



A **NIBE** GROUP MEMBER



SERIES FAN POWERED TERMINAL UNIT

PRODUCT CATALOG

Part#: I100-90045507 | CA-110 | Published: July 25, 2024

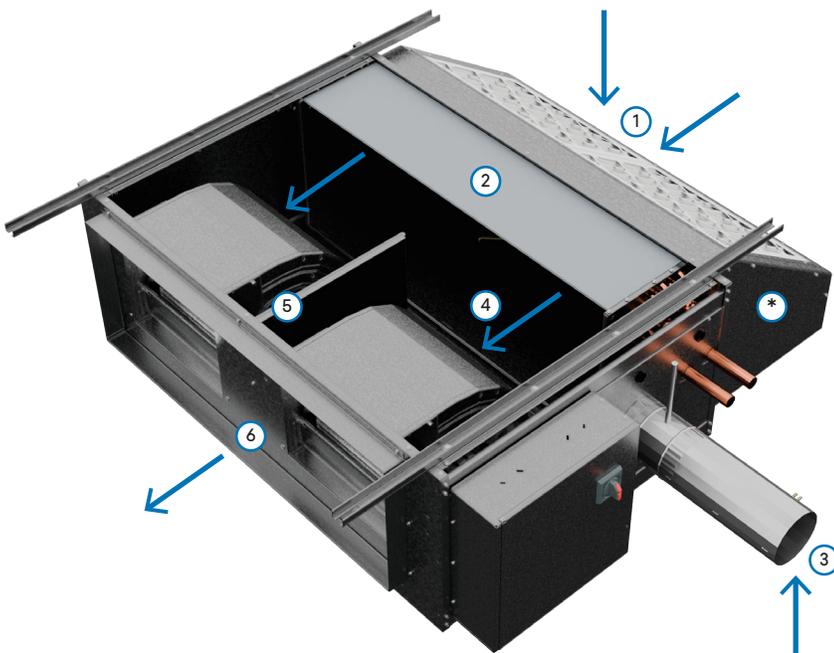
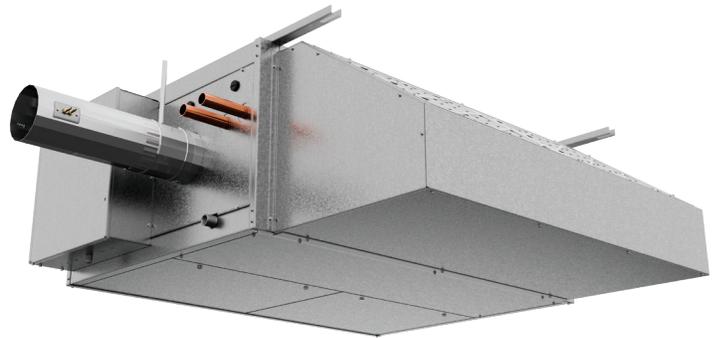
Models: HTY

CFM Range: 600-2,000

3	Portfolio
4	Special Applications
5	Model Nomenclature
6	Ratings and Listings
7	Motor Data
8	Sound Power Data
12	Fan Performance Curves
14	Electric Heating
15	Submittal Data
19	Air Flow Arrangements
20	Standard Features and Options
24	Piping Packages
25	Revision History

**SERIES FAN POWERED TERMINAL UNIT HTY
600 CFM TO 2000 CFM**

The Series Fan Powered Terminal (HTY) is designed for above or below the ceiling ducted applications. The base unit comes standard with 18-gauge steel blower/primary air module and a cold water module. Options for heating and return air plenum modules available.



Product Functionality

1. Top or Rear Return air enters unit.**
2. Air is drawn through the MERV filter and cooling coil.
3. Preconditioned outdoor air is introduced to unit when CO₂ levels call for demand.
4. Preconditioned outdoor air mixes with return air.
5. Air passes the EC Motor/blowers.
6. Air passes through heating coil or Electric Heat module and into the room.

Notes:

- Optional heat module not shown in image.
- * Extended plenum for sound attenuation.
- ** Optional sound attenuator shown.



Reduces First Cost of a project by reducing air handler size and required ductwork through more efficient management of partial system loads. Ship loose valve packages can be supplied to reduce installation time on the jobsite. Customer supplied DDC controls can be factory installed to reduce installation time on the jobsite. The HTY also reduces the number of components required to supply the space with the desired conditions (temperature, humidity and fresh air).

Reduces Operating Cost through energy efficient EC Motors and proportional controls that modulate air and water flow in response to delta from set point and by providing feedback on system operation and health via communication with the BMS. A controller is not included in the standard package.

Maximizes Occupant Comfort by delivering the right amount of dehumidified, preconditioned outdoor air at the lowest sound levels. No more over-ventilation/cooling. This system is optimized to meet ASHRAE standards 90.1 and 62.1 for energy savings and indoor air quality, as well as local codes.

Provides Ultimate Flexibility, with Ease of Service and installation. Available in sizes ranging from 600 to 2000 CFM, the HTY can be customized to specific job requirements including footprint, constant volume or torque operation, and heating needs. Units arrive at the site ready to hang with pre-installed Unistrut channels, and are designed to provide ready access to critical parts for rapid service, cleanability, and maintenance.

- Optional powder paint finish colors selections will complement most décors controls packages.
- Optional airflow configuration (top return or rear return).
- Wide variety of insulation and air filter materials are available to address IAQ concerns.
- Wide variety of factory assembled valve packages to meet desired controls specifications.

Model Nomenclature

Model:
HTY

01 | 02 | 03 | 04 | 05 | 06 | 07
H | **T** | **Y** | **0** | **8** | **B** | **6** | **S** | **C** | **2** | **D** | **Y** | **A** | **C** | **2**

UNIT | VINTAGE

HTY = Series Fan Powered Terminal Unit

SIZE

06 = 600 CFM 14 = 1400 CFM
 08 = 800 CFM 16 = 1600 CFM
 10 = 1000 CFM 18 = 1800 CFM
 12 = 1200 CFM 20 = 2000 CFM

COILS/ELECTRIC³ HEATING

Two-Pipe Cooling and Heating or Four-Pipe Cooling

B = 4-Row
 K = 6-Row
 L = 8-Row

Four-Pipe Heating or Voltage

Coiled Heating	Electric Heating
Y = None	C = 120V
6 = 1-Row	D = 208V
7 = 2-Row	E = 240V
	F = 277V

Coil Connection or kW

Coiled Heating	Electric Heating
Y = None	D = 2.0
S = Same End	F = 3.0
	G = 5.0
	H = 6.0
	J = 7.0
	K = 8.0
	L = 9.0
	M = 10.0

MOTOR

Voltage

C = 115-1-60
 D = 208-1-60
 E = 230-1-60
 F = 277-1-60

Type

R = ECM, Constant CFM

CONTROLS

System / Thermostat

Manual Fan Operation

A2 = None

Function Control

G = 40 amp appropriate fuse
 H = 40 amp disconnect
 K = 41-60 amp disconnect
 P = 61-80 amp disconnect

Voltage

Y = None
 B = 24V

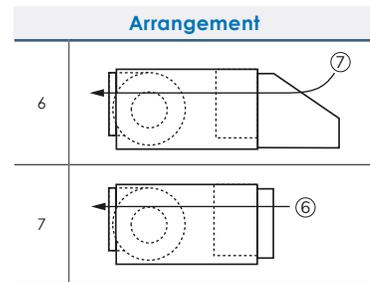
HAND/ARRANGEMENT

Hand⁴

R = Right
 L = Left

Arrangement

See Below



NOTES:

- For additional details, refer to Price Guide.
- Consult factory for 50 Hz applications.
- Note that kW's depend on voltage and unit size. Motor and heater voltage must match. Dual power sources are not available.
- Standing in front of the unit, hand is determined by looking into the air supply.

International Environmental Corporation (IEC) works continually to improve its products. As a result, the design and specifications of each product may be changed without notice and may not be as described herein. Please contact IEC for information regarding current design and product specifications. Statements and other information contained herein are not express warranties and do not form the basis of any bargain between the parties but are merely IEC's opinion or commendation of its products. Manufacturer's standard limited warranty applies. The latest version of this document is available at www.iec-okc.com. © International Environmental Corporation (IEC). All Rights Reserved 2024.

