

# Specification Manual

# **Devair High Temperature Dryers**

Model 'HTD18' 18 CFM Dryer Unit

'HTD26' 26 CFM Dryer Unit

**'HTD37'** 37 CFM Dryer Unit

'HTD52' 52 CFM Dryer Unit

Phone: (705) 728-5657 Fax: (800) 561-1663 Email: sales@dvair.ca Web: www.dvair.ca

## **General Information:**

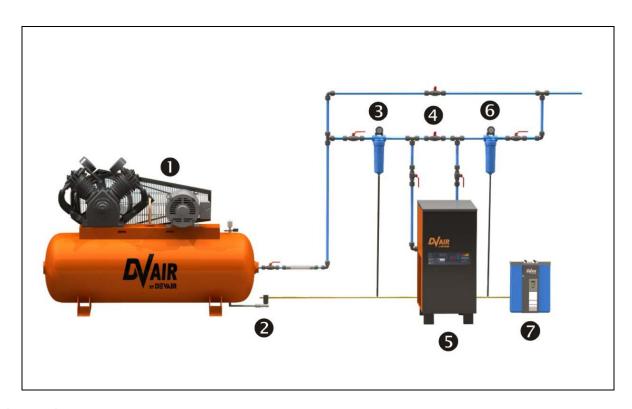
#### The Function of the Dryer:

Refrigerated Air Dryers are a cost affective means of eliminating moisture from compressed air by means of lowering the temperature of the air to approximately 3°C. As the compressed air temperature is lowered, the moisture contained in the air is separated by means of stainless steel baffles, and then further discharged by means of an electronic automatic drain. (The electronic drain is preset at the factory to drain for one second every minute. Changing these settings to suit your particular application will be dealt later.)

To limit the size of the Dryer Unit, an internal heat exchanger is used. The heat exchanger allows the cold air exiting the Unit to cool the warmer air entering the Dryer.

Once the air passes through the Dryer Unit, it is virtually humidity-free.

#### **Typical Dryer Installation:**



#### Legend:

1. Air Compressor Unit: Compresses ambient air at atmospheric pressure to a desired higher pressure.

2. Automatic Tank Drain: Drains the compressors air receiver of moisture.

3. Separator Filter: Acts as a pre-filter to the dryer unit. Takes out larger particles, etc.

4. Air Bypass: Allows the dryer to be separated from the compressed air system, this for

servicing and maintenance.

5. Refrigerated Air Dryer: Removes the moisture from the compressed air by lowering its temperature.

6. Coalescing Filter: Removes oil from the compressed air.

7. Oil-Water Separator: Separates the oil from the moisture drained by the compressor, air filters, and

dryer unit. The oil is trapped by internal filters, while the water is allowed to be

dispensed to the building drain.

# **Unit Specifications:**

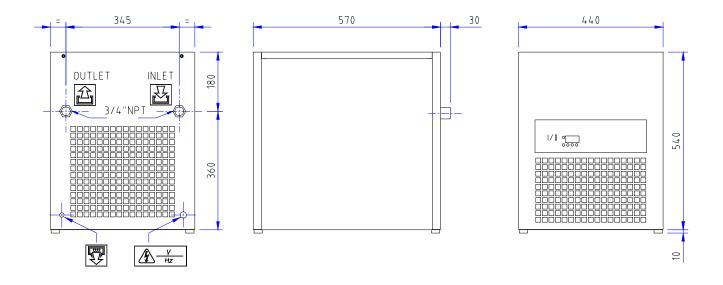
## Model 'HTD18', 'HTD26, 'HTD37, 'HTD52'

Model:		HTD18	HTD26	HTD37	HTD52
Flow Rate:	SCFM Nm³/h	18 31	26 44	37 63	52 88
Inlet/Outlet	NPT	1/2"			
Refrigerant		R134a			
Weight	Kg lbs	37 17	34 15	36 17	39 18
Air Inlet Temp	°C °F	60° (Max 80°) 140° (Max 180°)			
Ambient Temp	°C °F	25° (Max 40°) 77° (Max 104°)			
Working Press.	Bar Psi	7 (Max 16) 100 (Max 232)			
Press. Dew Point	°C °F	3° (Max 10°) 37° (Max 50°)			

