



Dual Seal Instructional Sheet

**Electronic Pressure and Temperature
Transmitter-Switch
One Series Models with Option M041**



UNITED ELECTRIC
CONTROLS

Installation Instructions

Please read all instructional literature carefully and thoroughly before starting. Refer to the final page of the installation manual for the listing of Recommended Practices, Liabilities and Warranties.

INSTALLATION REQUIREMENTS (ANSI 12.27.01)

The One Series Dual Seal (option M041) contains a fixed header with attached wiring. The sensor and unit head must never be rotated more than 360° in either direction (clockwise/counterclockwise) from the original factory position or permanent wiring damage could occur. To prevent damage due to rotation never loosen the 1 3/4" union nuts (2) located on the dual seal prior to installing the unit. The installation steps below must be followed in the sequence given:

- 1. Connect unit to pressure port:** The unit must be connected to the pressure port using the wrench hex(s) at the sensor only. The gage pressure sensor has a 1 1/6" wrench hex. The differential pressure sensor has (2) 3/4" wrench hexes.
- 2. Mount the Dual Seal housing:** Loosen (but do not remove) the lower 1 3/4" union nut located on the dual seal to allow orientation of the union housing up to 180° in either direction (clockwise/counter clockwise). The head of the unit must then be securely mounted to a back plane support as instructed in either IM_ONEX-04 or IM_ONE_SAFETY-03. The sensor & dual seal are not designed to support the weight of the unit head when installed.
- 3. Orient the Dual Seal vent:** Loosen (but do not remove) the upper 1 3/4" union nut located on the dual seal. With the sensor & unit head secured, and with both the upper & lower union nuts loosened, the union housing (containing the vent) may be oriented as desired. The two union nuts must be tightened to 15-20 ft-lbs to complete the installation.
- 4. Connect the vent (optional):** The vent provides visual annunciation of a primary seal failure. The vent must be kept free of any debris. The vent may be left open to the atmosphere. If desired, the vent may also be connected to a collection system using the 1/8" NPT thread provided.



NOTE: ALL WARNINGS REFERENCED IN IM_ONEX-04 AND IM_ONE_SAFETY-03 APPLY TO DUAL SEAL OPTION M041.



THIS INSTRUCTIONAL SHEET IS TO INFORM YOU THAT WHEN YOU CHOOSE DUAL SEAL OPTION M041, THE INSTRUMENT WILL NOT COVER GAS GROUP A "ACETYLENE" FOR cULus APPROVAL.

THIS EQUIPMENT IS SUITABLE FOR USE IN NON-HAZARDOUS LOCATIONS AND THE FOLLOWING HAZARDOUS LOCATIONS:



Class I, Div. 1, GRPS B, C, D
Class II, Div. 1, GRPS E, F, G
Class III
Class I, Zone 1, AEx d IIC T3/T5*
Class I, Zone 1, Ex d IIC T3/T5*
Enclosure Type 4X, IP66
2X2D, 2X3A, 2X4D: -40°C ≤ TAMB ≤ +85°C (-40°F TO +185°F)
2XLP, 8X2D: -40°C ≤ TAMB ≤ +80°C (-40°F TO +176°F)
4X3A: -40°C ≤ TAMB ≤ +70°C (-40°F TO +158°F)

THIS EQUIPMENT IS ATEX CERTIFIED SUITABLE FOR APPROPRIATE USE IN GAS ZONE 1 & DUST ZONE 21 APPLICATIONS.



DEMKO 09 ATEX 0813748X
II 2 G Ex d IIC T3/T5*
II 2 D Ex tb IIIC T+90°C Db, IP66
2X2D, 2X3A, 2X4D: -40°C ≤ TAMB ≤ +85°C (-40°F TO +185°F)
2XLP, 8X2D: -40°C ≤ TAMB ≤ +80°C (-40°F TO +176°F)
4X3A: -40°C ≤ TAMB ≤ +70°C (-40°F TO +158°F)

THIS EQUIPMENT IS IECEx CERTIFIED, SUITABLE FOR APPROPRIATE USE IN GAS ZONE 1 APPLICATIONS.



IECEx UL 08.0017X
Ex d IIC T3/T5*
Ex d tb IIIC T+90°C Db, IP66
2X2D, 2X3A, 2X4D: -40°C ≤ TAMB ≤ +85°C (-40°F TO +185°F)
2XLP, 8X2D: -40°C ≤ TAMB ≤ +80°C (-40°F TO +176°F)
4X3A: -40°C ≤ TAMB ≤ +70°C (-40°F TO +158°F)

* Straight pressure sensor models 10-16 have a temperature class of T3, all others T5.

