

Compressed Air Dryers



NCE Series

Non-Cycling Refrigerated Compressed Air Dryers
11-64 SCFM

HTB Hi-Temp

Non-Cycling Refrigerated Compressed Air Dryers
For High Inlet Temperature Applications
15-100 SCFM

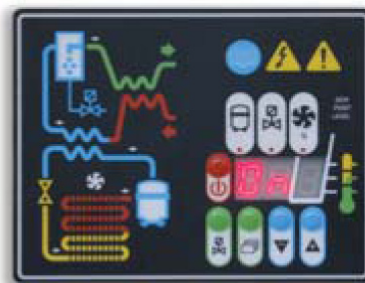
Compressed air is used commonly for powering tools and equipment, in production and finishing processes and to control valves and instruments. Water, compressor lubricant aerosols, and air-borne particulates can damage tools, increase maintenance requirements or spoil finished product. NCE and HTB Series™ Non-Cycling Refrigerated Dryers from GENTEC remove harmful moisture and contaminants from compressed air to guard against process waste and spoilage, and production downtime.

NCE Series

With a comprehensive list of standard features and innovative operation, NCE Series non-cycling dryers deliver value and performance in a compact design.

- **Integral Heat Exchanger/Separator** - Compact and corrosion resistant, this unique assembly provides efficient air drying while minimizing dryer footprint.
- **VSD Fan Operation** - Variable speed condenser fan control modulates fan speed in relation to dryer load. Slowing the speed of the fan under low load conditions saves energy. Additionally, long-term reliability is improved because fewer components are required within the refrigeration circuit.
- **Microprocessor Control** - 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.

With five models available in capacities from 11-64 SCFM, NCE Series dryers are ideally suited to air systems with 2.5 -10 compressor horsepower.



HTB Hi-Temp

HTB Hi-Temp dryers are specifically engineered to provide efficient air treatment for high-temperature process air applications. Inlet air temperature has a significant effect on air dryer performance. Raising the inlet temperature by 20°F approximately doubles the amount of moisture in the air stream. HTB Hi-Temp dryers have unique features that address the demands of high temperature compressed air for economical delivery of clean, dry air including:

- **Integrated Air-Cooled Aftercooler** - Efficiently lowers inlet air temperature
- **Air-to-Air Exchanger** - Economically cools air for energy savings
- **Internal Coalescing Filter** - Enhances separation of air and condensate

HTB Series dryers eliminate the need for separate aftercooler, separator and drain - only one piece of air treatment equipment to purchase and maintain.

Six HTB models, from 15 -100 SCFM, make selection easy. All are fully-featured, requiring only connection within the compressed air system and utility hookup.



HTB015-HTB100

NCE and HTB Standard Features

- Integral Heat Exchanger/Separator
- VSD Condenser Fan Control
- Fully Hermetic Refrigeration System
- NEMA 12 Electrical Design
- Environmentally Friendly Refrigerant
- Precooler/Reheater (Air-to-Air Exchanger)
- Air-cooled Aftercooler (HTB only)
- Built-in Coalescing Filter (HTB only)
- Microprocessor Control with Touch Pad:
 - Illuminated compressor-running indicator
 - Condensate drain open indicator
 - Indication of full- or variable speed fan operation
 - Fault message indication
 - Drain timing/Drain test interface
- Reliable Electric Solenoid Drain
- Galvanized Internal Structural Components
- Powder-Coated Cabinet
- Compact Design/Quiet Operation
- UL Listed

Available Options

- Prefilter - Particulate (Field installed)
- Gauge Package (Field installed)
 - Inlet or outlet air pressure and temperature
- 3-Valve Bypass (Field installed)