AHRI CERTIFICATION

IEC's Series Fan Powered Terminal Units are certified in compliance with Air-Conditioning, Heating, and Refrigeration Institute (AHRI) industry standard AHRI-440-2019 for room fan-coil units. Approved standard ratings are tabulated below.



C-ETL-US LISTING

IEC's Series Fan Powered Terminal Units are listed by ETL. The C-ETL-US listing signifies that IEC's fan coil units have been examined by ETL and are in compliance with both the U.S. and Canadian applicable standards.



EC Motor Standard Ratings

Unit Size	Coil Rows	Air Flow Rating (SCFM)	Water Pressure Drop (ft. water)	Total Cap. (Btuh)	Sensible Cap. (Btuh)	Power Input (Watts)
6	4	600	1.6	16,400	13,000	150
	6	600	4.0	20,000	13,800	156
8	4	800	3.1	21,000	17,300	165
	6	800	4.5	28,800	19,000	170
10	4	1,000	7.0	29,300	22,700	320
	6	1,000	7.9	30,800	21,400	330
12	4	1,200	8.8	33,400	27,100	260
	6	1,200	17.9	44,600	29,000	270
14	4	1,400	12.3	43,400	32,000	295
	6	1,400	5.5	49,300	35,000	310
16	4	1,950	8.0	56,800	44,200	570
	6	1,700	15.0	68,100	47,900	425
18	4	2,100	11.0	62,200	47,500	510
	6	1,900	20.0	76,200	53,100	430
20	4	2,100	12.0	65,100	49,000	480
	6	2,000	16.9	80,200	54,500	480

Note:

- Ratings are based on 80°F DB and 67°F WB EAT, 45°F EWT, 10°F water temperature rise, high fan speed, motor voltage 115-1-60, and air flow under dry coil conditions.
- For all application ratings, use IEC's Rating Program, or contact your local IEC representative.
- For additional information, please consult the Directory of Certified Applied Air-Conditioning Products or AHRI's website at www.ahrinet.org.
- The AHRI Standard 440 certification program does not apply to unit sizes above 1500 nominal CFM.
- Ratings are based on the Standard Coil Circuit and FPI option

MOTOR PERFORMANCE DATA

Tables below indicate full load amperage (FLA). The EC Motor FLA condition occurs at 0.3-inch ESP.

Note that this data is for design purposes and should not be used for an energy analysis. EC Motor reaches full load condition at the unit's maximum external static because it has increased output to maintain airflow. An EC Motor decreases output with lower static, causing the minimum power usage to occur at 0.0-inch w.g. ESP.

EC Motor Performance Data – HTY

Voltage	Unit Size	6	8	10	12	14	16	18	20
	Nominal HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
120V	Motor FLA	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40
	Max Program Current	2.63	3.57	5.21	5.11	6.40	3.92	3.52	4.75
208- 240V	Motor FLA	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80
	Max Program Current	1.52	2.06	3.00	2.95	3.71	2.26	2.03	2.74
277V	Motor FLA	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
	Max Program Current	1.14	1.55	2.26	2.21	2.79	1.70	1.52	2.06

Note:

1. Total unit motor AMPS are shown.
2. UL approves the motor and thermal overload combination at locked rotor conditions only.
3. Consult factory for 50 Hz applications.

HTY 06 Sound Power Data

CFM	ESP Target	CASING RATED SOUND POWER LEVEL Lw (dB, reference one picowatt)							
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
250	0.0	60	47	44	41	31	24	23	28
	0.2	66	57	53	49	42	36	28	27
	0.4	69	63	58	54	48	43	36	29
	0.6	73	67	62	56	51	47	40	31
400	0.0	63	57	51	48	40	34	27	28
	0.2	69	64	58	53	47	42	34	28
	0.4	72	67	62	55	50	46	39	30
	0.6	73	70	65	57	53	49	43	34
500	0.0	68	63	57	52	46	41	34	28
	0.2	71	66	61	55	50	45	38	30
	0.4	74	69	64	56	53	48	41	32
	0.6	74	71	67	58	54	50	44	35
600	0.0	62	59	54	49	43	38	33	24
	0.2	73	68	64	54	53	48	42	34
	0.4	74	71	67	59	56	51	45	36

HTY 08 Sound Power Data

CFM	ESP Target	CASING RATED SOUND POWER LEVEL Lw (dB, reference one picowatt)							
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
250	0	61	51	45	41	31	25	28	27
	0.2	66	56	51	47	39	34	29	27
	0.4	70	62	56	50	45	40	34	28
	0.6	73	66	60	53	48	44	38	31
500	0	69	65	57	51	44	40	36	29
	0.2	71	65	59	52	47	44	39	31
	0.4	72	67	61	53	49	46	40	32
	0.6	74	69	64	55	51	48	43	35
800	0	64	63	60	52	47	44	39	32
	0.2	75	72	69	60	55	53	48	42
	0.4	75	73	70	60	56	54	49	43
	0.6	77	74	71	61	57	55	50	44
950	0	77	76	73	63	58	57	52	46
	0.2	78	75	74	63	59	57	52	47
	0.4	77	74	72	63	58	57	52	46
	0.6	77	73	71	61	57	55	50	45

HTY 10 Sound Power Data

CFM	ESP Target	CASING RATED SOUND POWER LEVEL Lw (dB, reference one picowatt)							
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
350	0.0	63	48	45	39	34	26	22	27
	0.2	65	55	53	48	43	37	27	27
	0.4	68	60	55	52	48	43	34	28
	0.6	72	64	59	55	52	47	39	29
625	0.0	66	58	55	50	47	42	33	27
	0.2	66	59	56	52	49	45	36	28
	0.4	68	63	59	54	52	48	40	30
	0.6	71	66	62	56	55	51	43	32
900	0.0	67	63	62	57	54	51	45	34
	0.2	68	66	63	58	56	53	46	35
	0.4	69	65	65	58	58	54	47	36
	0.6	70	66	65	59	59	55	49	38
1030	0.0	69	69	65	59	57	54	49	39
	0.2	68	66	66	60	59	56	50	39
	0.4	69	66	67	60	60	57	51	40
	0.6	69	67	67	61	61	58	51	41
1175	0.0	70	68	68	61	61	58	53	43
	0.2	70	67	68	62	61	58	53	43
	0.4	71	67	69	62	62	59	53	44
	0.6	71	68	69	63	63	60	54	45

HTY 12 Sound Power Data

CFM	ESP Target	CASING RATED SOUND POWER LEVEL Lw (dB, reference one picowatt)							
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
350	0.0	65	48	46	43	36	28	37	38
	0.2	66	58	54	51	45	37	33	29
	0.4	70	64	60	56	52	46	40	35
	0.6	73	68	64	59	56	50	45	36
700	0.0	67	59	54	52	47	38	38	38
	0.2	69	64	58	55	51	44	38	30
	0.4	72	68	62	58	55	48	43	35
	0.6	75	71	66	60	58	52	47	40
1150	0.0	72	70	65	59	57	54	48	41
	0.2	73	71	65	60	58	55	48	39
	0.4	76	74	68	62	60	56	50	42
	0.6	77	75	72	63	61	58	52	44
1500	0.0	77	77	74	65	61	59	57	47
	0.2	77	76	76	65	62	59	57	48
	0.4	77	76	76	64	62	60	55	47
	0.6	78	76	78	65	63	60	55	48

HTY 14 Sound Power Data

CFM	ESP Target	CASING RATED SOUND POWER LEVEL Lw (dB, reference one picowatt)							
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
450	0.00	66	53	50	46	37	32	25	25
	0.20	67	61	57	53	46	41	36	28
	0.40	73	69	66	59	55	50	46	39
	0.60	75	69	66	60	55	50	45	36
875	0.00	68	63	57	53	47	42	37	28
	0.20	71	66	62	56	51	47	42	33
	0.40	75	70	67	61	57	52	47	41
	0.60	78	74	72	65	60	56	52	47
1300	0.00	73	70	66	60	55	51	48	41
	0.20	75	72	68	61	57	53	50	43
	0.40	76	74	71	63	59	55	51	45
	0.60	78	74	74	65	60	57	53	48
1400	0.30	76	74	70	63	59	56	51	46
1750	0.13	77	76	73	66	61	58	55	50

