ZEKS
COMPRESSED AIR SOLUTIONS®

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

Uses
Environmentally Friendly Refrigerant

ZEKS

Meets The Needs Of Compressed Air Users

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 ZEKS 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.

64NCE

15NCE; 25NCE; 32NCE

11NCE

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)

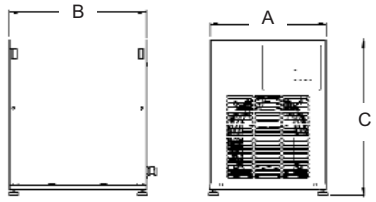
All NCE and HTB Models Use Environmentally Friendly

R-134a Refrigerant

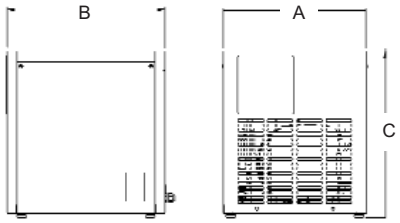
NCE Series™ Technical Specifications

MODEL	11NCE	15NCE	25NCE	32NCE	64NCE
Capacity SCFM	11	15	25	32	64
Refrigerant	R-134a	R134a	R-134a	R-134a	R-134a
(A) Width in.	12	15 3/8	15 3/8	15 3/8	16 9/16
(B) Depth in.	14 3/16	17	17	17	20 5/16
(C) Height in.	16 1/16	17 3/8	17 3/8	17 3/8	21 11/16
Weight lb.	40	40	78	62	78
Air Connection In/Out	3/8" FPT	3/8" FPT	1/2" FPT	1/2" FPT	3/4" FPT
Condensate Drain	6 mm	6 mm	6 mm	6 mm	6 mm
Refrig. Comp. HP	1/10	1/10	1/6	1/4	1/2
Max. Work. Press. psig	203	203	203	203	203
Operating KW*	.22	.22	.27	.49	.66
Voltage	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, 100°F inlet air, 100°F ambient air.



NCE 11



NCE 15-64

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

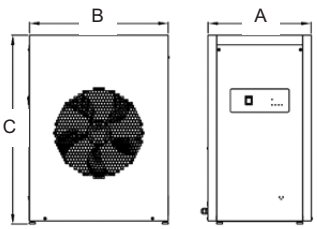
Inlet Air Pressure	psi	70	85	100	115	130	145	160	175	190	205
	P-Factor	0.82	0.93	1	1.07	1.12	1.16	1.19	1.21	1.23	1.25
Air Inlet Temperature	°F	80	90	100	110	120	130	140			
	T-Factor	1.3	1.18	1	0.8	0.6	0.42	0.25			
Ambient Air Temperature	°F	80	90	100	105	110	122				
	A-Factor	1.1	1.05	1	0.93	0.83	0.65				

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	HTB015	HTB025	HTB035	HTB060	HTB080	HTB100
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
Voltage	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.



HTB 15-100

HTB015-HTB100 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 HTB080**.

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

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

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