NCE Series™ Technical Specifications

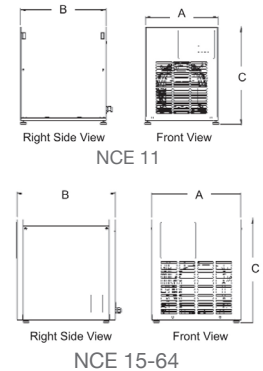
Model Number	Capacity SCFM	Refrigerant	Air Connection In/Out	Condensate Drain	Refrig. Comp. HP	Max. Work. Press. psig	Operating KW*	Voltage	Dimensions WxDxH (in)	Weight (lbs)
11NCE	11	R-134a	3/8" FPT	6mm	1/10	203	.22	115-1-60	12x14 ^{3/16} x16 ^{1/16}	40
15NCE	15	R-134a	3/8" FPT	6mm	1/10	203	.22	115-1-60	15 ^{3/8} x17x17 ^{3/8}	40
25NCE	25	R-134a	1/2" FPT	6mm	1/6	203	.27	115-1-60	15 ^{3/8} x17x17 ^{3/8}	78
32NCE	32	R-134a	1/2" FPT	6mm	1/4	203	.49	115-1-60	15 ^{3/8} x17x17 ^{3/8}	62
64NCE	64	R-134a	3/4" FPT	6mm	1/2	203	.66	115-1-60	16 ^{9/16} x20 ^{5/16} x21 ^{11/16}	78

Performance data obtained as per ISO 7183, Table 2, Option A2. Rated at 100 psig, 100°F inlet air, 100°F ambient air.

11-64 NCE Correction Factors for other-than-standard conditions

		70	85	100	115	130	145	160	175	190	205
Inlet Air Pressure	psi										
	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	80	90	100	110	120	130	140	-	-	-
	T-Factor	1.3	1.18	1	0.8	0.6	0.42	0.25	-	-	-
Ambient Air Temperature	°F	80	90	100	105	110	122	-	-	-	-
	A-Factor	1.1	1.05	1	0.93	0.83	0.65	-	-	-	-

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: 30 SCFM / 85 psig / 110°F inlet / 105°F ambient
 Solution: Corrected Flow = 30 SCFM ÷ .93 ÷ .8 ÷ .93 = 43.3 SCFM. Size to model 64 NCE.


Hi-Temp™ Technical Specifications

Model Number	Capacity SCFM	Refrigerant	Air Connection In/Out	Condensate Drain	Refrig. Comp. HP	Max. Work. Press. psig	Operating KW*	Voltage	Dimensions WxDxH (in)	Weight (lbs)
HTB015	15	R-134a	1/2" NPT	6mm	1/6	203	.27	115-1-60	15 ^{3/16} x19 ^{11/16} x25 ^{5/8}	84
HTB025	25	R-134a	1/2" NPT	6mm	1/4	203	.49	115-1-60	15 ^{3/16} x19 ^{11/16} x25 ^{5/8}	86
HTB035	35	R-134a	1/2" NPT	6mm	1/4	203	.49	115-1-60	15 ^{3/16} x19 ^{11/16} x25 ^{5/8}	86
HTB060	60	R-134a	3/4" NPT	6mm	1/2	203	.66	115-1-60	16 ^{9/16} x22 ^{5/16} x30 ^{3/8}	126
HTB080	82	R-134a	3/4" NPT	6mm	1/2	203	.75	115-1-60	16 ^{9/16} x22 ^{5/16} x30 ^{3/8}	137
HTB100	100	R-134a	1" NPT	6mm	2/3	203	1.14	115-1-60	16 ^{9/16} x22 ^{5/16} x30 ^{3/8}	148

Performance data obtained as per ISO 7183, Table 2, Option A2. Rated at 100 psig, 150°F inlet air, 95°F ambient air.

HTB015-HTB100 Correction Factors for other-than-standard conditions

		70	85	100	115	130	145	160	175	190	205
Inlet Air Pressure	psi										
	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 ÷ .93 = .75 SCFM. Size to model HTB080.

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

GENTEC NCE and HTB refrigerated dryers are not designed, intended or approved for breathing air applications.

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