



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

CX45 / CX45X

Ultra-Efficient R32 EVI MAX Air-To-Water Heat Pump

Optimized for cold-climate heating · T3 rated for hot-climate cooling

2.5 Tons Cooling

3.9 Tons Heating



SCOP up to 4.95

EN14825 seasonal heating —
certified by SGS

COP 4.98

Heating 46,950 BTU @ W95 / A47

EER 18.17

Seasonal average cooling — IPLV
COP 5.33 certified by AHRI

-22 to 125 °F

Ambient operating range



R32 ultra-high-efficiency CX45X EVI heat pump

Building on the success of the award-winning CX34, the CX45X has record-setting heating and cooling efficiency while using R32, the most eco-friendly refrigerant available in USA.



The CX45 obtains its ultra-high efficiency using our award-winning technologies in a system optimized for increased heating performance while delivering extreme cooling efficiency and T3 performance. The CX45 uses a Panasonic EVI DC inverter compressor and a DC inverter water pump (both variable speed) controlled together with a DC inverter variable-speed fan to achieve the best possible performance.

About Our World's Record Official Efficiency Ratings:

SCOP up to 4.95 is certified by SGS under EN14825 and represents the heating Seasonal Coefficient of Performance (SCOP) using European test conditions and BIN data, which are highly similar to USA DOE Climate Zone 5A conditions and BIN data. USA Zone 5A, characterized as a humid cold climate, includes cities like Hartford CT, Chicago IL, Manchester NH, and Pittsburgh PA. Cooling data is certified under AHRI 550/590.

Dynamic Humidity Control (DHC)

The included Chiltrix Psychrologix™ control offers DHC (Dynamic Humidity Control) to maximize comfort and performance and allow the unit to operate well above its published ratings at times when humidity allows. DHC provides dynamic loop/coil temperature reset based on indoor humidity and temperature.

Fully Dynamic Capacity

The CX45 system capacity is fully dynamic and can operate between 27% and 100% of its rated capacity, as needed. This means the system is always the right size for changing conditions and avoids the on/off cycling of traditional systems.

Supports: Radiant, ductless fan coils, ducted air handlers & domestic hot water in any combination.



All Chiltrix wall, floor and ceiling fan coil units use nearly silent DC Inverter fan motors. Inverter ducted air handlers are available.

Heating, Cooling, Domestic Hot Water

Use any or all in the same application with World's Record efficiency.

Radiant, Ductless Fan Coils, Ducted AHU

Use any or all in the same application.

Radiant Cooling

Ask us about our radiant cooling dew point control options. In many applications, a radiant heating system can also be used for cooling.

Max Temperature 149 °F

If needed, the CX45 can support baseboard heaters with up to 149 °F supply outlet temperatures.

Domestic Hot Water

Enjoy the highest rated efficiency of any US DOE certified heat pump water heating system, with up to UEF 4.95 and first-hour ratings of up to 133 gallons.

Radiant, Boiler & Hydronic Integration

Can serve as low-cost primary or sole heat when used with, or in replacement of, an existing boiler heating system. Perfect for radiant floor heating, ducted or ductless. Dramatically reduces heating costs for users of electric, propane or oil-fired boiler systems.

Dynamic Heating Performance

The CX45 compressor provides heating down to outdoor temperatures as low as -22 °F. The optional V18 variable backup heater can be directly integrated for precise dynamic control and the highest efficiency ever achieved by an electric hydronic backup heater.



UL 60335-2-40 · CSA C22.2 · SGS
Serving the USA market since 2015

US Patent 12,078,378

All specifications subject to change · Images are representative only



www.chiltrix.com





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

CX45 / CX45X

Ultra-Efficient R32 EVI MAX Air-To-Water Heat Pump

Performance & specifications

2.5 Tons Cooling · 3.9 Tons Heating

Ambient operating range -22 °F up to 125 °F

Optimized for cold-climate heating

T3 rated for hot-climate cooling

Modular & stackable — up to 3 Chiltrix units of any size can be combined to create larger solutions.

