

# Cooltec5™ GAS FIRED COOLING



## General Description

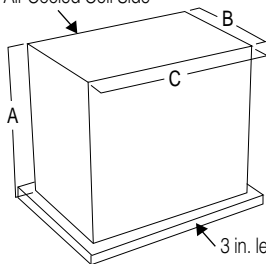
The Cooltec5™ is designed to provide comfort cooling in residential and commercial buildings, as well as process cooling for commercial and industrial applications. It is a self-contained, air-cooled, natural or propane gas-fired chiller approved for outdoor installation. The Cooling Technologies family of products utilize proprietary heat recovery technology to provide the highest operating efficiency in this size range. The Cooltec5™ is the first product of its type to earn the UL Listing and represents the future of absorption cooling.

## Cooltec5 Features

- Highest GAX efficiency
- 0.68+ Coefficient of performance (COP)
- Proprietary heat exchangers
- TEV for higher efficiency at all ambient conditions
- Multi-speed condenser fan for variable loads
- Spark ignition
- Unique Lo-NOx power burner (<25 PPM)
- Closed water loop (pump optional)

## Chiller Dimensions

Air-Cooled Coil Side



A - Height	57 in.	1.44 m
B - Depth	34 in.	0.86 m
C - Width	55 in.	1.39 m

## Performance Specifications

### Description

Delivered cooling capacity in BTU/Hour at standard ARI condition of 95°F ambient	60,100	(17.6 Kw)
Gas input at BTU/Hour	89,000	(26.1 Kw)
Condenser air flow in CFM	7,000	(200 m³/min)

## Chilled Water Data

### Description

Return water temperature	55 °F	(12.8 °C)
Supply water temperature	45 °F	(7.2 °C)
Chilled water flow (GPM)	12.0 Gpm	(45.4 Lpm)
Internal pressure drop in feet of water	20.0 ft	(6.1 m)
Unit chilled water volume in gallons	2.5 gal	(9.5 Liters)
Maximum external pressure drop for unit mounted water pump	25 ft	(7.6 m)

## Electrical Specifications

### Description

Electrical power requirements (60 Hz, single phase)	208/230V
Condenser fan motor HP	1/3 (2) (.223 KW (x2))
Refrigerant circuit pump motor HP	1/2 (.372 KW)
Internal water pump HP (optional)	1/3 (.223 KW)
Total cooling operating KW consumption	1.3
Minimum circuit ampacity (MCA)	15
Electrical connections, utility plate diameter	7/8 in (2.22 cm)
Size of time delay fuses (field supplied) /quantity	15 Amp/2 fuses

## Piping Connections/Physical Data

### Description

Chilled water supply/return, FPT	1 1/4 in (3.2 cm)
Gas inlet, FPT	1/2 in (1.27 cm)
Electrical knockouts	7/8 in (2.22 cm)
Shipping weight	1100 lbs (500 Kg)
Operating weight	1050 lbs (476 Kg)
Overall height	57 in (1.44 m)
Overall depth	34 in (.67 m)
Overall width	55 in (1.40 m)
Refrigerant type	R-717

\* Specifications are subject to change and periodic updates.

## Benefits

### Operational Benefits

- Operating savings; gas vs. electric rates
- Reduced demand charges
- Simplified zone control (chilled water loop)
- Modulated multi-unit operation
- Low power requirement (.27 kw/ton)
- Ideal for peak-shaving applications
- Integrates to building control systems
- No capacity loss over time

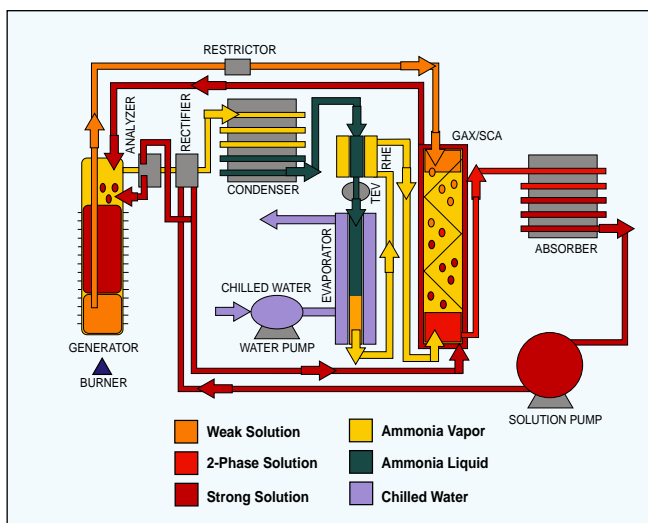
### Service Benefits

- Easy service access
- High quality and reliability
- Sealed systems; few moving parts
- Reduced service costs; no compressor unit
- Reduced maintenance costs; no cooling tower

### Installation Benefits

- Self contained, air-cooled package
- No cooling tower required
- Eliminates machinery room
- Minimizes roof penetrations
- No three-phase power required
- Single point utility connection
- Ideal for renovation projects

## GAX Absorption Cycle



## Features

### Standard Features

- UL listed for safety
- UL listed for natural or propane gas
- Environmentally sensitive  
R-717 (ammonia) refrigerant  
No CFC's, HCFC's, or HCF's
- Thermal expansion valve (TEV) for improved efficiency at all ambient conditions
- Unique power burner system  
Direct spark ignition  
Low NOX (<25 ppm)  
Variable speed combustion fan
- Condenser fans  
Multi-speed motors match ambient and load conditions  
High efficiency, low noise, composite fan blades
- Pre-cooler for improved performance at high and low ambient conditions
- Chiller base elevates unit above ground  
Air circulation, moisture control  
Four (4) side fork lift access  
Direct installation on pad or roof stringers
- Unit mounted vibration isolation for solution pump
- Unit mounted chilled water strainer
- Unit mounted chilled water circuit air bleed
- Easy access for cleaning condenser/absorber air coil

### Optional Features

- Factory installed and wired chilled water pump (1/3 HP)
- Factory installed chilled water expansion tank
- Factory installed and wired hot water boiler
- Factory mounted, piped and wired multiple chiller arrays (Coolpak™) in 5RT increments from 10-30RT

## Product Summary

- Thermally activated
- Uses reliable and plentiful natural or propane gas
- No CFC's or HCFC's for cooling
- Flexible – adapts easily to many applications
- Low noise level
- Low operating costs
- Low maintenance costs
- Low installation costs
- Long product life
- Lowest total life cycle costs



**LISTED**  
ABSORPTION AIR CONDITIONING EQUIPMENT  
9TX8

## Cooling Technologies, Inc.

333 14th Street  
Toledo, OH 43624

p 419.536.9006  
f 419.724.9007

info@coolingtechnologies.com  
www.coolingtechnologies.com