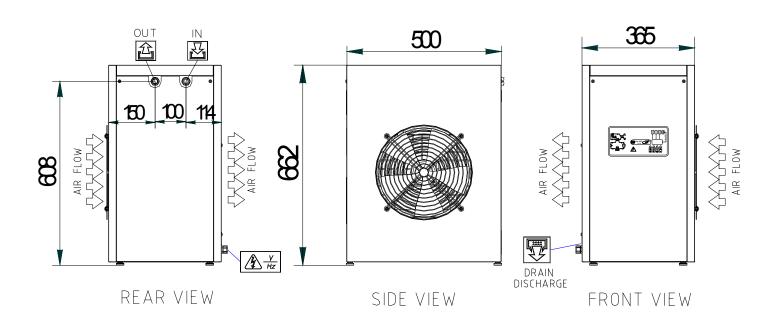
Model:		HTD18	HTD26	HTD37	HTD52
Electrics	v/ph/hz	115/1/60			
Nominal Consumption	KW	0.37	0.202	0.38	0.38
Full Load Consumption	KW	0.49	0.31	0.59	0.59
Nominal Current	Amps	4.23	2.60	4.58	4.58
Full Load Current	Amps	5.24	3.50	6.25	6.25
Locked Rotor Current	Amps	27	35	28	28
Fan Motor Current	Amps	1.35			

## **Unit Dimensions:**

## Model 'HTD18'



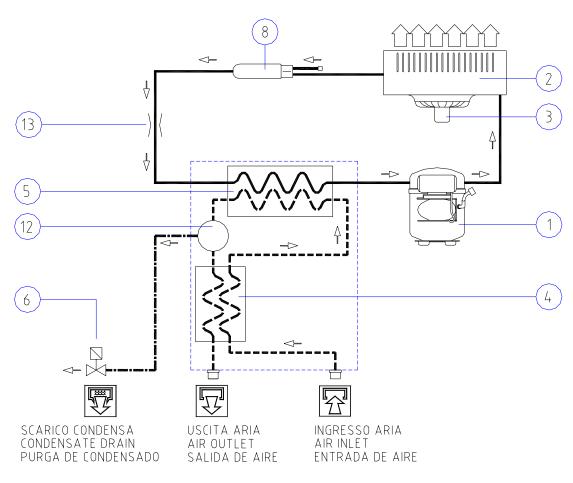
## Model 'HTD26, 'HTD37, 'HTD52'



## **Refrigeration Circuits:**

#### Model 'HTD18'

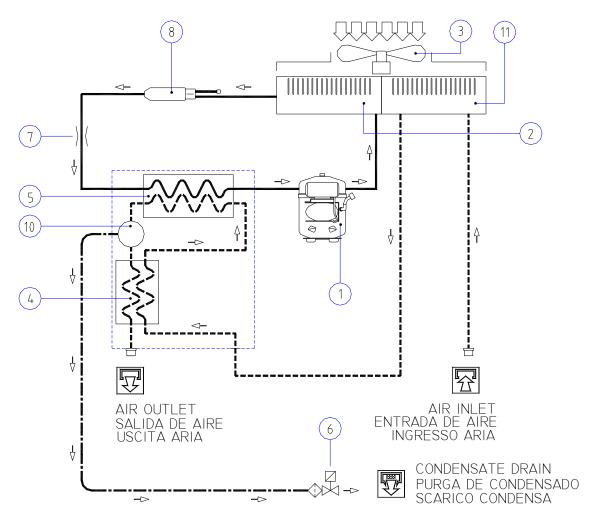
Pos.	Description:
1	Compressor
2	Condenser
3	Condenser Fan
4	Air-to-Air Heat Exchanger
5	Evaporator
6	Condensate Electronic Drain
8	Refrigerant Filter
12	Condensate Separator
13	Capillary Tube



## **Refrigeration Circuits:**

### Model 'HTD26', 'HTD37', 'HTD52'

Pos.	Description:
1	Compressor
2	Condenser
3	Condenser Fan
4	Air-to-Air Heat Exchanger
5	Evaporator
6	Condensate Electronic Drain
7	Capillary Tube
8	Refrigerant Filter
10	Condensate Separator
11	Air-to-Air Heat Exchanger

