**Product Data Sheet** **APD70-C**

APD70-C Automatic Dehydrator, with LP alarm, 0.7 SCFM, 115V 50/60 Hz

## Product Description

The APD20-C series Automatic Pressurization Dehydrator is designed for reliable pressurization of elliptical waveguide, coaxial cable and rigid transmission line systems. The dehydrator includes a self contained completely automated air drying system that utilizes a pressure swing moisture absorption cycle to provide pressurized dry air while continuously purging the collected moisture to the atmosphere. This eliminates the need for replacement or manual reactivation of the desiccant and makes our APD20-C and APD70-C series dehydrators ideal for unattended operation at even remote sites. Dehydrators are also suitable for the average manned working environment since they typically run less than 5% of the time. In most normal applications, APD series dehydrators can be expected to operate for up to five years before any maintenance activities are required.

## Features/Benefits

- The APD70-C Automatic Pressurization Dehydrator is rated at 0.7 SCFM at 115 volts 60 Hz and is designed for operation in larger systems with up to 1,700 ft. of 6-1/8" diameter transmission line.
- From normal room environments the output air has typical dew points of -60°F (-53°C).
- System pressure is controlled by the dehydrator pressure switch settings. Normally, this is factory adjusted to 3 psig (20.7kPa) -on- and 5 psig (34.5 kPa) -off-, but may be readjusted in the field to operate anywhere between 1.5 and 10 psig (10.3 kPa and 68.9 kPa).
- An internal 40 psig check valve guarantees that the customer system stays isolated from the dehydrator's internal system and prevents loss of system pressure due to leakage in the dehydrator.
- For additional safety, a standard low pressure alarm switch , factory-set at 1 psig (6.9 kPa), is installed in the dehydrator.
- The alarm switch contains a set of SPST contacts that can be used for both local and remote monitoring or alarming.
- Additional standard features include a 0-15 psig pressure gauge, indicating power light, and a visual moisture monitor which is dark blue when dry and turns pink when wet.
- The units may be shelf mounted or placed in a 19" EIA relay rack.

## Technical Specifications

| | |
|---|---|
| Product | Dehydrator |
| Dehydrator Type | Automatic |
| System Capacity | Large |
| 60 Hz Output Capacity, l/s (SCFM) | 0.7 (0.32) |
| 50 Hz Output Capacity, l/s (SCFM) | 0.58 (0.27) |
| Output Dew Point, °C (°F) | -40 (-40) |
| Factory Set Output Pressure (on/off), kPa (psig) | 20.7/34.5 (3/5) |
| Field Adjustable Output Pressure (on/off), kPa (psig) | 10.3-68.9 (1.5-10) |
| Output Differential Output Pressure (on/off), kPa (psig) | 13.8 (2) minimum |
| Number of Outlets | 1 |
| Output Fitting | 1/8" FPT to 3/8" plastic tube fitting |
| Operating Voltage, V | 115VAC 50/60 Hz |
| Max. Active Power Consumption, W | 600 |
| Compressor Rating | 1/4 hp |
| Idle Power Consumption, W | 10 |
| Dimensions, H x W x D mm (in) | 297 x 382 x 203 (11.7 x 15 x 8) |
| Net Weight, kg (lb) | 17 (37) |
| Ambient Temperature Range °C (°F) | 1 - 49 (33 - 120) |
| Ambient Humidity Range,relative % | 95 |
| Low Pressure Alarm | Factory set for 1 psig (P/N 916814-001) 0.5 psig differential. |

## Notes

## Other Documentation

Service Manual: APD-C Series Service Manual 412822 Rev B.pdf

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**APD-70/72/73 Maximum Dehydrator Capacity Ratings**

| Transmission Line | Approximate Length Feet (m) |
|---|---|
| 7/8" | 73,000 (22,200) |
| 1-5/8" | 24,000 (7,300) |
| 3-1/8" | 7,300 (2,200) |
| 6-1/8" | 1,700 (500) |
| 6 to 12 GHz Waveguide | 28,000 (8,500) |
| 4 to 5 GHz Waveguide | 14,000 (4,300) |

*Based on 2 hour continuous running.

Capacity Ratings

**APD70-C Factory-Attached Options**

| Model Number | Description |
|---|---|
| 940019-C-BVF | Bleeder Valve |
| 940019-C-HAF | Humidity Monitor with Bleeder Valve |
| 940019-C-TAF | Timer Alarm |
| 940019-C-HTAF | Humidity Monitor with Timer Alarm |

Order information