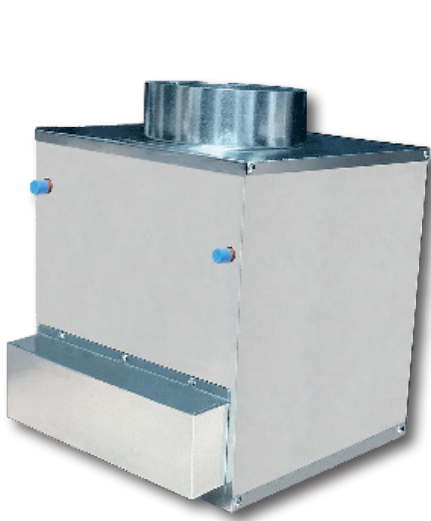




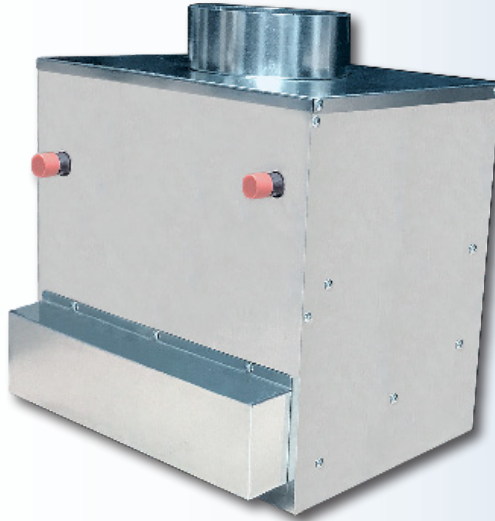
Efficient Heating, Cooling and IAQ Systems

ESP Cube EC Series

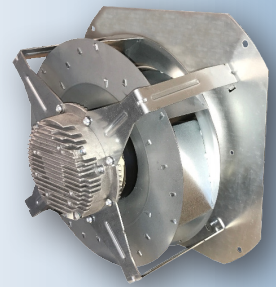
Compact Air Handler



CU-31-EC



CU-51-EC



with Variable Speed
Backward Curved Fan

The Most Flexible Air Delivery System for Small Spaces

Compact Heating, Cooling or Fresh Air

Stand-alone Make-Up Air or Exhaust Air Applications

Requires Little or No Maintenance, Only 2 Moving Parts

Multi-Positional to Suit any Mechanical Location

Perfect for Spaces Requiring Additional Heating, Cooling or Fresh Air

- Apartments/Condos
- Secondary Suites
- Garages & Workshops
- Large Open Unconditioned or Unheated Spaces
- Basements
- Modular Homes
- Sun Rooms/Porches/Foyers
- "Tiny" Homes

Matching Coils
Refrigerant Coils
RCM-30, RBM/RPM-E/RCM-50
Chilled Water Coils
WBM/WCM-50
Hot Water Coils
HWC-30, HWC-50



Efficient Heating, Cooling and IAQ Systems

ESP Cube EC Series

Options

- Variable Speed Motors
- Filter Assembly Optional
- Use Ducted or Unducted
- Available with or without Hot Water Coil
- Cooling Coil Option Available
- Circuit Board Compatible with all Thermostats

