

CMW30 Water-Cooled, Ceiling-Mount Spot Air Conditioner

When we introduced our CM12 and CM25 models, they set industry standards as the first self-contained, ceiling-mount spot air conditioners. Now we are adding to our ceiling-mount lineup with the new water-cooled CMW30 model. The CMW30 is specifically designed for applications where an air-cooled spot air conditioner cannot be used because there is no suitable space to direct the hot exhaust air into.

The CMW30 offers a larger cooling capacity than the CM25 (29,400 Btu/h total and 20,800 Btu/h sensible for rooms; 25,200 Btu/h total and 22,000 Btu/h sensible for computer rooms). Its compact dimensions and other CM-Series features allow easy, low-cost installation.

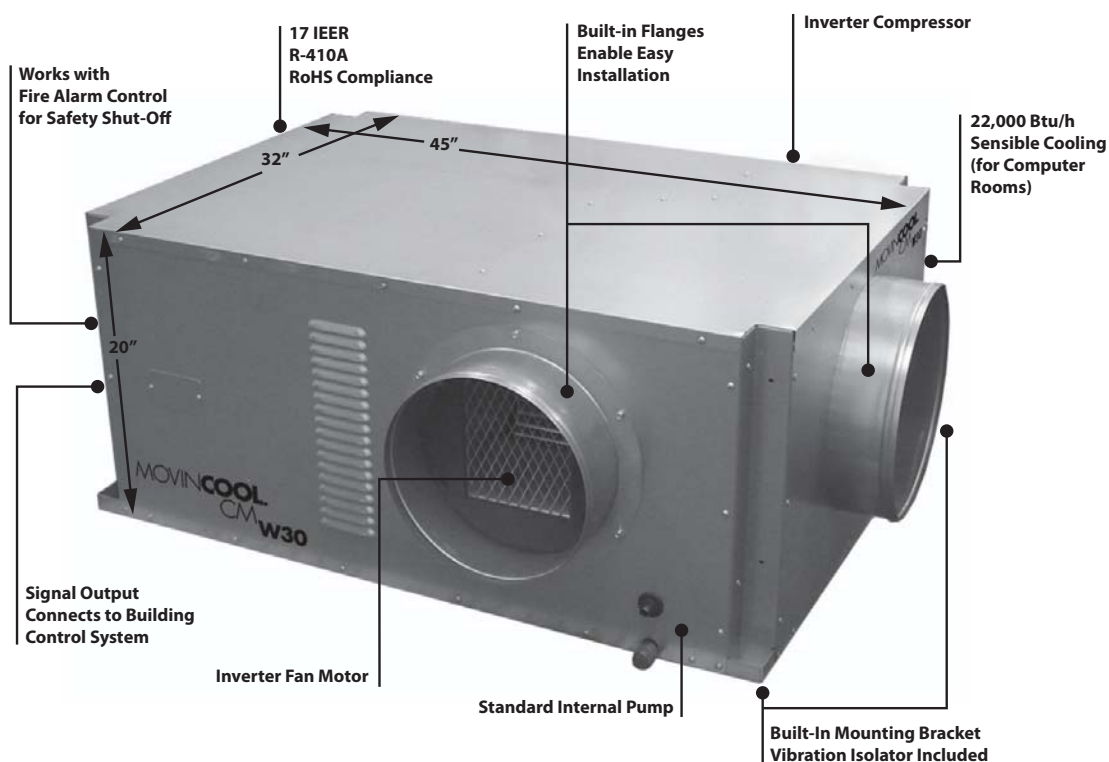
Environmentally Friendly, Energy-Efficient Design

Based on the same breakthrough engineering technology as the CM25 the CMW30 features a high integrated energy efficiency ratio (IEER) of 17.0, made possible by an energy-saving, variable-speed inverter compressor and inverter fan motor.

The CMW30's inverter compressor varies its speed as the heat load changes, producing the appropriate amount of cooling required at all times. This reduces temperature swings and results in up to 60% less power consumption than a fixed-speed compressor. In addition, the inverter compressor has a "soft start" feature that eliminates dips in power and therefore causes less start-up wear.