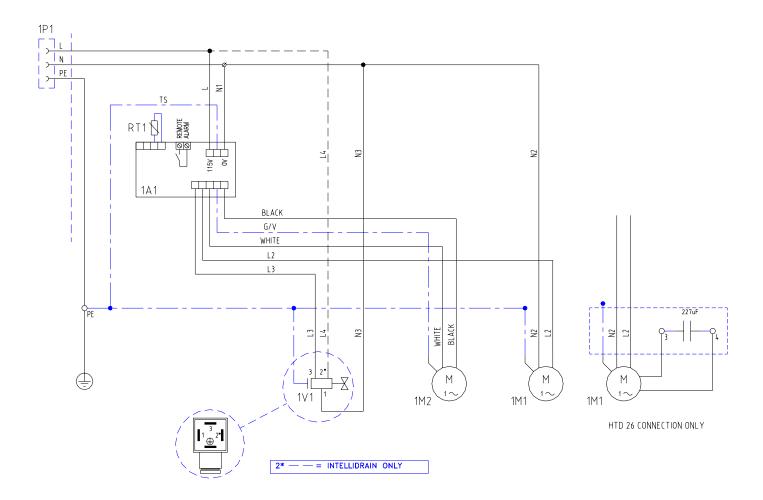


----- = LINEA FREON - REFRIGERANT LINE
---- = LINEA ARIA - COMPRESSED AIR LINE
---- = LINEA DRENAGGIO - CONDENSATE DRAIN LINE

# **Electrical Diagrams:**

## Model 'HTD18', 'HTD26', 'HTD37', 'HTD52'

Pos.	Description:
1M1	Compressor
1M2	Condenser Fan Motor
1V1	Condensate Electronic Drain
1A1	Electronic Controller
RT1	Dew Point Probe
1P1	Electric Power Plug



#### - Devair One Year Limited Refrigerated Air Dryer Warranty -

The manufacturer warrants the product manufactured by it and sold to the original purchaser, when properly installed, operated, applied and maintained in accordance with procedures and recommendations outlined in the manufacturer's instruction manuals, to be free of defects in material and workmanship for a period of one (1) year from date of purchase at the retail level by the end user, not to exceed eighteen (18) months from the date of manufacture, provided such defect is discovered and brought to the manufacturers attention within the aforesaid warranty period.

The manufacturer will repair or replace any product or part determined to be defective by the manufacturer within the warranty period, provided such defect occurred in normal service and not as the result of misapplication, misuse, abuse, neglect, incorrect maintenance, accident, or normal wear. Normal maintenance items requiring routine replacement are not warranted.

The warranty covers parts and labour for the warranty period. Repair or replacement shall be made at the sole option of the manufacturer. Any service performed on the product by anyone other than the manufacturer must first be authorized by the manufacturer. Unauthorized service voids the warranty and any resulting charge or subsequent claim will not be paid.

Products repaired or replaced under warranty shall be warranted for the unexpired portion of the warranty applying to the original product, based on the original date of purchase and/or date of manufacture, as outlined above.

Exported items (those shipped beyond the continental Canada/US) deemed defective and to be returned to Devair for Warranty consideration are to be forwarded at the Customers expense to a Devair designated location on the continental Canada/US (excluding Alaska, Hawaii, and Puerto Rico).

There is no other expressed warranty. Implied warranties including those of merchantability and fitness for a particular purpose are limited to one (1) year from date of purchase to the extent permitted by law and any and all implied warranties are excluded. This is the exclusive remedy. Liability for consequential damages under any and all warranties are excluded to the extent exclusion is permitted by law.

This warranty gives you specific legal rights, and you may also have other rights within your jurisdiction.

This warranty does not cover:

- 1. Merchandise that has become inoperative because of ordinary wear, misuse, negligence, accident, or improper and unauthorized repair or alteration.
- 2. Costs occasioned by the removal, replacement, or repair of merchandise (other than by Devair) without previous authorization from Devair.
- 3. Expenses incurred in travel or lodging beyond a 100 kilometer (60 mile) distance from the nearest Devair Authorized Service Centre.
- 4. Expenses incurred in the return of equipment for inspection purposes to the manufacturers facility. All returns must be pre-authorized, returned 'Freight Prepaid', and accompanied by a 'Return Authorization (RA) Number'.
- 5. Products, parts, materials, components, or accessories manufactured by others or supplied in connection with the sale of the manufacturers products.
- 6. Repair and transportation costs of merchandise determined not to be defective under the terms and conditions of this warranty.
- The cost of rental or loaner equipment while the customers original equipment is being assessed, repaired, or replaced.
- 8. Consequential damages in the event of product failure.

All decisions by Devair Inc. with regard to this policy shall be final. Devair will not be responsible for any claimed defective materials returned other than in accordance with this statement of policy or without our prior authorization.



Devair Inc. 490 Welham Road Barrie, Ont. L4N 874

Tele: (705) 728-5657 Fax: (705) 4974