HEATING PERFORMANCE — CAPACITY BTU / COP

Ambient	LWT 95 °F	LWT 105 °F	LWT 120 °F
47 °F	46,950 / 4.98	45,750 / 4.34	43,950 / 3.58
32 °F	40,640 / 4.01	39,820 / 3.57	38,560 / 3.05
17 °F	34,430 / 3.19	33,980 / 2.92	33,300 / 2.58
5 °F	29,000 / 2.87	27,470 / 2.43	25,150 / 1.92

LWT = leaving water temperature

COOLING & SEASONAL PERFORMANCE

Rating	Condition	BTU	EER / COP
IPLV	W 44.6 °F	30,002	EER 18.17
NPLV	W 55.4 °F	37,840	EER 26.81
EER	A 95 °F / W 44 °F	30,002	EER 9.64
T3 cooling	A 113 °F / W 44 °F	21,338	1.88
T3 cooling	A 122 °F / W 44 °F	17,043	1.50
SCOP EN14825	35 c	—	NR
SCOP EN14825	55 c	—	NR

T3 total power input: to be confirmed.

CEC — California Energy Commission Listed

Cooling 30,002 BTU · EER 9.64 · IPLV 18.17
 Heating W120F / A47F 43,950 BTU · COP 3.58
 Heating W120F / A17F 33,300 BTU · COP 2.58

Anti-Corrosion Technology

Protection against salt air or air pollution is incorporated into all Chiltrix outdoor units, including a special coil, hermetically sealed compressor and fan motor.

No Other ATW Heat Pump Like It, at Any Price

Contact us to learn more about designing an air-to-water heat pump chiller system for your home, commercial location, or server room. We can also help you integrate our system with an existing system, retrofit replacement, integration with solar, or with an existing boiler or hydronic heating system with baseboard radiator support up to 149 °F.

SYSTEM SPECIFICATIONS

Parameter	Specification
Compressor	Panasonic EVI dual inverter rotary
Fan motors	DC Inverter, dual variable speed
Power	208-240 V / 50-60 Hz
RLA / MCA / max allowed fuse	18a / 23a / 35a
Max. water temperature	149 °F
Lowest water temp, cooling (glycol)	32 °F
Operating range	-22 °F to 125 °F
Refrigerant Circuit	
Refrigerant	R32
DC inverter compressor	Dual Rotary EVI
Heat exchanger 1	Cu/Al anti-corrosion
Heat exchangers 2, 3	Stainless 316L BPHE
Refrigerant weight	2 kg
Water Circuit	
DC variable speed pump	Grundfos
Water connections	1" NPT
Water flow (max)	9.1 GPM
Max / suggested pressure	90 PSI / 20 PSI
Unit	
Dimensions W × H × D	43.9" × 37.1" × 17.7"
Net weight	276 lbs.
Noise level	49 dB(A)

CX45 and CX45X

The CX45 has a standard variable speed pump and non-metal front grill. The CX45X adds a stainless-steel variable speed pump and an aluminum front grill (shown in pic). The critical components we use to build our heat pumps are sourced from the world's top manufacturers and include heat exchangers from Sweden, German pumps, American valves, electronics from Japan, controls from USA, and a compressor from Panasonic.

Flexible Indoor Options — Any Combo

You can use up to 8 or more ductless fan coil units of any type including wall mount, ceiling, floor standing, etc. with a single Chiltrix air-to-water heat pump chiller. You can also use ducted fan coil air handlers (AHU) for a central forced-air heating & air conditioning system, use it with a radiant floor or radiant panels, or with concealed ceiling fan coils, mini-ducts, or any combination of these. Domestic water heating may be added to any of the above.

DISTRIBUTED BY



HotSpot Energy Inc.
 4021 Holland Blvd., Chesapeake VA 23323

www.hotspotenergy.com · info@hotspotenergy.com
 1-757-410-8640 · US Patent 12,078,378

All specifications subject to change · Images are representative only



www.chiltrix.com

