

i42 inverter

INDUSTRY STANDARD SLEEVE

16 x 42"



Applied
COMFORT

Highest Efficiency

-- in real-world conditions the modulating inverter chassis means that the inefficient start/stop of the compressor is eliminated.



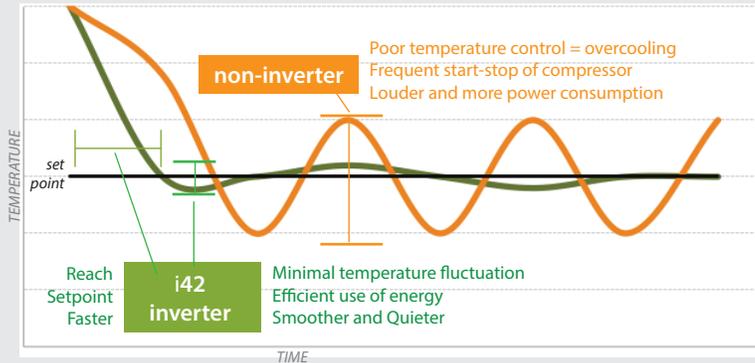
Consistent Dehumidification

-- modulating inverter technology ensures a cold condensing evaporator coil in part-load to keep comfortable humidity levels, eliminating clamminess in humid conditions.

Incredibly Quiet

-- inverter compressor, condensor fan, and evaporator fan slow to match cooling and heating demand of room, reducing operating sound levels.
-- elimination of compressor start/stop means the room is much quieter in part-load conditions

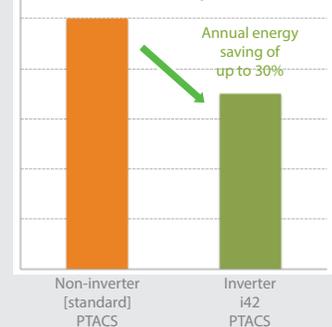
i42 : The Benefits of Inverter Technology



Non-inverter PTACS
run the compressor at full RPM or zero RPM (on or off)
-- the on/off compressor cycling in part-load conditions wastes substantial amounts of electric power

i42 Inverter PTACS
slow the compressor RPM to match the part-load cooling or heating power required
-- a substantial reduction in power consumption occurs

Power Consumption



The i42 Inverter Heatpump incorporates state-of-the-art INVERTER technology not found in any other PTAC, yet it fits into standard 16 x 42" PTAC sleeves. The i42 is the culmination of years of research to develop a PTAC to clearly lead the market with the lowest energy consumption, most consistent dehumidification, best conditioned air, and the lowest sound levels.

Although published EER's will be similar to other PTACs, based on laboratory testing simulating real-world installations, up to a 30% reduction in energy consumption can be expected with the Applied Comfort i42 when compared to other PTACs!

Dramatic energy savings and sound reduction is achieved by modulating the output of the PTAC to match the cooling or heating demands of the room, eliminating costly and noisy compressor cycling.

i42 inverter

advanced modulating inverter

INVERTER HEATPUMP PTHP Series

i42 inverter uses advanced inverter control with Mitsubishi inverter compressors to provide the highest efficiency cooling and heating, lowest noise levels, and the best temperature and humidity control under part-load conditions. **i42 inverter** is engineered to modulate its components to eliminate inefficient 'cycling' on and off of the compressor, reduce power consumption under part-load demand, and maintain a consistent evaporator condensing surface for humidity control.

i42 inverter PTHP are manufactured with a power-cord attached to the chassis.

230/208v	i42 -- heatpump with electric backup heat			
	i42HC09K36E7	i42HC12K36E7	i42HC15K36E7	i42HC15K50E8
LCDI Plug	NEMA#6-20P 20Amp	NEMA#6-20P 20Amp	NEMA#6-20P 20Amp	NEMA#6-30P 30Amp
Cooling BTUH Operating Range (**)	5580 to 9320 (9300)	9300 to 15100 (12000)	9300 to 17600 (15000)	9300 to 17600 (15000)
EER Range (**)	11.8 to 11.3 (11.5)	14.8 to 10.3 (10.9)	14.8 to 9.5 (10.3)	14.8 to 9.5 (10.3)
Dehumid. Pints/hr **	1.5	3.1	3.1	3.1
Minimum Circuit Amps Cooling	5.9	7	7	7
Reverse-cycle Heating BTUH (**)	6300 to 9720 (8380)	7035 to 13100 (10980)	7035 to 15260 (13310)	7035 to 15260 (13310)
C.O.P.	3.7 to 3.3 (3.26)	3.3 to 3.4 (3.38)	3.3 to 3.1 (3.1)	3.3 to 3.1 (3.1)
HeatPump Amps **	3.7/3.5	4.9/4.5	6.7/6.2	6.7/6.2
HeatPump Watts **	720/700	1010/990	1390/1370	1390/1370
Backup Electric Heat kW	3.6	3.6	3.6	5.0
Airflow CFM (Hi/Lo)	352/323	405/333	405/333	405/333
Indoor Sound dB(A) (Hi/Lo)	43/35	44/36	44/36	44/36
Outdoor Sound dB(A)	66/60	66/60	66/60	66/60
Net Wt/Ship Wt lb	106/119	110/123	110/123	110/123

** Although the i42 is a variable output (inverter) PTAC, ASHRAE tests for PTACs are at only a static output. The data corresponding to ** were generated by programming the chassis to be static Btu/hr output (non-variable). All data was collected at standard test conditions.

Cooling Performance - Btu/hr Cooling Capacity Range

Btu/hr.	5580	5650	5950	6250	6550	6850	7150	7450	7750	8050	8350	8650	8950	9300	9320	9700	10000	10300	10600	10900	11200	11500	11800	12100	12400	12700	13000	13300	13600	13900	14200	14500	14800	15100	15250	15550	15850	16150	16450	16750	17050	17350	17600									
i42HC09K_	11.8														11.3																																					
i42HC12K_															14.8		10.3																																			
i42HC15K_															14.8		9.5																																			

xx.x = EER measured at Normal Rating Conditions --- Outdoor air temperature (°C//°F): DB 35 // 95 ; WB 23.9 // 75 --- Indoor air temperature (°C//°F): DB 26.7 // 80 ; WB 19.4 // 67

Heating Performance - Btu/hr Heating Capacity Range

Btu/hr.	6300	6550	6800	7035	7300	7550	7800	8050	8300	8550	8800	9050	9300	9550	9720	10050	10300	10550	10800	11050	11300	11550	11800	12050	12300	12550	12800	13050	13100	13300	13550	13800	14050	14300	14550	14800	15050	15260														
i42HC09K_	3.6														3.7																																					
i42HC12K_															3.3		3.3																																			
i42HC15K_															3.3		3.1																																			

xx.x = COP measured at Normal Rating Conditions --- Outdoor air temperature (°C//°F): DB 8.3 // 47 ; WB 6.1 // 43 --- Indoor air temperature (°C//°F): DB 21.1 // 70 ; WB 15.6 // 60

Specifications Subject to Change Without Notice

See other CALM Series Solutions from Applied Comfort: www.ptacs.com

U42 flexible amperage

Flexible Amperage/Heater
 -- non-inverter chassis, flexible to use
 15, 20, or 30amp cords for 2, 3 or 5kW of electric heat.

C42 fixed amperage

Fixed Cord/Amperage
 -- non-inverter chassis
 in 20amp and 30amp fixed cord configurations.