

Vertical Series
FAN COIL TECHNICAL CATALOG



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Vertical Series

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Portfolio

Vertical Hideaway (FHY) 200 CFM to 1200 CFM

The Vertical Hideaway (FHY) fan coil unit is designed for concealed applications. The slender design of the FHY makes this unit ideal for perimeter heating and cooling applications in public buildings, offices, hospitals and hotels. The coil section of the FHY is lined with glass fiber insulation to provide positive protection against sweating and maximum dampening of air noise. Standard FHY units are constructed with 18 gauge galvanized steel and are provided with a galvanized finish.



Vertical Cabinet (FXY) 200 CFM to 1200 CFM

The slender design of the Vertical Cabinet (FXY) fan coil unit makes this unit ideal for perimeter heating and cooling applications in public buildings, offices, hospitals and hotels. The FXY cabinet is fabricated of heavy gauge steel. The overlapping top panel provides structural rigidity and ruggedness essential for an exposed unit. FXY units have a removable, one-piece front panel for easy access to all internal components. Standard FXY units are constructed with 18 gauge galvanized steel and are provided with an attractive powder-coated paint finish.

Vertical Sloped Top Cabinet (FSY) 200 CFM to 1200 CFM

The Vertical Sloped Top Cabinet (FSY) fan coil unit is designed for applications in public buildings, offices and hospitals where it is necessary to prevent books and other items from being placed over the discharge grilles on the top panel. The FSY cabinet is fabricated of heavy gauge steel. The overlapping top panel provides structural rigidity essential for an exposed unit. FSY units have a removable, one-piece front panel for easy access to all internal components. Standard FSY units are constructed with 18 gauge galvanized steel and are provided with a durable powder-coated paint finish.



Portfolio, Cont'd.

Vertical Lowboy Hideaway (LHA/LHW)
200 CFM to 600 CFM

The Vertical Lowboy Hideaway (LHA/LHW) fan coil unit is designed for concealed, under-window applications in public buildings, offices, hospitals and hotels. The low-silhouette design of the LHA and LHW does not interfere with vision through the window, obstruct light or detract from the motif in the room. Standard LHA and LHW units are constructed with 18 gauge galvanized steel and are provided with a galvanized finish.



Vertical Lowboy Cabinet (LXA/LXW)
200 CFM to 600 CFM

The Vertical Lowboy Cabinet (LXA/LXW) fan coil unit is designed for exposed, under-window applications in public buildings, offices, hospitals and hotels. The low-silhouette design of the LXA and LXW does not interfere with vision through the window, obstruct light or detract from the décor in the room. Standard LXA and LXW units have two flush die-formed doors for access to three-speed fan control and optional thermostats. Standard LXA and LXW units are constructed with 18 gauge galvanized steel and are provided with an attractive powder-coat paint finish.



Vertical Recessed Cabinet (STY/STW)
130 CFM to 275 CFM

The Vertical Recessed Cabinet (STY/STW) fan coil unit is designed for recessed wall applications where space is at a premium. The STY and STW are designed specifically for installation between the studs, ideally in foyers, bathrooms and other small areas. Standard STY and STW units are constructed with 18 gauge galvanized steel and are provided with a galvanized finish. The wall panel has an attractive powder-coat paint finish.



Features and Benefits

Application Fit

- Several cabinet types that will meet a multitude of room layouts.
 - The vertical cabinet units (FXY), with aesthetically pleasing cabinetry in seven nominal capacities, are ideal for perimeter air conditioning to pre-condition the heat gain or loss through glazing thus eliminating unnecessary drafts.
 - The vertical sloped top cabinet units (FSY) discourages the placement of objects on the supply grille.
 - The vertical lowboy cabinet units (LXA/LXW) can be used for the same applications (no sloped top) with low window sill height.
 - The vertical hideaway version of the above units (FHY/LHA/LHW) is tailored to recess in a wall or continuous cabinetry to meet architectural needs.
 - The vertical recessed cabinet (STY/STW) is a specific application unit for recessing in a corridor, bathroom, or stairwell wall where space is at a premium.

