



12436 Waveguide Dehydrator

The DRALLIM Waveguide Dehydrator Type 12436 has been designed specifically for supplying low pressure dry air to Waveguides and Aerial feeders.

The "Standard" unit supplies a maximum of 5.0 psi; the 12436/H3 version 15.0 psi.

It is an energy saving integrated unit which occupies only three units (133mm) of panel space within a 19" equipment rack.

The Dehydrator utilises a well proven heatless reactivation system capable of supplying dry air at a dewpoint of -35C via three outlets to which 1/4" OD tubing can be connected. Adaptors are available if this size is not to user requirements.

An automatic wet air by-pass facility is provided such that any insufficiently dried air is directed to atmosphere and prevented from entering the waveguide/aerial.

The inclusion of an air storage vessel allows for a regulated flow of air to the outputs with the capacity to produce in excess of 7 cu. ft/hr. The compressor does not run continuously, nor "hunt" in operation, as a reserve of air is always available.

Installation is straight forward. The only user adjustment necessary is the setting of the output pressure regulator and connection to the waveguide itself. All controls are located on the front panel. The provision, at the rear of the equipment, of an alarm output connector enables external monitoring of low pressure, high humidity and mains failure conditions.



WAVEGUIDE DEHYDRATOR TYPE 12436 DATA SHEET



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PRODUCT SPECIFICATION

1 Environmental Considerations

Operating Voltage 230V A.C. 50Hz single phase
Removable mains lead and plug supplied.

Current consumption – maximum: 1.2A

Temperature Ambient operating temp. 0 to 45 C (32-113 F)
19" high x 378mm deep.

Fixings To suit 19" equipment rack in standard 3U space.

Mass 17.5kg

2 Operational Features:

Compressor 1/10HP rocking piston pump (100psi max.)
Stop/start pressure 20 - 40 psi.

Minimal transmission of vibration - compressor fitted via rubber mounts.

Air Drier Twin bed heatless pressure reactivated adsorption type. Each bed on line 1 min / regenerating 1 min.
Automatic changeover by electro-mechanical process timer with memory.
Desiccant, grade 4A molecular sieve, 3-5mm.
Inlet and outlet filtration by sintered 35 micron bronze filters at each drier bed port. Output dewpoint detection circuit with associated indication facilities

Humidity Detection Automatic bypass to atmosphere of any insufficiently dried air. Set to operate at -18°C
Fail safe operation

Dry Air Storage Internal moulded polyethylene air storage vessel provides a 0.7 litre reserve of dry air.
Moulded from flame retardant material.

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Dry Air Output

Pressure Controlled by front panel mounted tamperproof (relieving type) regulator.
0.5 - 5.0 psi 12436
0.5 - 15.0 psi 12436/H3

Flow 7 ft³/hr at any set output pressure.

Dewpoint Better than -35°C.

Connection 3 outlets to suit 1/4" OD Tube at rear of unit.

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Alarm Indication

Visual High Humidity (Red) i.e. output being bypassed to atmosphere.
Low Output pressure (Red) adjustable, factory set at approx. 0.5 psi.

Extended Rear mounted "D" type connector provided to enable remote indication of all normally open and normally closed volt free contacts provided for each of:

- a. Mains Fail
- b. High Humidity (vessel/w.guide not filling)
- c. Low Output Pressure

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Monitoring/Control

Electrical Combined on/off switch/lamp and circuit breaker.
Total running hour meter to indicate compressor usage, permanent LCD display

Pneumatic "Compressor" pressure gauge 0-100psi
"Receiver" pressure gauge 0-100psi.
"Output" pressure gauge 0-15 psi.
Total flow indicator 0.5-10ft³/hr.
Tamperproof precision output regulator (accurate within 10mbar over operational range of equipment).