



The World's Most Efficient Air-To-Water Heat Pumps

FC30 Free-Cooling Unit Low Ambient Cooling Server Room / Grow Room Cooling Companion Unit For Chiltrix Heat Pumps 12,000 BTU – 60,000 BTU Variable Capacity



Allows cooling operation as cold as -50 F outdoors.

Allows cooling operation with compressor at reduced speed or off when below 38F

Saves a large amount of energy with COP >46 (>EER 150)

IPLV Conditions

This means the system is configured to run at with a outlet supply water temperature of 44.6 F. Seasonal average EER is 22-23 (Without FC30) according to the selected Chiltrix heat pump model. Strong dehumidification. With FC30, EER as high as 150+.

NPLV Conditions

This means the system is configured to run at with a outlet supply water temperature of 55 F. Seasonal average EER >30 (Without FC30) according to the selected Chiltrix heat pump model. Dehumidification is reduced. With FC30, EER as high as 180+.

Dynamic Humidity Control (DHC)

When DHC is enabled, NPLV conditions will be met for normal operation, fan coil units will be sized to meet the sensible load at supply water 55 F. When humidity is detected, supply water will be reset to IPLV condition until humidity is satisfied and stable.

For Cooling When it is Cold Outside Server Rooms / Indoor Growing / Process

Low Ambient

Modern high efficiency air conditioner-based cooling systems are designed to operate in cooling mode when it is as low as 50°F outdoors and some can function down to as low as 5°F outdoors before self-protection causes them to stop. Alternatives such as bringing in outside air in the winter are a poor solution due to contaminants, humidity, etc. If your equipment or process must have cooling year-round regardless of how cold it gets outside, the FC30 is an ideal 100% water-side solution allowing operation to as low as -50°F.

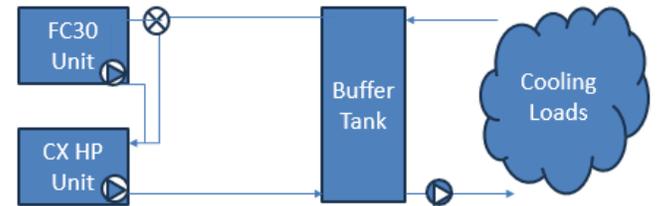
Extreme Energy savings

The FC30 can be set to engage at or below 38F, once engaged it performs pre-cooling to handle a portion of the cooling load, reducing the speed and energy use of the compressor. As outdoor temperature drops lower, the FC30 can handle an increasing amount of cooling, up to the point of handling the entire cooling load with the compressor (and associated energy use) stopped.

| FC30 Free Cooling Unit | | |
|---|---------|--------|
| Glycol 50% 45 °F Outlet 55 ° Inlet Nominal Capacity | Ambient | BTU/h |
| | 0 °F | 59,381 |
| | 10 °F | 50,161 |
| | 25 °F | 34,780 |
| | 35 °F | 20,520 |

FC30 Logical Topology

Option 1 – In Series



| | | |
|--------------------------|--|-----------------|
| Max Capacity @ 0 °FA | | 59,381 BTU/h |
| Max Power | | 410 W |
| Volts | | 208-240v |
| Max Current LRA | | 2.5a |
| Minimum Circuit Ampacity | | 3.5a |
| Net Weight | | 155 Lbs. |
| Dimensions W*D*H | | 43" * 16" * 40" |
| Noise Level | | 47 dB(a) |

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Images are representative only

All Specifications Subject To Change

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