

Installation Instructions for **HMI** HOYME Adaptor 1103-TWP 24Vac/120Vac Controlled 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: Replacement/Ventilation Air Control Damper – HAC-0x10-OPC/PO; ADP-1101-05A; ADP-1102-TWP.

ADP-1103-TWP



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



This Adaptor **ADP-1103-TWP** is an automatic switch to actuate a 24Vac Replacement Ventilation air damper to open while running a designated exhaust fan **or** during the firing cycle of one or the other of **two furnaces sharing a common fresh air duct**. Running the exhaust fan will simultaneously cause the replacement air damper to open and the main furnace fan only to run. The firing of either furnace will also cause the replacement air damper to open.

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-1103-TWP

Two Relays SPDT: Relay Coil 24Vac.
One Relay DPDT: Relay Coil -120Vac.
All Contact Points – 24Vac – 5 Amps.

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

-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-1103-TWP to a controlled 120Vac Designated Ventilation Exhaust Fan circuit and to the Replacement Ventilation HAC Damper.

1. Turn off electrical power supply to appropriate appliance(s).
2. **Choose** one of the furnaces as **the main appliance** and install the 'HAC' motorized air control damper in the duct as per instructions supplied with it. Satisfactory operation of the inlet damper is recommended before interconnecting to the Adaptor.
3. Connect Adaptor line voltage leads (120Vac) to the controlled exhaust fan circuit as per wiring diagram. Follow applicable codes.
4. Connect **Adaptor terminal #5** to the '**R**' terminal (24 Vac) of the main furnace.
5. Connect **Adaptor terminal #2** to one of the two wires of the **Power Close** type HAC' damper or **Adaptor terminal #1** to the **Power Open** type.

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6. Connect the other wire from the damper to the furnace terminal (C) or to a furnace ground screw. (See wiring diagram).

7. (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'.

8. Turn on electrical line power to the main furnace. If damper is a Power Open type, it will remain closed at this time. If damper is a Power Close type, it will close at this time.

9. Turn on exhaust fan switch. Exhaust fan, main furnace fan and inlet damper will all operate simultaneously at this time.

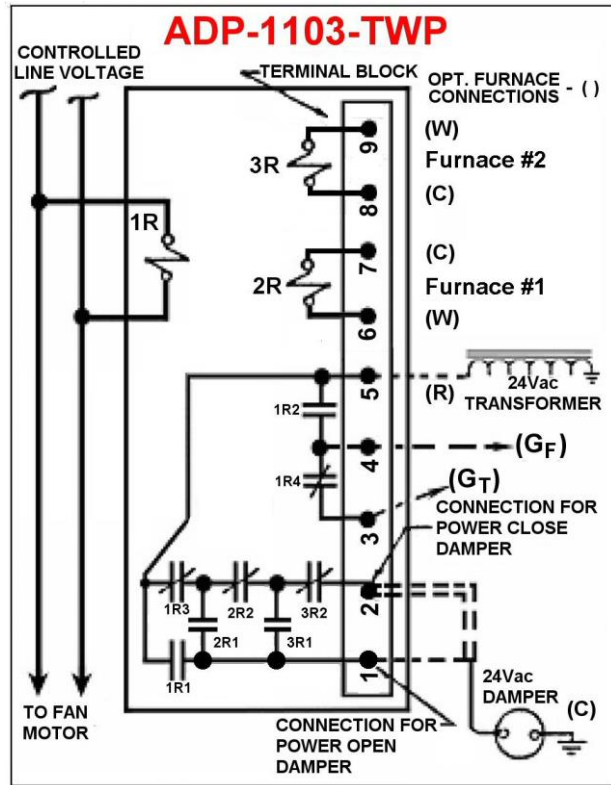
Connecting the Thermostat to the Adaptor for the HAC Damper to open during furnace firing. (Turn off main power to each furnace):

a) MAIN FURNACE - Connect Adaptor #6 to Furnace (W) and connect Adaptor #7 to furnace (C) or ground screw.

b) SECONDARY FURNACE - Connect Adaptor #9 to (W) of the secondary furnace and connect Adaptor #8 to furnace (C) or ground screw.

9. Turn power on to each furnace and turn the thermostat up for each furnace to fire. Damper will open during each firing cycle of either furnace and close to save energy when the furnace fire stops.

**Schematic Wiring Diagram of Adaptor
ADP-1103-TWP**



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.