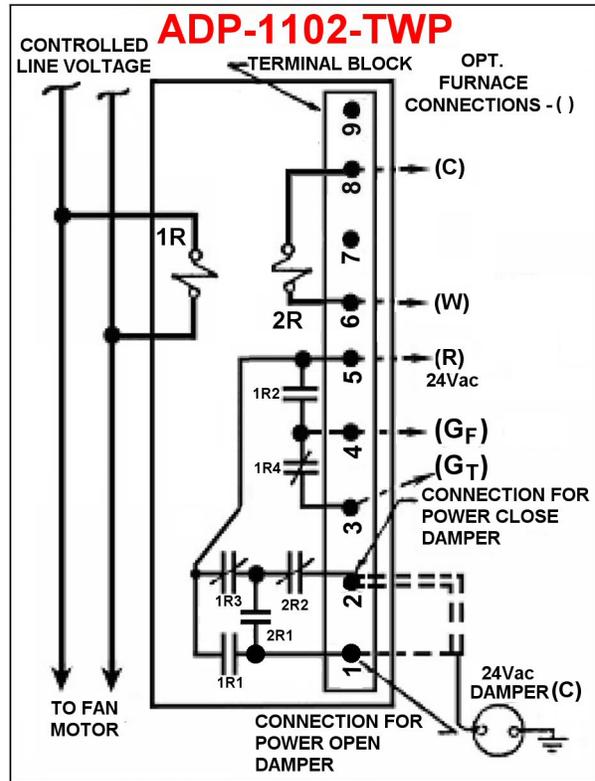
(b) Connect Adaptor terminal #4(**G_F**) to the furnace '**G**'.

7. Turn on electrical line power to appliance(s). If damper is a **P**ower **O**pen type, it will remain closed at this time. If damper is a **P**ower **C**lose type, it will close at this time.

8. Turn on exhaust fan switch. Exhaust fan, furnace fan and inlet damper will operate simultaneously.

IF DAMPER IS TO OPEN DURING FIRING OF THE FURNACE,

7. Connect **Adaptor #6** to Furnace '**W**' and **Adaptor #8** to furnace '**C**'. Damper will remain open during firing for complete combustion and will close to save energy when furnace fire stops.



Note:

This marking is also on label to be affixed adjacent to appliance wiring diagram.

Additional wire shall be of the same size as originally used when completing electric circuits.