The inverter fan motors, or electronically commutated motors (ECMs), which also have a soft start, are more energy-efficient than conventional, permanent-split capacitor (PSC) motors. With an ECM, AC power is supplied to the inverter, then converted to DC power to drive the motor. Subsequently controlling the input frequency allows the motor to run at multiple speeds, making it more efficient through its entire operating range.

Additional green features include the use of R-410A refrigerant, as well as voluntary RoHS compliance in advance of mandated requirements.



High Cooling Capacity at a Remarkably Low Price

The CMW30 offers the industry's highest cooling capacity for an air conditioner of its class, but at a lower cost than conventional solutions such as precision cooling systems. It has a total cooling capacity of 29,400 Btu/h and a high sensible cooling capacity of 20,800 Btu/h (80° F, 50% RH, 85° F EWT, 95° F LWT), yet its suggested list price is only \$7,495.

Low-Cost Installation and Maintenance

The compact CMW30 was specifically designed for server rooms and other spaces with dense heat loads. The unit is only 20 inches high, enabling it to fit conveniently above a drop ceiling. A built-in mounting bracket, along with built-in flanges and vibration isolators, allows easy, low-cost installation using standard, off-the-shelf hardware. As with all MovinCool spot air conditioners, no refrigerant connections or outside condensing units are required, further reducing costs.

Wide Range of Applications

Typical uses for the CMW30 include:

- Server rooms, data centers, telecom closets or other spaces with high heat loads that need a dedicated cooling system
- During off-season or other periods when central cooling system is off or in heating mode—great for cold-weather applications
- Overhead-mounted spot cooling in warehouses or manufacturing facilities, to save valuable floor space
- Supplemental-cooling applications
- Hotels and restaurants
- Anywhere floor space is limited

Specifications:

Technical Specs		CMW30**
Electronic Features	Operation Control	Wall Mounted Controller with LCD display Electronic
Electrical Characteristics	Voltage Requirement Min. - Max. Voltage Recommended Fuse Size	208/230V, 1 Phase, 60Hz 198-253V 20 amps
Cooling Capacity and Power Consumption Air: 80°F at 50% RH Water (EWT/LWT): 85°F/95°F Air: 75°F at 50% RH Water (EWT/LWT): 86°F/95°F	Total cooling capacity Sensible cooling capacity Power consumption Current consumption	29,400 Btu/h ¹ 20,800 Btu/h ¹ 1.99 kW ¹ 8.9 amps ¹
	Total cooling capacity Sensible cooling capacity Power consumption Current consumption	25,200 Btu/h ¹ 22,000 Btu/h ¹ 2.00 kW ¹ 9.0 amps ¹
IEER		17.0
Evaporator	Type of Heat Exchanger Type of Fan Max. Air Flow - High/Low Max. External Static Pressure	Plate Fin Centrifugal Fan 1060/840 CFM 0.66 IWG
Condenser	Type of Heat Exchanger Water Connection Max. Water Pressure Recommended Water Flow Rate	Water Cooled, Coaxial Coil 3/4 in NPT Female 150 psi 7.1 gal/min
Compressor	Type	Hermetic Swing Inverter
Refrigerant	Type Amount	R-410A 2.31 lbs
Dimensions	W x D x H (without flange) W x D x H (with flange)	45 x 32 x 20 in 49 x 35 x 20 in
Net Weight/Shipping Weight		236/271 lbs
Internal Condensate Pump Capacity	Pump rate Head	5 gal/h 4 ft
Operating Conditions Range	Evaporator Inlet Air - Max./Min. Condenser EWT - Max./Min.	95°F at 50% RH/55°F at 50% RH 115°F/45°F
Maximum Duct Length	Per Cold Duct Hose	120 ft ²
Maximum Sound Level	Under Ceiling Tile with Evaporator Duct	55 dB(A)

All specifications subject to change without notice.

¹ Measured with two 20 ft ducts with one 90° bend each, supply grill and return grill with filter (0.30 IWG external static pressure).

² Confirm pressure drop of duct, grills and filter with manufacturer specifications.

**Specification information shown with 230V.