HTY 16 Sound Power Data

CFM	ESP Target	CASING RATED SOUND POWER LEVEL Lw (dB, reference one picowatt)							
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
500	0.00	62	52	50	48	39	33	24	26
	0.25	65	57	55	55	48	42	33	26
	0.50	69	64	62	60	55	51	44	35
	0.75	72	66	64	61	58	54	48	40
1000	0.00	65	61	59	57	52	46	40	30
	0.25	67	66	61	60	55	50	44	33
	0.50	68	64	63	61	58	53	46	36
	0.75	69	66	65	62	60	55	49	40
1500	0.00	78	75	69	63	61	57	52	43
	0.25	71	68	67	63	60	56	51	43
	0.50	72	69	69	65	63	59	53	45
	0.75	73	71	70	66	65	61	55	47
2000	0.11	86	81	77	69	67	65	60	53
	0.25	83	84	85	85	88	88	58	82
	0.50	75	73	72	68	67	64	59	52
	0.75	76	73	72	68	68	65	60	53

HTY 18 Sound Power Data

CFM	ESP Target	CASING RATED SOUND POWER LEVEL Lw (dB, reference one picowatt)							
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
1450	0.00	66	61	60	64	53	50	44	32
	0.20	67	62	61	65	55	52	46	34
	0.25	68	63	61	65	56	52	47	35
	0.50	69	65	64	61	68	55	50	39
	0.75	71	68	67	62	71	57	52	41
1900	0.08	68	66	65	63	62	57	53	43
	0.21	70	66	66	63	66	58	53	43
	0.25	70	66	66	63	66	58	54	44
	0.50	71	68	69	64	70	60	55	46
	0.75	73	69	69	64	71	61	56	47
2150	0.10	72	69	68	64	67	60	56	47
	0.20	73	69	71	64	67	61	56	47
	0.25	71	68	70	65	68	61	57	48
	0.50	72	69	71	65	71	62	58	50

HTY 20 Sound Power Data

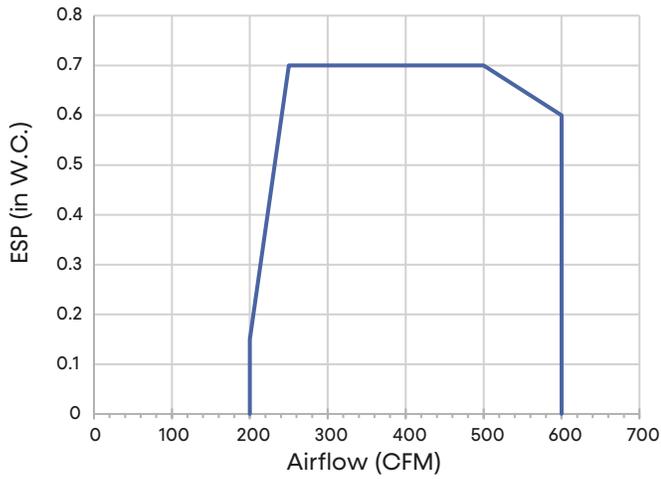
CFM	ESP Target	CASING RATED SOUND POWER LEVEL Lw (dB, reference one picowatt)							
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
600	0	68	61	57	55	52	47	41	30
	0.2	68	63	60	58	54	51	45	33
	0.25	69	64	61	59	56	53	47	36
	0.5	70	66	64	61	59	56	51	40
	0.75	73	69	66	63	61	58	53	43
1050	0	69	65	62	60	56	53	48	37
	0.2	70	65	63	61	58	55	50	39
	0.25	71	65	63	61	58	55	50	40
	0.5	73	67	65	62	61	58	53	43
	0.75	73	69	67	64	62	60	55	45
1500	0	70	66	64	61	59	56	51	41
	0.2	70	67	65	62	60	57	52	42
	0.25	70	67	65	62	60	58	53	43
	0.5	73	68	67	64	63	59	55	45
	0.75	73	69	68	65	63	60	56	47
1950	0	71	68	66	63	62	60	55	46
	0.2	74	69	67	64	62	60	56	46
	0.25	73	70	68	64	63	61	56	47
	0.5	74	69	69	65	64	62	58	48
	0.75	74	72	70	66	66	63	59	50
2300	0.15	73	71	68	65	64	62	58	49
	0.2	74	70	69	65	64	62	58	49
	0.25	74	70	69	66	65	63	59	49
	0.5	74	70	70	66	66	63	59	50
	0.75	75	73	72	67	67	64	60	51

International Environmental Corporation (IEC) works continually to improve its products. As a result, the design and specifications of each product may be changed without notice and may not be as described herein. Please contact IEC for information regarding current design and product specifications. Statements and other information contained herein are not express warranties and do not form the basis of any bargain between the parties but are merely IEC's opinion or commendation of its products. Manufacturer's standard limited warranty applies. The latest version of this document is available at www.iec-okc.com. © International Environmental Corporation (IEC). All Rights Reserved 2024

