

Installation Instructions for **HMI** HOYME **Adaptor 0MV2-S5A** Interlocks 24Vac Combustion Air Control Damper To 250mVdc-100 Vdc Safety Control Circuits

INSTALLATION OF THIS ADAPTOR SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.

Refer also to **HMI** HOYME Installation Instructions: 'Combustion Air Control Damper, Series HOM.'

ADP-0MV2-S5A



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

This Adaptor comes with two relays and a printed circuit which senses a 250 mVdc/100 Vdc safety control circuit, opens a 24Vac damper and then signals back to the safety circuit for firing. For line voltage AC safety control circuits, use Adaptor ADP-1102-S5A.

I.D.: ADP-0MV2-S5A Includes:

- Test/Run Switch,
- Printed Circuit Board with Relays
- Main Coil 24Vac. Points 24Vac/5Amps.

- For one appliance, use one Adaptor and one Damper, Series HOM, Type – SF1.
- For two appliances, use two Adaptors and one Damper, Series HOM, Type SF1.
- Adaptor is to be mounted as close as possible to 250 mVdc/100Vdc gas valve.
- Additional wire shall not be spliced to the RED, BLACK or WHITE leads.
- Use an approved 24Vac transformer of adequate capacity (10 VA min.)
- Supply for the primary of the transformer shall be taken from the line voltage supply for the appliance. Follow applicable codes.

- Always conduct a thorough check-out after installation is complete.
- Affix attached wiring diagram label adjacent to appliance wiring diagram label.

Note: Numbers 1 to 6 includes inter-connecting the Adaptor to the Damper.

1. Turn temperature control to lowest setting.
2. Turn off electric power. Add a 24Vac transformer to power the damper closed. (See # 4) Follow applicable Codes.
3. Connect damper wires BLACK (1), RED (2), BROWN (3) to Adaptor terminals 1, 2 and 3 respectively. Note: Connect damper wire BLUE (5) to Adaptor terminal 4.
4. Connect 24Vac transformer wires to Adaptor terminals 3 and 5.
5. Turn on electric power to transformer. Damper will close.
Note: 'TEST/RUN' manual switches on the damper and adaptor are to be in the 'RUN' position.
6. Test for common ground by touching WHITE Adaptor lead to base of gas valve. If sparking occurs, interchange transformer wires on Adaptor terminals 3 and 5.

Note: Numbers 7 to 11 includes inter-connecting the Adaptor to the power pile of a mVdc circuit.

Note: Pilot light to remain burning.

Adaptor leads BLACK and WHITE must be properly matched to the dc polarity of the power pile with the Pilot light burning.

7. Test by touching Adaptor WHITE lead to thermopile wire on terminal (PP) on Coil side of the gas valve while touching Adaptor BLACK lead to remaining thermopile wire. Damper should now open. If no response, exchange Adaptor leads and retest.

8. Connect this WHITE 'lead/thermopile' wire combination to (PP) terminal on coil side of the gas valve. (This might require interchanging thermopile wires for proper polarity of DC current and relight pilot if necessary.)
9. Disconnect temperature control wire leading to the TH terminal on gas valve coil and replace with the Adaptor RED wire.
10. Rejoin the temperature control wire to the Adaptor BLACK lead with a screw-on wire connector.
11. Turn temperature control to call for heat. Damper will open and heating appliance will operate normally.

Note: Numbers 12 to 17 includes interconnecting the Adaptor to dc circuits other than the mVdc.

SAFETY NOTE:

Higher voltage requires EXTRA CAUTION.

12. Adaptor leads BLACK and WHITE must be properly matched to the dc polarity of the safety circuit.

13. Test by touching Adaptor WHITE and BLACK wires to the dc source leading to the gas valve. If damper does not open, reverse the Black and WHITE leads and the damper will open. Note this polarity combination.

SAFETY NOTE: With voltages other than mVdc, turn the supply power off.

14. Connect the WHITE lead wire to the gas valve as per polarity combination found in 7.

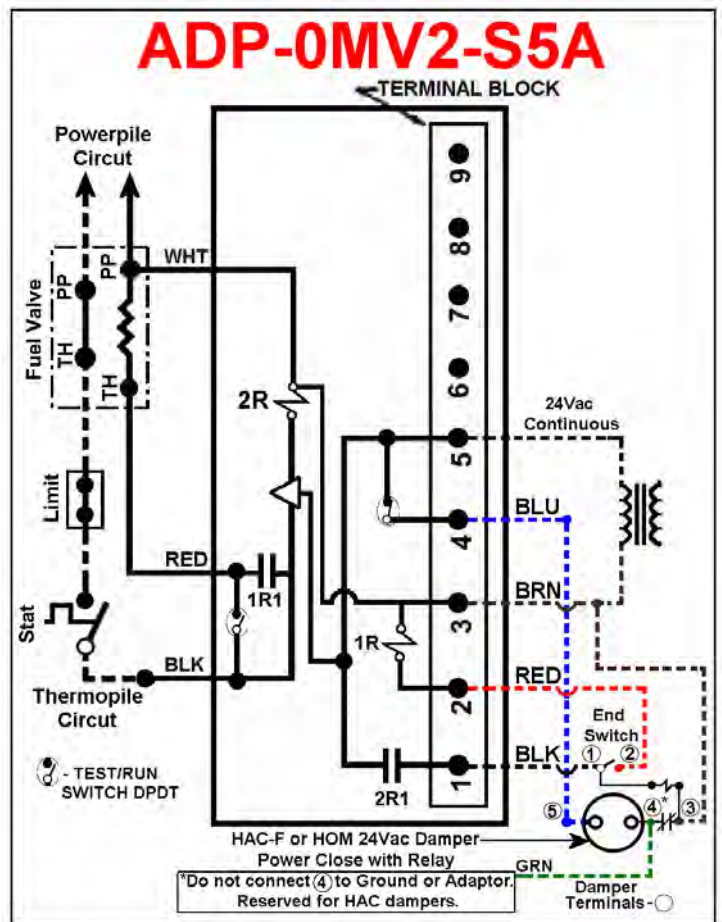
15. On the other side of the gas valve disconnect the dc wire and replace it with the Adaptor RED wire.

16. To the wire removed in #9 connect the Adaptor BLACK wire with the wire nut supplied.

17. Turn on the power. Turn temperature control to call for heat. Damper will open and heating appliance will operate normally.
- ON DC CIRCUITS OTHER THAN mVdc circuits, the BLACK and WHITE leads shall also be matched to the dc polarity of the safety circuit.

CAUTION: Adaptor leads BLACK, RED and WHITE are to be connected to the 250mVdc-100Vdc safety circuit only.

SCHEMATIC WIRING DIAGRAM FOR COMBUSTION AIR CONTROL DAMPER INTERLOCKED TO MILLIVOLT SAFETY CONTROL CIRCUIT USING ADAPTOR '0MV2'.



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

Additional wire shall be of the same size and type as originally used when completing the above circuit.