

PTB 015-100

High Temperature Application Refrigerated Compressed Air Dryers

PTB Hi-Temp models are designed to be used specifically with air compressors that discharge compressed air at temperatures 120°F and higher - commonly, reciprocating or piston-type compressors. These dryers include an integral after-cooler and separator filter to handle the additional heat load and moisture content of these high-temperature applications. A unique refrigeration system, which modulates the dryer's fan operation in relation to dryer load, simplifies operation and contributes to the long service life of the dryer. All models efficiently separate water and contaminants from the air stream and discharge them through a user-adjustable timed solenoid drain.

PTB Dryers Provide These Advantages:

- **Low pressure drop** – < 1 psid
- **Compact and light weight** – Minimal space requirements
- **Quiet operation** – Allows flexibility of dryer placement
- **Precooler/Reheater** – Eliminates pipe sweating;
Lower operating cost
- **Reliable operation** – No hot gas bypass valve to adjust

PTB Standard Features:

- **Microprocessor Controller**
- **User-adjustable Timed Solenoid Drain**
- **Precooler-Reheater Exchanger**
- **Integral Aftercooler & Separator Filter**
- **NEMA 12**
- **UL Listed**
- **Powder-Coated Cabinet**
- **R-134A Refrigerant**

PTB Hi-Temp dryer functions and drain operation are microprocessor-controlled. LED display provides visual indication of dryer operating status. A touchpad user interface permits easy manipulation of all dryer parameters. Indication of refrigerant compressor-running, drain open, fan operation and fault messages are visible on the display.



Model PTB080 Shown

PTB Technical Specifications

MODEL	PTB015	PTB025	PTB035	PTB060	PTB080	PTB100
Capacity SCFM	15	25	35	60	82	100
Refrigerant	R-134a	R134a	R-134a	R-134a	R-134a	R-134a
(A) Width in.	15 3/16	15 3/16	15 3/16	16 9/16	16 9/16	16 9/16
(B) Depth in.	19 11/16	19 11/16	19 11/16	22 5/16	22 5/16	22 5/16
(C) Height in.	25 5/8	25 5/8	25 5/8	30 3/8	30 3/8	30 3/8
Weight lb.	84	86	86	126	137	148
Air Connection In/Out	1/2" NPT	1/2" NPT	1/2" NPT	3/4" NPT	3/4" NPT	1" NPT
Condensate Drain	6 mm	6 mm	6 mm	6 mm	6 mm	6 mm
Refrig. Comp. HP	1/6	1/4	1/4	1/2	1/2	2/3
Max. Work. Press. psig	203	203	203	203	203	203
Operating KW *	.27	.49	.49	.66	.75	1.14
Voltages	115-1-60	115-1-60	115-1-60	115-1-60	115-1-60	115-1-60

Performance data obtained as per ISO 7183, Table 2, Option A2.

Rated at 100 psig, 150°F inlet air, 95°F ambient air.

* Average kilowatts per hour of dryer operation at full rated capacity.

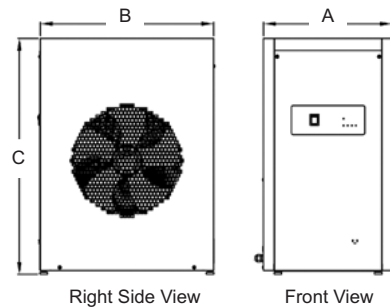
Correction Factors for other-than-standard conditions.

Inlet Air Pressure	psi	70	85	100	115	130	145	160	175	190	205
	P-Factor	0.82	0.93	1	1.07	1.12	1.16	1.19	1.21	1.23	1.25
Air Inlet Temperature	°F	120	140	150	160	170	180	200			
	T-Factor	1.25	1.1	1	0.93	0.83	0.75	0.5			
Ambient Air Temperature	°F	80	90	95	105	110	122				
	A-Factor	1.22	1.07	1	0.75	0.6	0.28				

Calculation: Corrected Flow = User Flow Rate ÷ P-Factor ÷ T-Factor ÷ A-Factor.
Select dryer that meets or exceeds corrected flow capacity.

Example: User's Conditions: 55 SCFM / 85 psig / 150°F inlet / 105°F ambient

Solution: Corrected Flow = 55 SCFM ÷ .93 ÷ 1 ÷ .75 = 78.8 SCFM. **Size to model PTB080.**



PTB 15-100



1302 Goshen Parkway
West Chester, PA 19380

Phone: 800-220-7059

Fax: 610-692-9192

Web: www.premierairsystems.com

Specifications, illustrative materials and descriptions contained herein were as accurate as known at the time this publication was approved for printing. The company reserves the right to change specifications, discontinue models, equipment or design without notice and without incurring obligation. The information set out in this brochure is for preliminary information only and is not intended to constitute any representation or warranty by PREMIER Air Systems to potential customers or to form the basis of a contract with any customer.