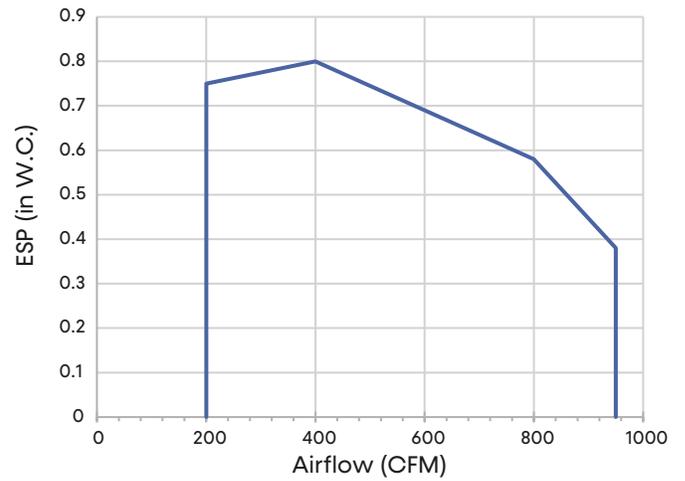
Fan Performance Curves

Model:
HTY

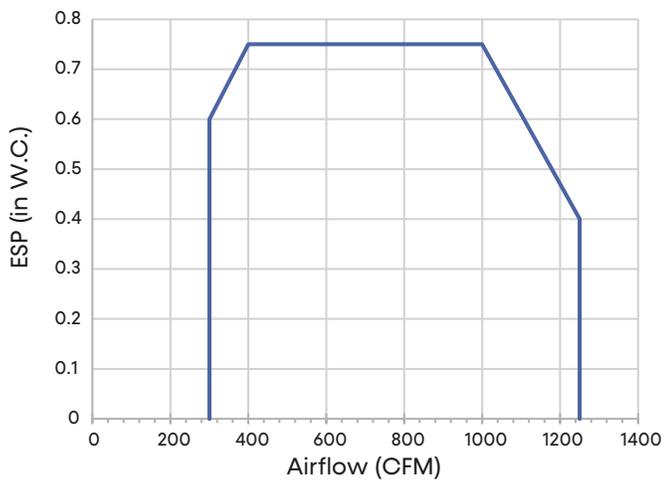
Size 6 Recommended Operating Range



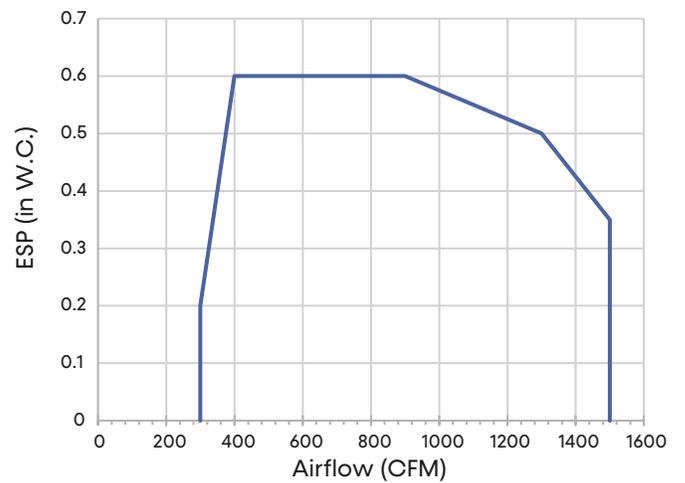
Size 8 Recommended Operating Range



Size 10 Recommended Operating Range



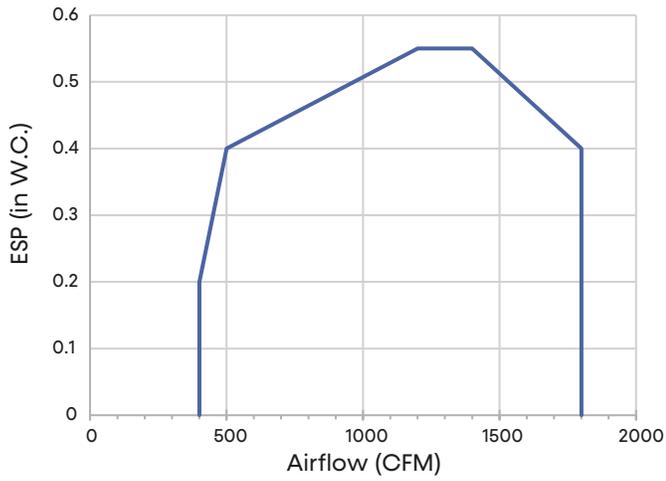
Size 12 Recommended Operating Range



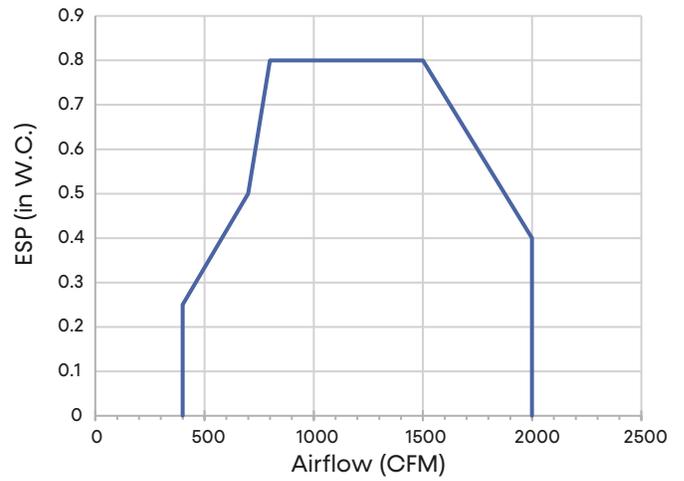
Fan Performance Curves

Model:
HTY

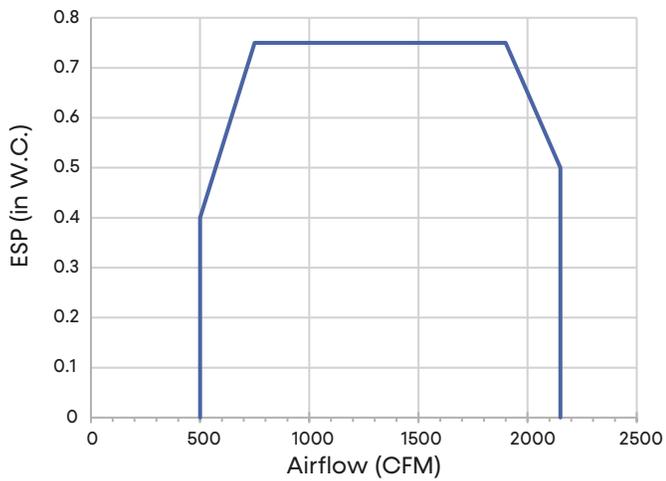
Size 14 Recommended Operating Range



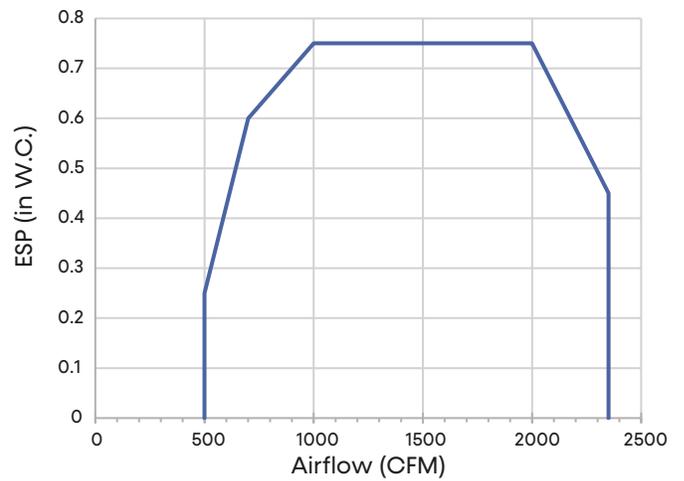
Size 16 Recommended Operating Range



Size 18 Recommended Operating Range



Size 20 Recommended Operating Range



International Environmental Corporation (IEC) works continually to improve its products. As a result, the design and specifications of each product may be changed without notice and may not be as described herein. Please contact IEC for information regarding current design and product specifications. Statements and other information contained herein are not express warranties and do not form the basis of any bargain between the parties but are merely IEC's opinion or commendation of its products. Manufacturer's standard limited warranty applies. The latest version of this document is available at www.iec-okc.com. © International Environmental Corporation (IEC). All Rights Reserved 2024

Electric heaters are available on IEC Series Fan Powered Terminal units for the following applications.

TOTAL ELECTRIC HEAT

Total electric heat eliminates the requirement for a boiler. Heating and/or cooling may be available on an individual basis throughout the year. Two-pipe chilled water is used for cooling, and the electric heater is used for heating. Individual room controls can be supplied for either manual or automatic changeover.

CONSTRUCTION

The heater coils of high-grade resistance wire are supported by ceramic insulators on plated steel brackets. These heat elements are suspended directly in front of the fan outlet. High limit thermal cutouts protect the heater in the event of air failure. There are many special applications and control sequences for electric heat. For special applications, please consult the factory.

