

Installation Instructions for **HMI** HOYME ADP- 1103-TPX

A Control Centre that Interlocks a 24Vac Ventilation Fresh Air Inlet Damper with End Switch to a 120Vac Exhaust Fan, Furnace Fan and Thermostat

Installation of this Adaptor shall be in Accordance with the requirements of the Authorities having Jurisdiction.

Refer also to **HMI** HOYME Installation Instructions: **TMADP-1102-TPX** control centre with 24Vac Timer; **ADP-1101-05A** Controlled Line to 24Vac switching; **ADP-0241-05A** Controlled 24Vac to Line switching; **ADP-1102-TPX** Interlocks 24Vac damper with end switch to 120Vac Exhaust Fan circuit.

ADP-1103-TPX



This adaptor with 3 relays acts as a control centre activated by a manual 120Vac ventilation switch to:

- (1) Open a 24Vac fresh air inlet damper equipped with an **end switch**;
- (2) Simultaneously turn on the furnace fan;
- (3) Turn on a 120Vac exhaust fan **after** damper proves to be open (**interlocked**); and
- (4) **In addition**, the inlet damper will also open during furnace firing.

***Note:** If a damper **without and end switch** is used, a jumper wire shall be connected to adaptor terminal #1 and #4 to **simultaneously** activate the exhaust fan, the furnace circulation fan and open a fresh air damper (If used).

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-TPX; comes with 3 relays:
Coil-120Vac, Contacts 5 Amps (DPDT);
Coil-2x24Vac, Contacts 10 Amps (SPDT).

- Adaptor line voltage leads connected to the appliance controlled line voltage shall be suitably cabled, fastened and enclosed in suitable raceways.
- Refer to local and applicable codes.
- Always conduct a thorough checkout after installation is complete.
- Affix appropriate labels and follow instructions and warnings on each label.

1. Turn thermostat to lowest setting.
2. Turn off electrical power to furnace.
3. Turn off electrical power to exhaust fan circuit.

ADP-1103-TPX to 120Vac supply

4. Select suitable location for **Adaptor** and connect to **120Vac** Vent Switch and Fan:
 - a) Connect 120Vac L1 (live) to Fan Switch,
 - b) Connect controlled side of Switch to ADP BLACK wire,
 - c) ADP RED wire to Exhaust Fan live,
 - d) ADP WHITE wire to L2 (common) leading to Exhaust Fan.Refer to schematic wiring diagram. Follow applicable codes.

ADP-1103-TPX to 24Vac

5. Connect **Adaptor** to **24Vac** safety control circuit:

- a) ADP terminal 5 to Furnace R,
- b) ADP terminal 3 to Furnace C,
- c) ADP terminal 6 (Gf) to Furnace G.

NOTE: Thermostat wire G connected to furnace G (if used) is to be reconnected to adaptor 7(Gt).

HAC-0x10-SPO/PC Damper to Adaptor

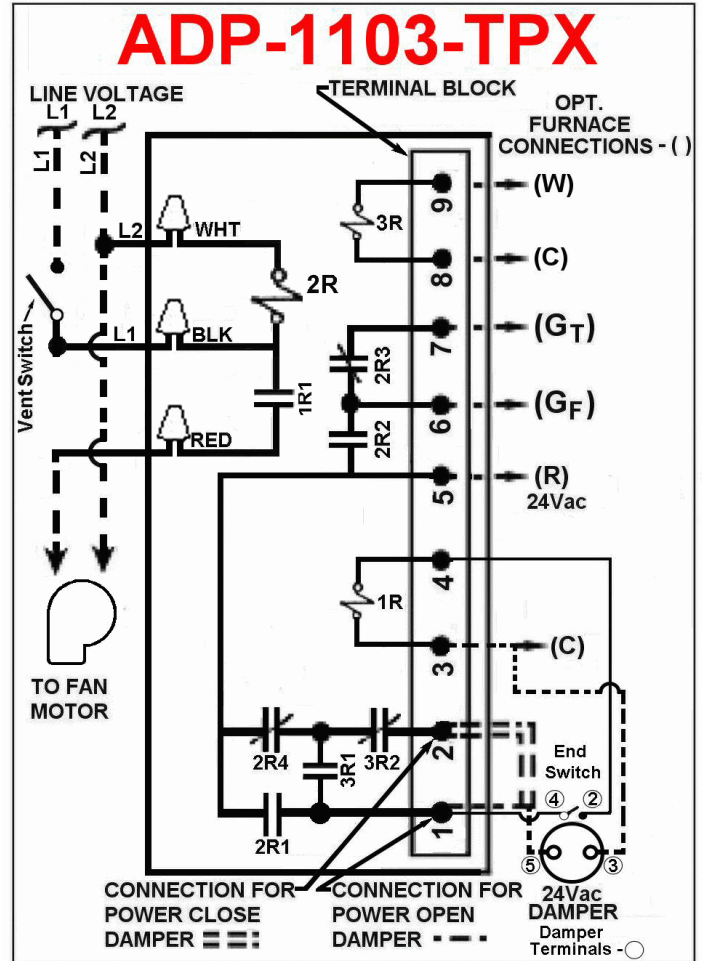
6. Select suitable location for inlet **Damper with end switch** and connect:

- a) Damper terminal 3 to ADP terminal 3
- b) Damper 5 (**PO** type) to ADP terminal 1
or
Damper 5 (**PC** type) to ADP terminal 2
- c) Damper 2 (Switch) to ADP terminal 4
- d) Damper 4 (Switch) to ADP terminal 1

HAC-0x10-SPO/PC Damper to open during Furnace firing

- 7. Connect ADP terminal 8 to furnace C and
Connect ADP terminal 9 to furnace W.
- 8. Turn on 120Vac power supply to exhaust fan switch and 120Vac power supply to furnace.
- 9. Turn on exhaust fan switch. Damper will open and prove to be open before exhaust fan runs. Furnace circulation fan (if not running) will also run. Turn off exhaust fan switch.
- 10. Turn thermostat to call for heat and the damper will open simultaneously with the furnace firing normally.

SCHEMATIC WIRING DIAGRAM ADP-1103-TPX INTERLOCKING FRESH AIR INLET DAMPER WITH END SWITCH TO AN EXHAUST FAN and INTERCONNECTED TO A FURNACE CIRCULATION FAN and THERMOSTAT CONTROL.



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.