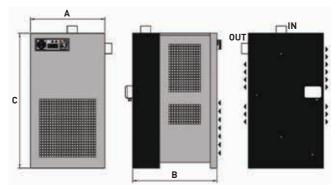
# TECHNICAL FEATURES

**Data refers to the following condition:** Ambient temperature of 35°C, with inlet air at 7 bar and 45°C. Pressure dew point as per Class 5-ISO Standard 8573.1,

**Maximum working conditions:** Ambient temperature 50°C, inlet air temperature 70°C and inlet air pressure 14 bar (16 bar TFD 6-22).



					100						
Model	Flow Rate L/S CFM		Power Supply	Port Sizes		Weight					
			Voltage	In/Out	A	В	С	kg			
TFD 6	9.9	21	240	1/2" BSP F	226	507	532	25			
TFD 10	16.5	35	240	1/2" BSP F	226	507	532	27			
TFD 15	25	53	240	3/4" BSP F	226	507	532	28			
TFD 22	36.8	78	240	3/4" BSP F	226	507	532	30			
TFD 30	50	106	240	1" BSP F	304	694	907	52			
TFD 45	75	159	240	1 1/4" BSP F	304	694	907	57			
TFD 60	100	212	240	1 1/4" BSP F	354	776	987	61			
TFD 72	119.9	254	240	1 1/2" BSP F	354	776	987	67			
TFD 85	141.6	300	240	1 1/2" BSP F	354	776	987	69			
TFD 100	166.6	353	240	2" BSP F	483	1104	1040	135			
TFD 120	200	424	415	2" BSP F	483	1104	1040	138			
TFD 150	258	530	415	2" BSP F	483	1104	1040	140			
TFD 180	308.2	653	415	2 1/2" BSP F	500	1204	1140	170			
TFD 220	366.7	777	415	2 1/2" BSP F	500	1204	1140	181			

# **Temperature Correction Factor**

Ambient Temperature (°C)		≤30			35			40			45			50		
PDP (°C)		5	7	10	5	7	10	5	7	10	5	7	10	5	7	10
	≤40	1.03	1.26	1.45	0.99	1.21	1.39	0.94	1.15	1.32	0.87	1.06	1.22	0.78	0.96	1.10
	45	0.85	1.04	1.20	0.82	1.00	1.15	0.78	0.95	1.09	0.72	0.88	1.01	0.65	0.79	0.91
	50	0.69	0.84	0.97	0.66	0.81	0.93	0.63	0.77	0.88	0.58	0.71	0.82	0.52	0.64	0.74
Inlet Air Temperature (°C)	55	0.59	0.72	0.83	0.57	0.69	0.79	0.54	0.66	0.75	0.50	0.61	0.70	0.45	0.55	0.63
remperature ( o,	60	0.51	0.62	0.72	0.49	0.60	0.69	0.47	0.57	0.66	0.43	0.53	0.61	0.39	0.47	0.55
	65	0.46	0.56	0.65	0.44	0.54	0.62	0.42	0.51	0.59	0.39	0.48	0.55	0.35	0.43	0.49
	70	0.43	0.52	0.60	0.41	0.50	0.58	0.39	0.48	0.55	0.36	0.44	0.51	0.32	0.40	0.45

# **Pressure Correction Factor**

Inlet Air Pressure (barg)	2	3	4	5	6	7	8	10	12	14
Factor	0.49	0.66	0.77	0.86	0.93	1.00	1.05	1.14	1.21	1.27

- Technical data conforms to +/- 5%. Pilot Air reserves the right to modification without notice for design and technical improvements.
- Warranty: 12 months on all products listed.
- For over 40 years Pilot Air Compressors has been meeting the needs of industry. Ask us about your requirements.

(\* Available during Pilot Air business hours of operation.)



# sales@pilotair.com.au service@pilotair.com.au

# NSW - Head Office & Manufacturing

115 Beaconsfield St, Silverwater, NSW 2128 **P** (02) 9648 3099 | **F** (02) 9648 3362

# NSW - Service & Spare Parts

21-25 Stubbs St, Auburn, Sydney NSW 2144 **P** (02) 9648 3099 | **F** (02) 9648 3362

### VIC

**P** 1300 667 579 | **F** (02) 9648 3362

### QLL

2/339 Archerfield Rd, Richlands, QLD 4077 **P** (07) 3279 1213

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Grand Junction Rd, Mansfield Park, SA 5012 **P** 1300 667 579 | **F** (08) 8347 4660

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TFD DRYER SERIES

# REFRIGERATED COMPRESSED AIR DRYERS

**Rated For Australian Conditions** 



www.pilotair.com.au

Industrial and specialist air compressors, compressed air treatment products, compressed air distribution and piping systems.