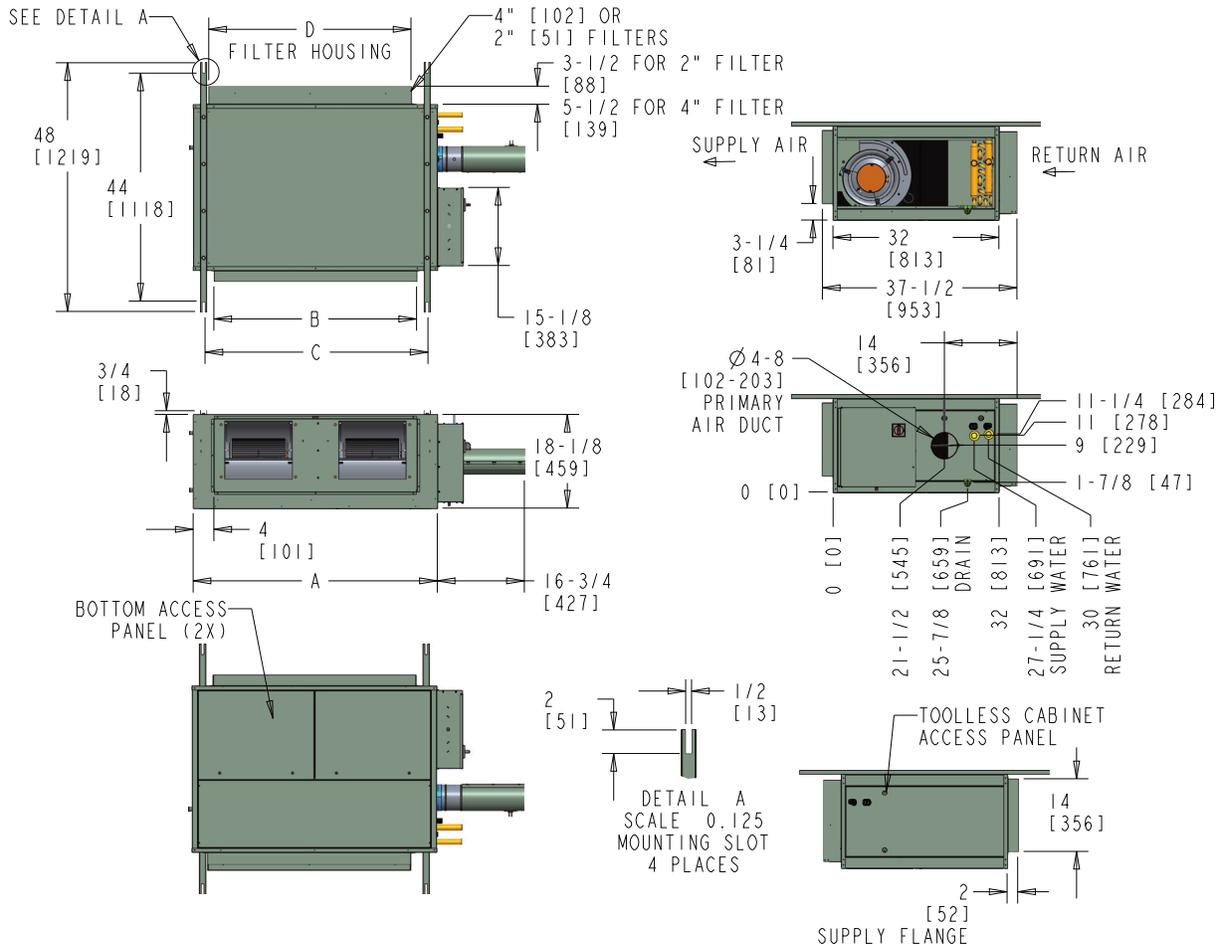
Electric Heater Selection

Unit Type	kW	Unit Size							
		6	8	10	12	14	16	18	20
120V	2.0	•	•	•	–	–	–	–	–
	3.0	•	•	•	–	–	–	–	–
208V 240V 277V	2.0	•	•	•	–	–	–	–	–
	3.0	•	•	•	–	–	–	–	–
	4.0	•	•	•	•	•	•	•	•
	5.0	–	•	•	•	•	•	•	•
	6.0	–	•	•	•	•	•	•	•
	7.0	–	–	•	•	•	•	•	•
	8.0	–	–	–	•	•	•	•	•
	9.0	–	–	–	•	•	•	•	•
	10.0	–	–	–	–	•	•	•	•

Note:

1. All heaters are single stage and single phase.
2. Heaters over 48 Amps are subdivided and fused.
3. Electric Heating Capacities (Btuh) = Heater kW x 3413.
4. Consult factory for 50 Hz applications.

HTY – Fan Powered Terminal Unit



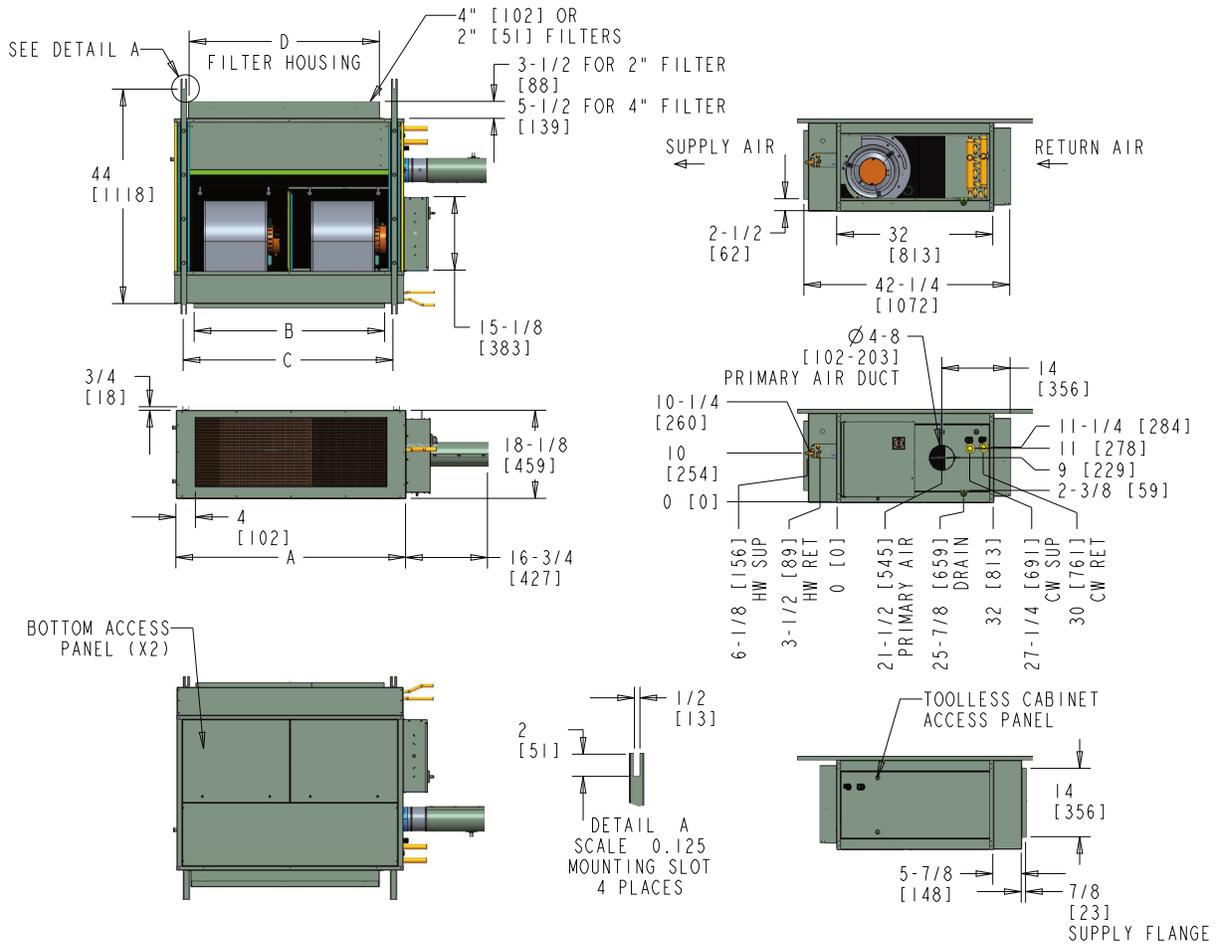
Unit Size	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
6	23 [584]	15 [381]	19 [483]	19.5 [495]	1	1	125
8	28 [711]	20 [508]	24 [610]	19.5 [495]	1	1	135
10	32 [813]	24 [610]	28 [711]	24.5 [622]	1	1	146
12	37 [940]	29 [737]	33 [838]	31 [787]	2	2	186
14	42 [1067]	34 [864]	38 [965]	39 [991]	2	2	200
16	47 [1194]	39 [991]	43 [1092]	39 [991]	2	2	215
18	52 [1321]	44 [1118]	48 [1219]	49 [1245]	2	2	228
20	56 [1422]	48 [1219]	52 [1321]	49 [1245]	2	2	244

Note:
* Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.

1. RH coil shown, LH opposite.
2. All dimensions are ± 0.25 [6]. Drawing not to scale.
3. Product specifications are subject to change without notice.
4. Control box size and position may vary (consult factory).
5. Position may vary.
6. Service access is located on the front of the control box.
7. Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is not to scale and is provided for reference only. Dimensions may vary with options ordered. Consult IEC website for up to date drawings.