CU-31-EC		CU-51-EC	
Hot Water Heating		Max Air Flow	
Coil Type		-	
Max. BTUH @ 200°F E.W.T. (kW @ 93°C)		31,400 (9.2 kW)	
Max. BTUH @ 190°F E.W.T. (kW @ 88°C)		29,200 (8.6 kW)	
Max. BTUH @ 180°F E.W.T. (kW @ 82°C)		26,900 (7.9 kW)	
Max. BTUH @ 170°F E.W.T. (kW @ 77°C)		24,600 (7.2 kW)	
Max. BTUH @ 160°F E.W.T. (kW @ 71°C)		22,300 (6.5 kW)	
Max. BTUH @ 150°F E.W.T. (kW @ 66°C)		21,100 (6.1 kW)	
Max. BTUH @ 140°F E.W.T. (kW @ 60°C)		17,800 (5.2 kW)	
Max. BTUH @ 130°F E.W.T. (kW @ 54°C)		15,600 (4.6 kW)	
GPM Flow Ratings (L/s Flow Ratings)		2 (0.13 L/s)	
Pressure Drop in Ft. H ₂ O (Drop in KPa)		6.3 (18.83 KPa)	
Chilled Water Cooling ⁽¹⁾		N/A	
Coil Type		-	
WBM/WCM Modules in Cooling Mode		N/A	
Max. BTUH @ 48°F E.W.T. (kW @ 8.9°C)		-	
Max. BTUH @ 46°F E.W.T. (kW @ 7.8°C)		-	
Max. BTUH @ 44°F E.W.T. (kW @ 6.7°C)		-	
Max. BTUH @ 42°F E.W.T. (kW @ 5.6°C)		-	
Max. BTUH @ 40°F E.W.T. (kW @ 4.4°C)		-	
WBM/WCM Modules in Heating Mode		N/A	
Max. BTUH @ 150°F E.W.T. (kW @ 66°C)		-	
Max. BTUH @ 140°F E.W.T. (kW @ 60°C)		-	
Max. BTUH @ 130°F E.W.T. (kW @ 54°C)		-	
Max. BTUH @ 120°F E.W.T. (kW @ 49°C)		-	
Max. BTUH @ 110°F E.W.T. (kW @ 43°C)		-	
GPM Flow Ratings (L/s Flow Ratings)		5 (0.32 L/s)	
Pressure Drop in Ft. H ₂ O (Drop in KPa)		3 (8.97 KPa)	
Refrigerant Cooling ⁽¹⁾		RCM-30	
RBM/RPM-E/RCM Modules BTUH Refrigerant TX Cooling		1.0 Ton (3.5 kWh)	
Electrical Heating		ESH/VESH-400	
Kilowatt Range (240v)		5 - 10 kW	
Specifications		CU-31-EC	
Nominal CFM (L/s)		400 (190 L/s)	
Max Rated CFM (L/s)		450 (212 L/s)	
Voltage		115/1/50/60 F.L.A. 2 amp	
Nominal Operating Amperage		1.5	
Horse Power - Watts		1/4 - 215	
Motor RPM		Variable / 3340 (max)	
Hydronic Connections	Supply	Ø3/8" (9.5mm)	
	Return	Ø3/8" (9.5mm)	
Supply Air Size		CU-51-EC	
		115/1/50/60 F.L.A. 2 amp	
		1.5	
		1/4 - 215	
		Variable / 3340 (max)	
		Ø3/4" (19mm)	
		Ø3/4" (19mm)	
		Round Duct	
		Rectangular Duct	
		Round Duct	
		Rectangular Duct	
		Ø8" round (203mm)	
		12.5" x 13" (318mm x 330mm)	
		Ø8" round (203mm)	
		17.5" x 13" (445mm x 330mm)	
Supply Maximum Length ⁽²⁾		50' (15.24m)	
Return Size Needed		Ø10" or 100 in ²	
Nominal Outlets ⁽³⁾		6 (HE) 12 (2")	
Maximum Outlets ⁽³⁾		10 (HE) 20 (2")	
Shipping Weight (w/ Heating Coil)		25 lbs (11.3 kg)	
Air Handler Dimensions (L x W x H)		14" x 13 1/2" x 14 1/2"	
(Add 2 1/2 inches to height for collars)		(356mm x 343mm x 368mm)	
		14 x 18 1/4" x 16 1/4"	
		(356mm x 464mm x 413mm)	

⁽¹⁾ Heating specs are rated at 68°F E.A.T., Cooling specs are rated at 80°F/67°F dB/wB

⁽²⁾ Maximum length is from the unit to the supply run end cap. More than one run per unit is allowable.

⁽³⁾ Refer to page 5 of Cube Installation Manual for details on flex allowances.

BTUH - British Thermal Units per Hour
E.W.T. - Entering Water Temperature
GPM - US Gallons per Minute
L/s - Litres per Second

CFM - Cubic Feet per Minute
F.L.A. - Full-Load Amperage
RPM - Revolutions per Minute
EAT - Entering Air Temperature