

CLEAN HEAT FOR ALL ROOM HEAT PUMP PROGRAM



NYSERDA
New York State Energy Research
and Development Authority

PRELIMINARY THROUGH-WALL HEAT PUMP SPECIFICATIONS

Specifications may be subject to change.

	Standard Size PTAC		
	Ephoca *	Form Research *	Y&N Gree Commercial USA *
Dimensions	16" H x 42" W	15.75" H x 41.75" W	16" H x 42" W
Voltage - Amperage	208/230V - 15A	208/230V - 15A	208/230V - 15A
Sustained Operational Min Temp	Pending	Pending	-22° F
Cooling Capacity	8,500 BTU/hr @ 95° F	10,000 BTU/hr @ 95° F	9,000 BTU/hr @ 95° F
EER	13.0 @ 95° F	Pending	12.0 @ 95° F
Heating Capacity	8,500 BTU/hr @ 47° F 8,500 BTU/hr @ 17° F 8,500 BTU/hr @ 5° F	10,000 BTU/hr	9,000 BTU/hr @ 47° F ≥ 85% of rated capacity @ 17° F ≥ 75% of rated capacity @ 5° F
COP (AHRI 310/380)	4.1 @ 47° F 2.7 @ 17° F 2.2 @ 5° F	Pending	3.45 @ 47° F 1.85 @ 17° F 1.55 @ 5° F
Condensation Management	Fine Mist Nebulizer	Internal	Self-evaporation
Controls/Integration	IoT, Wi-Fi	BACnet, Wi-Fi	BACnet, Wi-Fi, BMS
Sound Level	~ 27 dBA	Pending	~ 41 dBA
Energy Recovery Ventilation (ERV)	Integrated	Integrated	Integrated
	PTAC in Hydronic Cabinets	Through-the-Wall AC	
	Ice Air *	Olimpia Splendid USA	Y&N Gree Commercial USA *
Dimensions	16" H x 42" W	Pending	15.75" H x 26" W
Voltage - Amperage	115V & 208/230V - 15A	Pending	115V - 15A
Sustained Operational Min Temp	-22° F	Pending	-22° F
Cooling Capacity	9,200 BTU/hr @ 95° F	Pending	7,000 BTU/hr @ 95° F
EER	12.7 @ 95° F	Pending	10.6 @ 95° F
Heating Capacity	10,300 BTU/hr @ 47° F 9,500 BTU/hr @ 17° F 8,300 BTU/hr @ 5° F	Pending	7,000 BTU/hr @ 47° F ≥ 85% of rated capacity @ 17° F ≥ 75% of rated capacity @ 5° F
COP (AHRI 310/380)	4.3 @ 47° F 2.7 @ 17° F 2.1 @ 5° F	Pending	3.1 @ 47° F 1.75 @ 17° F 1.5 @ 5° F
Condensation Management	Built-in	Pending	Self-evaporation
Controls/Integration	BACnet, Wi-Fi, BMS	Pending	BACnet, Wi-Fi, BMS
Sound Level	~ 45 dBA	Pending	~ 39 dBA
Energy Recovery Ventilation (ERV)	Integrated	Pending	Integrated

*Expected specifications: product development in-progress, AHRI 310/380 testing not yet completed.

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The heat pumps being supported by the Room Heat Pump Program are in active development by the awarded manufacturers - all specifications below are subject to change.