HTY – Fan Powered Terminal Unit and Front Heat Section

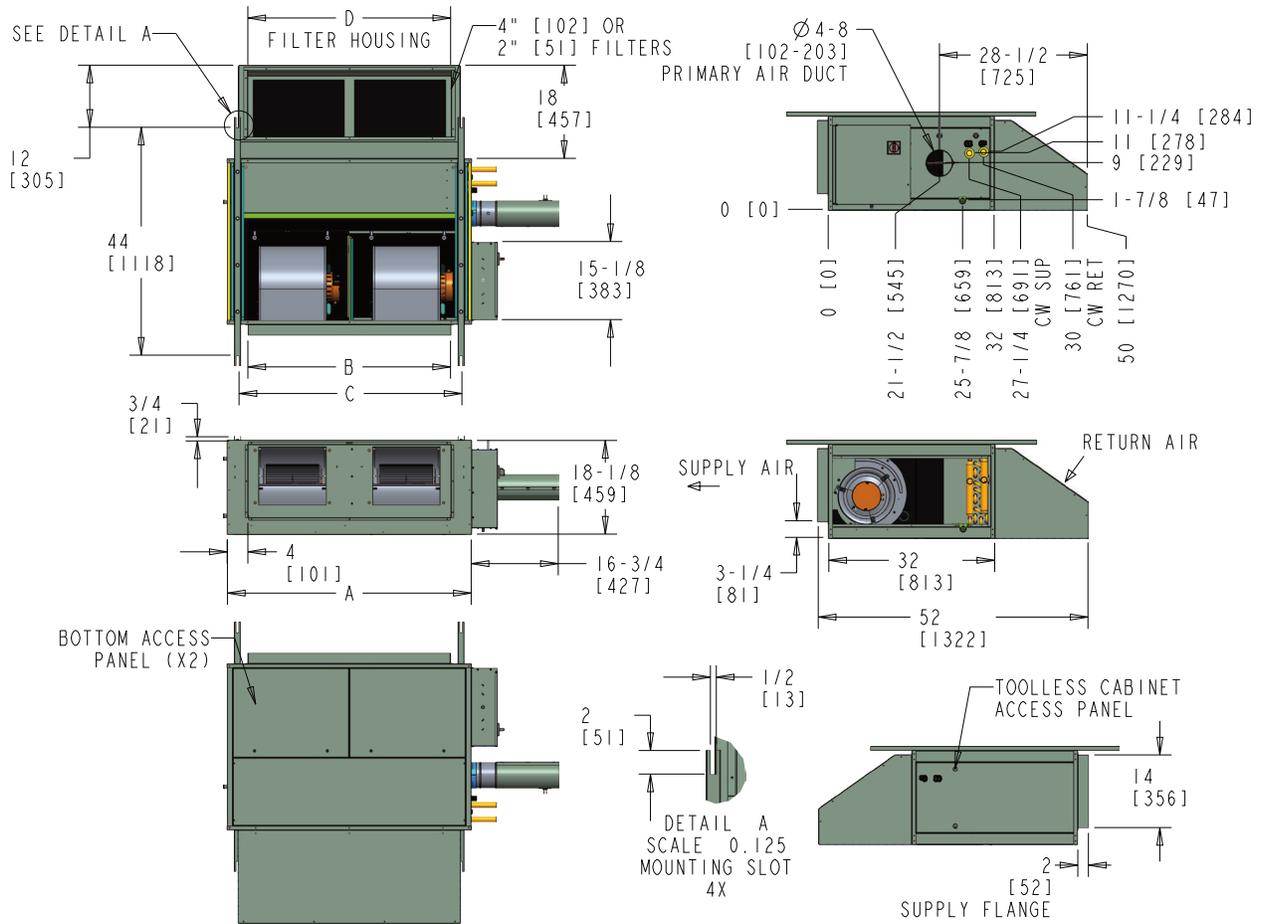


Unit Size	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
6	23 [584]	15 [381]	19 [483]	19.5 [495]	1	1	125
8	28 [711]	20 [508]	24 [610]	19.5 [495]	1	1	135
10	32 [813]	24 [610]	28 [711]	24.5 [622]	1	1	146
12	37 [940]	29 [737]	33 [838]	31 [787]	2	2	186
14	42 [1067]	34 [864]	38 [965]	39 [991]	2	2	200
16	47 [1194]	39 [991]	43 [1092]	39 [991]	2	2	215
18	52 [1321]	44 [1118]	48 [1219]	49 [1245]	2	2	228
20	56 [1422]	48 [1219]	52 [1321]	49 [1245]	2	2	244

- Note:**
 * Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.
 1. RH coil shown, LH opposite.
 2. All dimensions are ± 0.25 [6]. Drawing not to scale.
 3. Product specifications are subject to change without notice.
 4. Control box size and position may vary (consult factory).
 5. Position may vary.
 6. Service access is located on the front of the control box.
 7. Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is not to scale and is provided for reference only. Dimensions may vary with options ordered. Consult IEC website for up to date drawings.

HTY – Fan Powered Terminal Unit with Return Air Attenuator



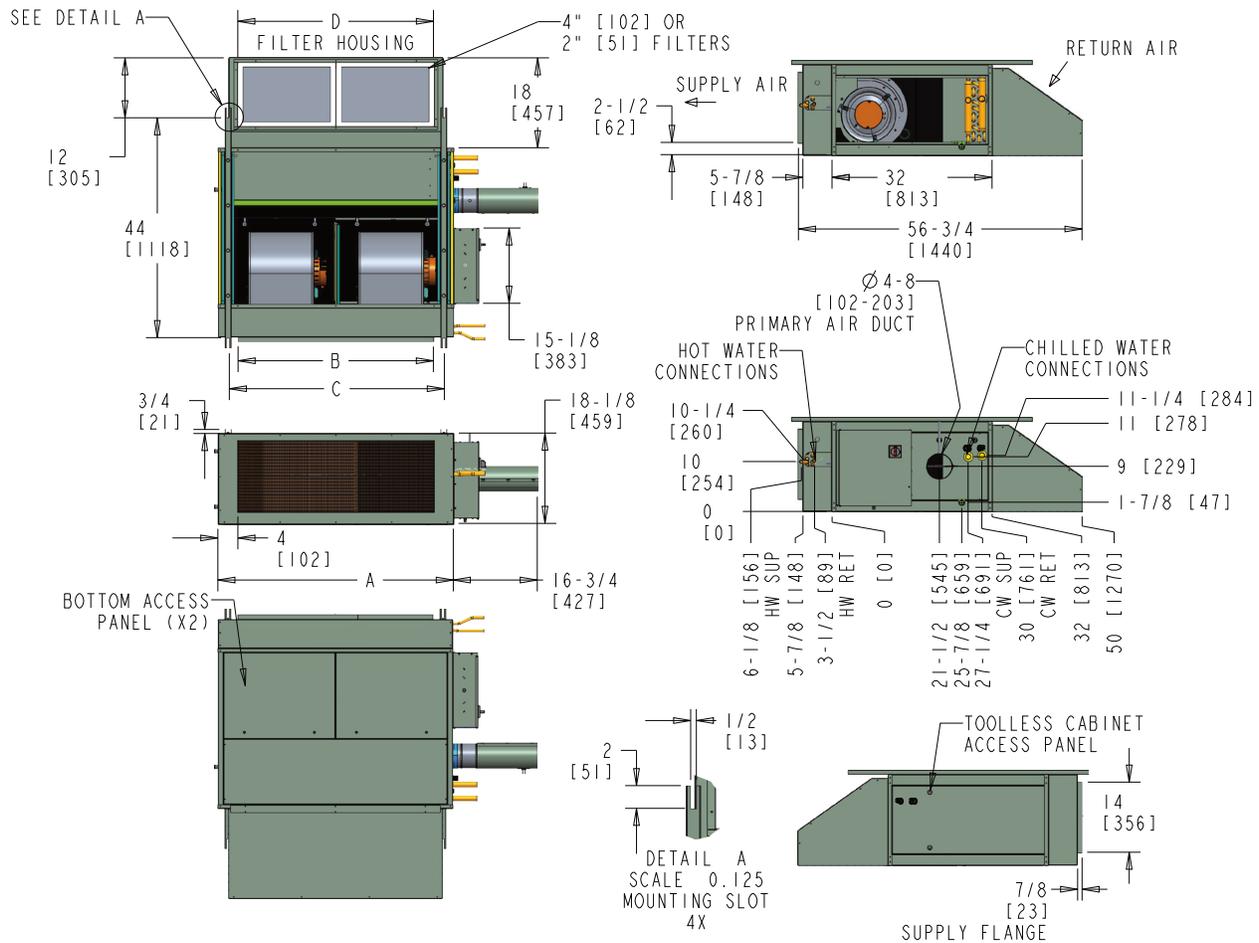
Unit Size	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
6	23 [584]	15 [381]	19 [483]	19.5 [495]	1	1	125
8	28 [711]	20 [508]	24 [610]	19.5 [495]	1	1	135
10	32 [813]	24 [610]	28 [711]	24.5 [622]	1	1	146
12	37 [940]	29 [737]	33 [838]	31 [787]	2	2	186
14	42 [1067]	34 [864]	38 [965]	39 [991]	2	2	200
16	47 [1194]	39 [991]	43 [1092]	39 [991]	2	2	215
18	52 [1321]	44 [1118]	48 [1219]	49 [1245]	2	2	228
20	56 [1422]	48 [1219]	52 [1321]	49 [1245]	2	2	244