PILOT AIR'S TFD RANGE OF REFRIGERATED AIR DRYERS IS RATED FOR AUSTRALIAN CONDITIONS WITH FLOW RATES BASED ON AN AMBIENT TEMPERATURE OF 35°C.

# **FEATURES**

# • ELECTRONIC CONTROL PANEL

Operation of the dryer is monitored by a digital thermometer in the control panel.

### HOT GAS BY-PASS VALVE

This innovative new design, incorporating greater precision and accuracy, prevents the formation of ice inside the evaporator under any load condition. The valve is set during final testing and no further adjustments are needed.

### CONDENSATE DRAIN

All models are fitted with a timed electronic drain. Discharge and pause times are adjustable.

### CONDENSER

Generous sizing of the condenser ensures maximum performance of the refrigerant circuit and the ability to operate with changes in the ambient conditions. Easy access to the condenser for cleaning and maintenance.



The counter flows of compressed air in the air to air heat exchanger ensure maximum heat transfer

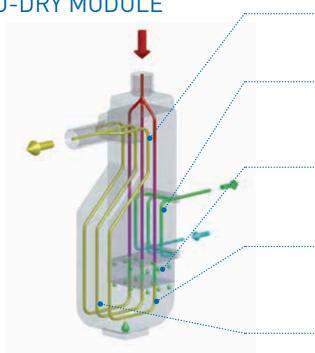
Generous dimensions of the air to refrigerant heat exchanger plus the counter flow gas streams allow full and complete evaporation of the refrigerant (preventing liquid returning to the compressor).

The high efficiency condensate separator is located within the heat exchange module.

The large capacity separator is designed to operate even with high humidity levels in compressed inlet air.

The large cross section of flow channels within the heat exchanger module aids flow rates and leads to reduced power requirements.





# Benefits of using Aluminium Cooling Technology refrigerated air dryers:

- ✓ REDUCE DOWN TIME The presence of moisture and other contaminants in compressed air can cause pneumatic valves and instruments to stick and malfunction. As a result, many manufacturers of this equipment insist on clean dry air as a condition of warranty.
- ✓ LOWER EQUIPMENT MAINTENANCE COSTS Moisture can wash away lubricants used in pneumatic tools, decreasing their life span.
- ✓ IMPROVE PRODUCT FINISH Poor painting or blasting due to moisture or particulates in the compressed air can result in an inferior job, resulting in extra costs to correct the problem.
- ✓ REDUCED ENERGY CONSUMPTION Running costs are reduced thanks to the efficient ALU-DRY heat exchanger, high efficiency compressors, innovative hot gas by-pass valves and low pressure drop (even with load variances).

# **INCLUSIONS**

	TFD 6-22	TFD 30-220
Alu-Dry Heat Exchanger	<b>✓</b>	<b>✓</b>
High Efficiency Compressor	<b>√</b>	✓
High Efficiency Fans	<b>✓</b>	<b>√</b>
Environmental Refrigerant	<b>√</b>	✓
Automatic Hot Gas By-Pass	<b>✓</b>	<b>√</b>
DMC 35 Controller	<b>√</b>	✓
Reciprocating Refrigerant Compressor	<b>✓</b>	
Rotary Refrigerant Compressor		<b>√</b>
Dew Point Too High Indication	✓	<b>√</b>
Dew Point Too Low Indication	<b>√</b>	✓

# **ENVIRONMENTALLY FRIENDLY**

All CFCs have been eliminated from the TFD dryer series by only using very efficient and environmentally friendly refrigerant gases such as R134a, R407C and R410A in line with the Montreal Protocol. All packaging materials are fully recyclable.







It is mandatory to install a dryer prefilter with a grade of a least 3 microns before the dryer to prevent rust, scale or other pollutants clogging the Alu-Dry module and the condensate drain. Failure to do so will void warranty on the dryer.