

## Medium-Pressure Membrane Air Dehydrator

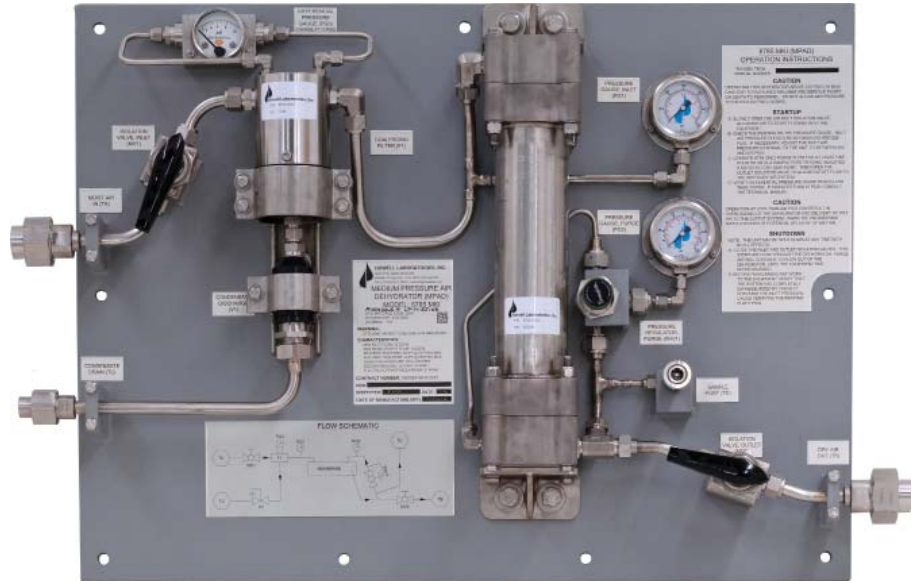
### Features:

- Membrane reliability and simplicity
- Ultra-low maintenance
- Manual startup - automatic operation

### General description

The Model 8785 Mark I Membrane Dehydrator is a self-contained unit designed for continuous, automatic operation. It is designed to provide clean, dry air at medium pressure (200 psig) for functions such as Diesel engine controls. Particulate matter and aerosols are removed by a coalescing filter. Then the filtered wet air is passed through a membrane module to remove moisture, resulting in an ISO 8573.1 Class 1, 3, 1 rating.

The dehydrator has been selected for the LPD 17 San Antonio class.



### Specifications:

Built in accordance with LPD 17 Specification 6259K. Welded in accordance with S9074-AR-GIB-010/278. Fully qualified to MIL-S-901D, High Impact Shock (Grade A), and MIL-STD-167-1, Vibration (Environmental) Shipboard.

#### Inlet air conditions:

- Air flow: To 12 scfm (20.4 m<sup>3</sup>/hr)
- Temperature: 55° to 125° F (13° to 52° C)
- Pressure: 200 to 230 psig (13.6 to 15.6 bar)
- Moisture content: 28.8° F (-1.8° C) dew point maximum at 200 psig (13.6 bar)

**Operating ambient temperature:** 60° to 122° F (Fahrenheit) [15.5° to 50° C (Celsius)]

#### Outlet air conditions:

- Air flow: 10 scfm (17.0 m<sup>3</sup>/hr)
- Pressure drop: 10 psi (0.68 bar) maximum
- Moisture content: -0.2° F (-17.9° C) pressure dew point maximum at 200 psig (13.6 bar)

**Purge flow:** 2.0 scfm (3.4 m<sup>3</sup>/hr) maximum; 1.0 scfm (1.7 m<sup>3</sup>/hr) typical

**Dimensions:** 32 in (81.3 cm) wide by 12 in (30.4 cm) deep by 24 in (61 cm) high, including maintenance envelope

**Weight:** 115 lb (52.3 kg) (actual)

#### Other:

- Design pressure: 250 psig (17.0 bar) except membrane 232 psig (15.8 bar)
- Proof pressure: 375 psig (25.5 bar)

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