



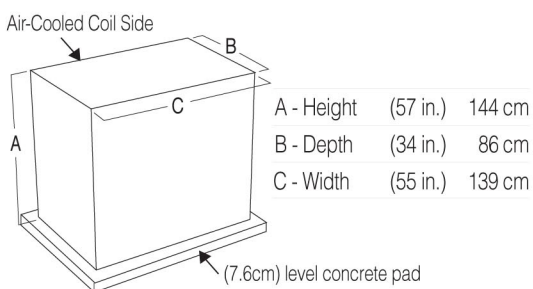
General Description

The AC 500 is designed to provide comfort cooling in 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 utilise proprietary heat recovery technology to provide the highest operating efficiency in this size range. The AC500 represents the future of absorption cooling.

AC500 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



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)	200m ³ /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 Litres
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)	144 cm
Overall depth	(34 in)	86 cm
Overall width	(55 in)	140 cm
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 (< 0.27 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
- Minimises roof penetrations
- No three-phase power required
- Single point utility connection
- Ideal for renovation projects

Features

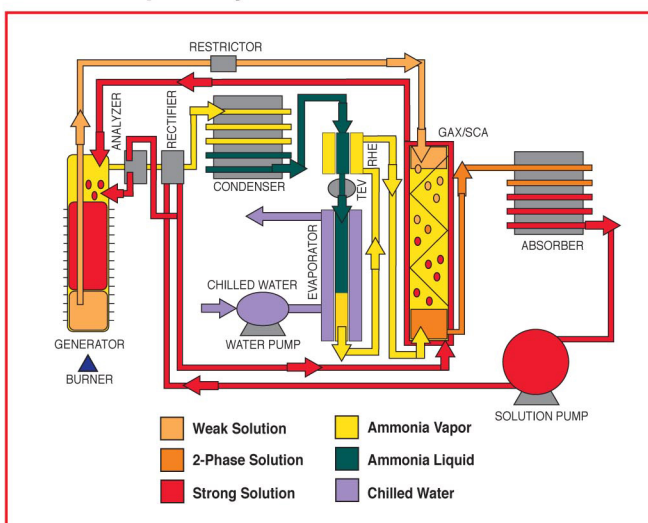
Standard Features

- Operates off natural or propane gas
- Environmentally sensitive
R-717 (ammonia) refrigerant
No CFCs, HCFCs, or HCFs
- 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 (MultiPack) in 17.5kw (5RT) increments from 35-105kw (10-30RT)

GAX Absorption Cycle



Product Summary

- Thermally activated
- Uses reliable and plentiful natural or propane gas
- No CFCs or HCFCs 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