

Installation Instructions for **HMI** HOYME ADP-1101-10AS Controls Two Separate Exhaust Fans to Operate Non-Concurrently while the Furnace Circulation Fan and Fresh Air Damper operate for either Exhaust Fan

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

Refer also to HOYME Installation Instructions for: Air Control Damper – HAC-0x10-OPO/PC; Relay Adaptors ADP-1101-05A; ADP-1102-TWP.

ADP-1101-10AS



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



This Adaptor **ADP-1101-10AS** is an automatic control switch designed to operate with **ADP-1101-05A** or with **ADP-1102-TWP** to:

1. Be connected to two exhaust fans, either one to operate from its own exhaust fan switch but is **interlocked** to prevent the two exhaust fans from operating at the same time;
2. To simultaneously turn on the furnace circulation fan for either exhaust fan;
3. To simultaneously open a Replacement/Ventilation damper (if used) for either exhaust fan.

Note: If the replacement air **damper** is to also **open** during the **firing cycle** of the furnace, replace **ADP-1101-05A** with **ADP-1102-TWP**.

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 1930-ch

USA – ANSI/NFPA 54, 2006, ANSI Z223.1 and/or local codes including local codes relating to ventilation air duct installation.

I.D.: **ADP-1101-10AS** comes with two relays with coils in parallel and therefore operate as **one relay**.

DPDT- Coil-120Vac. Points-24Vac- 5 Amps
SPDT- Coil-120Vac. Points 120Vac-10 Amps

- 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.

Note: Adaptor **ADP-1101-10AS** requires interconnection to **either ADP-1101-05A or ADP-1102-TWP**. Use **ADP-1102-TWP** in place of **ADP-1101-05A** if Replacement/Ventilation Damper is required to also open during furnace firing. Refer to appropriate installation instructions for each. Follow applicable codes.

1. Turn off electrical power supply to affected appliance(s).
2. Choose an appropriate location for the two Adaptors and fasten into place with screws.

A) 120Vac Electrical connections to ADP-1101-10AS and to the Exhaust Fan circuits.

3. PRIMARY Exhaust Fan Circuit: Connect the **controlled** 120Vac from the **Primary** exhaust fan switch to the **fan** and to the **Black** and **White** wires of the **ADP-1101-10AS**.

4. SECONDARY Exhaust Fan Circuit: Connect the 120Vac **live** wire directly to one of the **RED** wires of **ADP-1101-10AS** and connect the other **RED** wire directly to the **supply side** of the **Secondary** Vent Fan Switch which controls power to the secondary exhaust fan.

B) 120Vac Electrical Connections for ADP-1101-05A or ADP-1102-TWP to the Controlled side of the SECONDARY Vent Fan Switch.

5. Connect the 120Vac controlled side of the Secondary Vent Fan Switch to the Secondary Vent Fan and to the **Black** and **White** wires of **ADP-1101-05A (-TWP)**.

C) 24Vac Electrical connections to ADP-1101-10AS together with ADP-1101-05A (-TWP) which controls the furnace fan and a Power Open/Power Close (PO/PC) fresh air damper (if used).

6. Connect thermostat **G** to **3(Gt)** of **ADP-1101-10AS**. Connect **4(Gf)** of **ADP-1101-10AS** to **3(Gt)** of **ADP-1101-05A (-TWP)**. Connect **4(Gf)** of **ADP-1101 (-TWP)** to **Furnace G**. Connect terminal **5** of both Adaptors to furnace **R**.

7. a) If an inlet fresh air damper is used (**PO/PC**), connect one damper wire to furnace terminal **C**.

b) For a **PO** damper, connect the other damper wire to terminal **1** of both Adaptors.

- Or -

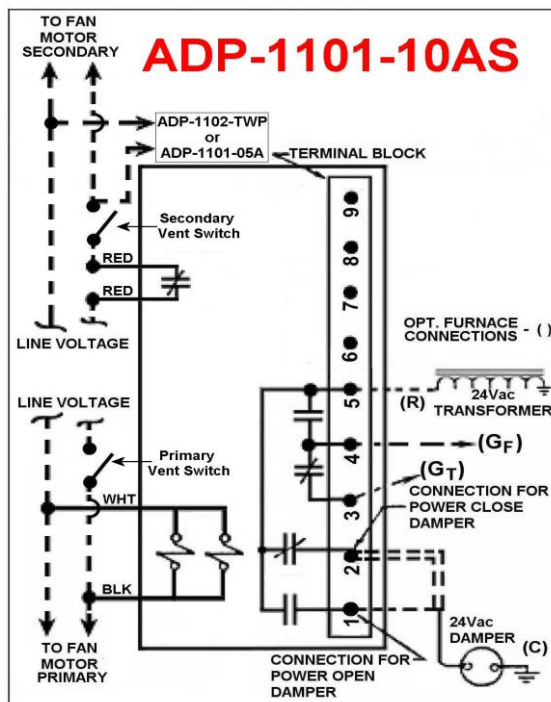
c) For a **PC** damper, connect the other wire to **2** of **ADP-1101-05A (-TWP)**. Disconnect terminal **5** of **ADP-1101-05A (-TWP)** from terminal **5** of **ADP-1101-10AS** and **reconnect** to terminal **2** of **ADP-1101-10AS**.

8. Turn on electrical line power to appliance(s). 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 the **Secondary** Exhaust Fan Switch. The **Secondary** Exhaust Fan, the Furnace Circulation Fan and the Inlet Damper (if used) will all operate simultaneously.

10. Turn on the **Primary** Exhaust Fan Switch. The **Secondary** Exhaust Fan will **stop** while the **Primary** Exhaust Fan will **run**. **Note** the Furnace Circulation Fan and Damper continue to operate.

Schematic Wiring Diagram of Adaptor 1101-10AS
Relay Coils: 120Vac; Points 24Vac & 120VAC-10A.



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.