Note:
* Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.

1. RH coil shown, LH opposite.
2. All dimensions are ± 0.25 [6]. Drawing not to scale.
3. Product specifications are subject to change without notice.
4. Control box size and position may vary (consult factory).
5. Position may vary.
6. Service access is located on the front of the control box.
7. Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is not to scale and is provided for reference only. Dimensions may vary with options ordered. Consult IEC website for up to date drawings.

HTY – Fan Powered Terminal Unit with Return Air Attenuator and Added Heat Section



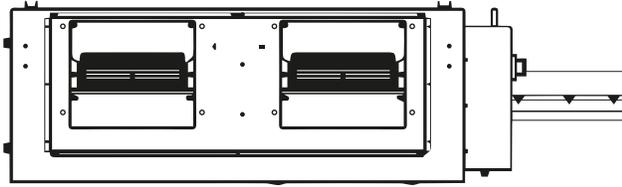
Unit Size	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
6	23 [584]	15 [381]	19 [483]	19.5 [495]	1	1	125
8	28 [711]	20 [508]	24 [610]	19.5 [495]	1	1	135
10	32 [813]	24 [610]	28 [711]	24.5 [622]	1	1	146
12	37 [940]	29 [737]	33 [838]	31 [787]	2	2	186
14	42 [1067]	34 [864]	38 [965]	39 [991]	2	2	200
16	47 [1194]	39 [991]	43 [1092]	39 [991]	2	2	215
18	52 [1321]	44 [1118]	48 [1219]	49 [1245]	2	2	228
20	56 [1422]	48 [1219]	52 [1321]	49 [1245]	2	2	244

Note:
* Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.

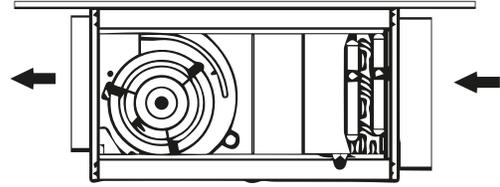
1. RH coil shown, LH opposite.
2. All dimensions are ± 0.25 [6]. Drawing not to scale.
3. Product specifications are subject to change without notice.
4. Control box size and position may vary (consult factory).
5. Position may vary.
6. Service access is located on the front of the control box.
7. Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is not to scale and is provided for reference only. Dimensions may vary with options ordered. Consult IEC website for up to date drawings.

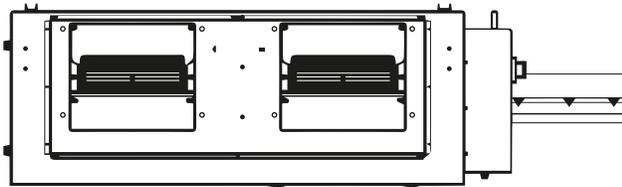
HTY – Fan Powered Terminal Unit



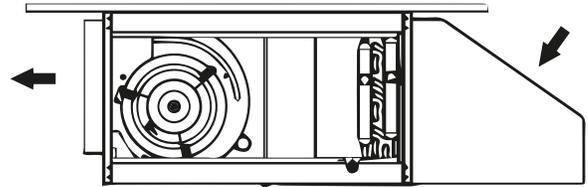
Front



Right



Front



Right

Standard Features and Options

Model:
HTY

Features and Options	Standard	Factory Installed Option	Field Installed Option	Factory Special Quote
Air Flow Arrangement				
Front Supply/Top Return		X		
Front Supply/Rear Return	X			
Coils				
4-Rows 2-Pipe	X			
6, 8-Rows 2-Pipe		X		
1, 2-Rows 4-Pipe				
0.025-inch tube thickness				X
Manual Air Vent	X			
Automatic Air Vent		X		
Coil Test Pressure 350	X			
Coil Test Pressure 400, 450		X		
Connection				
Right or Left (Same End)	X			
Drain Pan				
Stainless Steel Externally Coated	X			
Fin Material				
Aluminum with Galvanized End Sheets	X			
Copper with Stainless End Sheets & Bottom Coil Baffle		X		
Aluminum with Stainless-Steel End Sheets		X		
Epoxy-Coated Aluminum with Galvanized End Sheets		X		
Electric Heat				
NiChrome Wire Strip Electric Heater (Total)		X		
Indoor Air Quality				
2" MERV-8 Filter	X			
2" or 4" MERV-13 Filter		X		
Insulation				
1/2" Fiberglass	X			
1" Premium Fiberglass (Exposed Edges Sealed)		X		
1/4" Closed Cell		X		
1/2" Closed Cell		X		
Perforated Double Wall		X		
Cabinet Construction				
18-gauge Single Wall	X			
Motor Type				
EC Motor w/Quick Connect Plug	X			

Notes:

*Valve packages are assembled at the factory but field installed.

Table Continued On Next Page

Standard Features and Options

Model:
HTY

Table Continued From Previous Page

Features and Options	Standard	Factory Installed Option	Field Installed Option	Factory Special Quote
Motor Voltage				
120/1/60 Constant CFM	X			
208/230/277-1-60 Constant CFM		X		
Paint Options (HTY)				
Bright White, Arctic White		X		
Special Color				X
Controls				
Service Switch with Lockout Tabs		X		
Single-Point Power Connection	X			
Incoming Power Fusing		X		
24 V Controls	X			
Condensate Float Switch		X		
Three-Speed Switch only			X	
Thermostats (Remote Mount)			X	
Custom Controls (DDC)				X
Primary Air Damper Actuator		X		
Valve Package Options*				
Union Connections at the Coil			X	
24" Braided Hoses			X	
Ball Valves			X	
2-Way/3-Way 25 psi Control Valve			X	
2-Way/3-Way 150 psi, Normally Closed, Control Valve			X	
2-Way/3-Way 150 psi, Normally Open, Control Valve			X	
2-Way/3-Way 35 psi Floating Control Valve			X	
2-Way/3-Way 35 psi Proportional Control Valve			X	
Fixed-Flow Control 1.0-8.0 GPM			X	
Y-Strainer/Y-Strainer with Blowdown			X	
P-T Ports			X	
Circuit Setter			X	
Balance Valve (Return Line)			X	
Balance Valve (3-Way Bypass)			X	

Notes:

*Valve packages are assembled at the factory but field installed.

FILTER DATA

Series Fan Powered Terminals have 2-inch MERV 8 throwaway filters furnished as standard. MERV 13 filters available in 2-inch and 4-inch sizes.