	Standard Size PTAC		
	Ephoca	Form Research	Y&N Gree Commercial USA
Dimensions	16" H x 42" W	15.75" H x 41.75" W	16" H x 42" W
Voltage	230V	208/230V, single-phase	208/230V, single-phase
Outdoor Air Temperature Range	Pending	Pending	-22° F - 90° F
Cooling Capacity	Pending	10,000 BTU/hr	9,000 BTU/hr @ 95° F
Heating Capacity	Pending	10,000 BTU/hr	9,000 BTU/hr @ 47° F ≥ 85% of rated capacity @ 17° F ≥ 75% of rated capacity @ 5° F
Efficiency/COP (Coefficient of Performance)	Pending	Pending	Pending
Condensation Management	Fine Mist Nebulizer	Internal	Self-evaporation
Controls/Integration	IoT	BACnet, Wi-Fi	BACnet, Wi-Fi, BMS
Sound Level	~ 27 dBAv	Pending	41 dBA
Filtration	MERV 13	MERV	MERV 13
Energy Recover Ventilation (ERV)	Pending	Integrated	Integrated
Refrigerant	R32 / R310A	R32	R32
	PTAC in Hydronic Cabinets	Through-the-wall AC	
	Ice Air	Olimpia Splendid USA	Y&N Gree Commercial USA
Dimensions	15.5" H x 36.75" W	15.75" H x 41.75" W	15.75" H x 26" W
Voltage	230V	208/230V, single-phase	115V, single-phase
Outdoor Air Temperature Range	Pending	Pending	-22° F - 90° F
Cooling Capacity	Pending	10,000 BTU/hr	7,000 BTU/hr @ 95° F
Heating Capacity	Pending	10,000 BTU/hr	7,000 BTU/hr @ 47° F ≥ 85% of rated capacity @ 17° F ≥ 75% of rated capacity @ 5° F
Efficiency/COP (Coefficient of Performance)	Pending	Pending	Pending
Condensation Management	Fine Mist Nebulizer	Internal	Self-evaporation
Controls/Integration	IoT	BACnet, Wi-Fi	BACnet, Wi-Fi, BMS
Sound Level	~ 27 dBAv	Pending	39 dBA
Filtration	MERV 13	MERV	MERV 13
Energy Recover Ventilation (ERV)	Pending	Integrated	Integrated
Refrigerant	R32 / R310A	R32	R32

NYSERDA has awarded \$7.5 million to five heating, ventilation and air conditioning (HVAC) manufacturers for the development and demonstration of cold-climate, through-wall heat pumps terminal products.

Through-wall heat pumps are designed for buildings with through-wall sleeves and can provide efficient heating and cooling without major infrastructure changes. They replace existing equipment in three categories:

- Category 1: Standard-size packaged terminal air conditioning (PTAC)
- Category 2: PTAC in hydronic cabinets
- Category 3: Through-the-wall air conditioning

NYSERDA is investing \$7.5 million for product development and field demonstrations to ensure through-wall room heat pumps perform reliably in New York's diverse climate. We've vetted five room heat pump manufacturers to identify products that have been developed to meet New York building owner's rigorous performance and quality standards.

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Dimensions	16" H x 42" W	15.75" H x 41.75" W	16" H x 42" W
Voltage	230V	208/230V, single-phase	208/230V, single-phase
Sustained Operational Temp Min	Pending	Pending	-22° F
Rated Cooling Capacity	8,500 BTU/hr @ 95° F	10,000 BTU/hr	9,000 BTU/hr @ 95° F
Rated Heating Capacity	8,500 BTU/hr @ 47° F 6,500 BTU/hr @ 5° F	10,000 BTU/hr	9,000 BTU/hr @ 47° F ≥ 85% of rated capacity @ 17° F ≥ 75% of rated capacity @ 5° F
Efficiency/COP (AHRI 310/380) +EER2	Pending	Pending	Pending
Condensation Management	Fine Mist Nebulizer	Internal	Self-evaporation
Controls/Integration	IoT	BACnet, Wi-Fi	BACnet, Wi-Fi, BMS
Sound Level	~ 27 dBA	Pending	41 dBA
Energy Recover Ventilation (ERV)	Integrated	Integrated	Integrated
Refrigerant	R32 / R310A (based on configuration)	R32	R32
	PTAC in Hydronic Cabinets	Through-the-wall AC	
	Ice Air	Olimpia Splendid USA	Y&N Gree Commercial USA
Dimensions	Pending	Pending	15.75" H x 26" W
Voltage	Pending	Pending	115V, single-phase
Outdoor Air Temperature Range	Pending	Pending	-22° F
Cooling Capacity	Pending	Pending	7,000 BTU/hr @ 95° F
Heating Capacity	Pending	Pending	7,000 BTU/hr @ 47° F ≥ 85% of rated capacity @ 17° F ≥ 75% of rated capacity @ 5° F
Efficiency/COP (Coefficient of Performance)	Pending	Pending	Pending
Condensation Management	Pending	Pending	Self-evaporation
Controls/Integration	Pending	Pending	BACnet, Wi-Fi, BMS
Sound Level	Pending	Pending	39 dBA
Energy Recover Ventilation (ERV)	Pending	Pending	Integrated
Refrigerant	Pending	Pending	R32

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Controls/Integration	BACnet, Wi-Fi, BMS	Pending	BACnet, Wi-Fi, BMS
Sound Level	~ 45 dBA	Pending	~ 39 dBA
Energy Recovery Ventilation (ERV)	Integrated	Pending	Integrated

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