Unit Data				Filter Pressure Drop		
Unit Size	Filter Size	Filter Quantity	Nominal CFM	2-inch MERV 8	2-inch MERV 13	4-inch MERV 13
6	16" x 20"	1	600	0.13	0.20	0.16
8	16" x 20"	1	800	0.20	0.30	0.26
10	16" x 25"	1	1000	0.20	0.30	0.26
12	16" x 16"	2	1200	0.19	0.29	0.25
14	16" x 20"	2	1400	0.27	0.38	0.33
16	16" x 20"	2	1600	0.31	0.39	0.34
18	16" x 25"	2	1800	0.17	0.28	0.24
20	16" x 25"	2	2000	0.31	0.39	0.34

CONTROL PACKAGES

Low Voltage Control (24V)

The 24V control board (see below) offers simple installation, service, and diagnostics with its quick disconnect connectors, LED indicators, and manual adjustment potentiometer.

Standard Features:

- Quick disconnect wire connections
- EC Motor control
- LED diagnostics
- Compatible with DDC controller
- 1-or-2 motor operation
- 2-10V fully proportional control
- PWM motor output

Optional Features:

- RPM feedback to a customer furnished DDC or similar controller

Condensate Float Switch

The optional condensate float switch can be wired into a customer supplied controller. Through the use of the condensate float switch, the customer supplied controller can shut down the motor, actuator, and electric heat (if applicable), when the water level in the drain pan reaches an unsafe level.

Service Switch

We offer concealed service switches for use by maintenance and service personnel to shut off the power while working on the unit.

Fusing

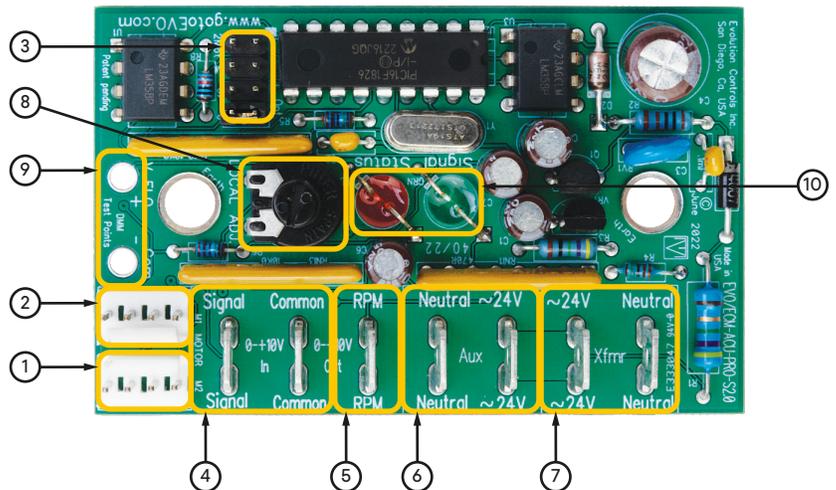
We offer incoming power fusing for all units as well as blower motor and control sub-fusing (single power source wiring).

Other Control Options

- Primary air damper actuator
- Customer furnished control package

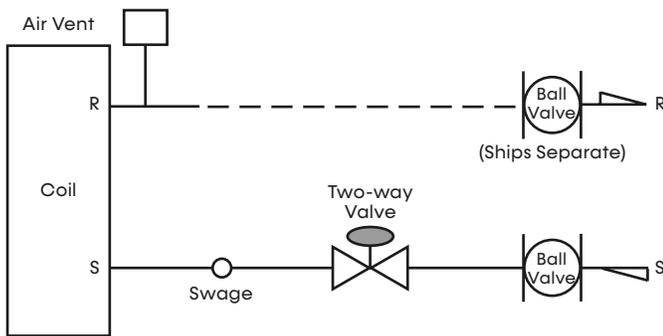
EVO/ECM-ACU-PRO

1	CN1 – EC Motor 1 Control Cable
2	CN2 – EC Motor 2 Control Cable
3	CN3 – Jumpers installed on P, S, and 2 Mot
4	CN4 – 0-10V Motor Control Input
5	CN5 – 0-10V RPM Output
6	CN6 – Common Power and Ground
7	CN7 – Power and Ground for Board
8	ECM Fan Speed Adjustment
9	DMM Test Points
10	LED Indicators



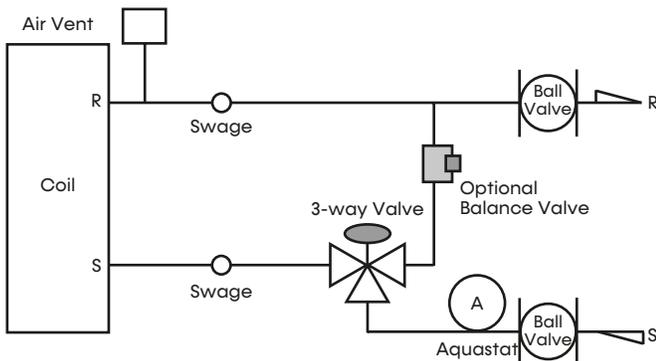
TWO-WAY MOTORIZED CONTROL VALVE

In a two-way motorized control valve package, the motor drives the valve open, and a spring returns the valve to a normally closed position. No water flows with the unit off. The standard supply connection from the coil will accept a swaged copper fitting for field brazing. As an option, this connection may be factory furnished with a union. When a swage is necessary, it becomes part of the valve package. The isolation, or ball, valve in the return piping is shipped loose for field installation.



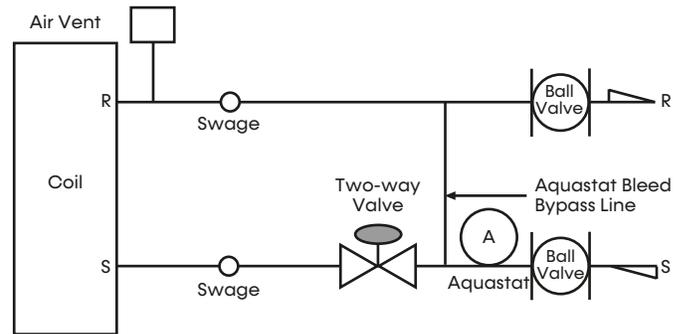
THREE-WAY MOTORIZED CONTROL VALVE

In a three-way motorized control valve package, a diverting valve controls water flow to the coil. When the unit is off, water bypasses the coil and flows directly to the system return. A balancing valve may be specified in the bypass line to permit equal flow balancing.



TWO-WAY MOTORIZED CONTROL VALVE WITH AQUASTAT BYPASS LINE

In a two-way motorized control valve package, the motor drives the valve open, and a spring returns the valve to a normally closed position. No water flows through the coil with the unit off. The aquastat bypass line allows a small amount of water to flow from the supply to the return piping when the control valve is closed. The strap-on aquastat senses whether the flowing water is being chilled or heated and switches a contact closed to provide automatic summer/winter changeover (ACO) for the system. When a two-pipe cooling/heating system with optional auxiliary electric heat is desired, an additional aquastat is required.



Notes:

1. Please note that project specifications for system pressure, pressure drop limitations and flow rate should be checked prior to selecting specific components or the valve package size
2. The supply and return piping connections of the factory-provided valve package are either swaged for field brazing (standard) or union fitted (optional) for field connection to the coil.
3. Consult IEC's Valve Packages and Piping Components manual or your local representative for detailed piping and valve application information. Factory-provided valve packages are assembled, brazed, wired electrically and dry-fit to the coil connections before shipping. Field brazing to the coil completes the installation. Some applications dictate shipping isolation valves loose.

Revision History

Model:
HTY

Date	Section	Description
07/25/2024	Ratings	Added clarifying note for ratings applicability.
06/17/2024	Document	Update Visual Design
05/24/2024	Created	



A **NIBE** GROUP MEMBER

5000 W. I-40 Service Rd. | Oklahoma City, OK 73128
Phone: 405.605.5000 | Fax: 405.605.5001
www.iec-okc.com



International Environmental Corporation (IEC) works continually to improve its products. As a result, the design and specifications of each product may be changed without notice and may not be as described herein. Please contact IEC for information regarding current design and product specifications. Statements and other information contained herein are not express warranties and do not form the basis of any bargain between the parties but are merely IEC's opinion or commendation of its products. Manufacturer's standard limited warranty applies. The latest version of this document is available at www.iec-okc.com. © International Environmental Corporation (IEC). All Rights Reserved 2024