Design Flexibility

- Standard hydronic coils and electric heat are available to match the space heating and cooling loads.
- Optional powder-coat paint finish colors on exposed units grilles will blend with any décor.
- Optional solid back panel to cover units that are visible from the outside.
- Custom cabinetry includes higher, wider, or deeper than standard sizes. Ideal for renovation jobs or where special sizes are required.
- Optional airflow configuration (front supply) to meet certain design limitations.
- Manual or motorized air dampers are available to meet ventilation needs (Not on Stud [STY/W]) Units).
- Wide variety of factory preassembled valve packages to meet desired controls specifications.

- Variety of insulation materials to meet IAQ concerns.
- Optional condensate float switch to meet latest building codes.
- Easy to use ratings program to speed up project design.

Ease of Installation

- Preassembled valve packages to minimize the piping work at the job-site.
- Optional unit mounted controls, service switches and fusing minimizes the electrical work required on site.
- Units are tagged at the factory for ease of identification on job site.
- Opposite end connection units to minimize the piping work on renovation jobs (not LXA/W or LHA/W).
- Custom cabinetry facilitates installations by:
 - Deeper units allow the piping to run along the wall minimizing piping work and providing an insulated plenum that eliminates outside air transitions on renovation jobs.
 - Wider units allow for same end piping and electrical connections to minimize floor penetrations and eliminate the need for filler cabinetry.

Ease of Service

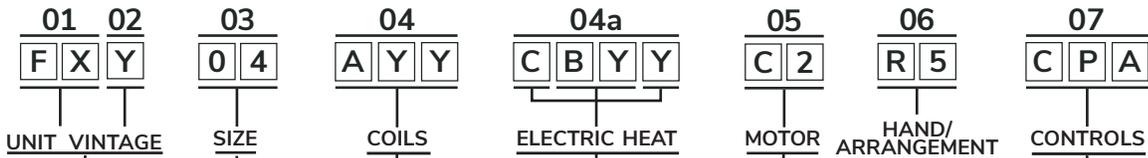
- All components are accessible by simply removing the front panel.
- Filters can be replaced without tools or removing the front panels on exposed units (except Lowboy [LXA/W or LHA/W]).
- Blower and drain pan assembly slide out for service and cleaning.

Quality and Safety

- Every unit is tested and inspected at the factory for trouble free startup.
- Standard camlocks are tamper-proof.
- ETL listed and AHRI certified.

Unit Model Key

Code Items
Code



- FHY • Vertical Hideaway
- FXY • Vertical Cabinet
- FSY • Vertical Sloped Top Cabinet
- LHA • Vertical LowBoy Hideaway
- LHW • Vertical LowBoy Tall Hideaway
- LXA • Vertical Lowboy Cabinet
- FSW • Vertical Lowboy Tall Cabinet
- STY • Vertical Recessed Cabinet
- STW • Vertical Recessed Wide Cabinet

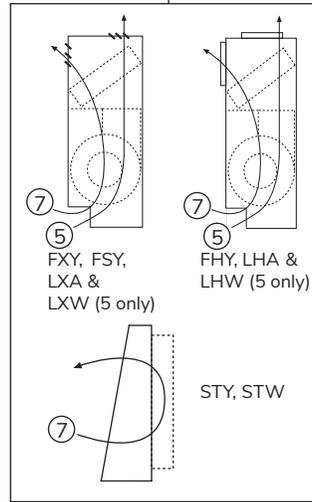
- 01 • 130 CFM
- 02 • 200 CFM
- 03 • 300 CFM****
- 04 • 400 CFM
- 06 • 600 CFM
- 08 • 800 CFM
- 10 • 1000 CFM
- 12 • 1200 CFM

- Voltage**
- C • 115-1-60
 - D • 208-1-60
 - E • 230-1-60
 - F • 277-1-60
 - V • 220-1-50*
 - U • 240-1-50*

- Type**
- 1 • Shaded Pole (STY/STW only)
 - 2 • Permanent Split Capacitor
 - A • ECM, 3-Spd Relay Brd (L/M/H)
 - B • ECM, Proportional (0-10VDC)
 - C • ECM, 4-Spd Board, Solid State w/PWM

- Hand****
- R • Right
 - L • Left

- Arrangement**
- 5
 - 7



Two-pipe Cooling and Heating or Four-pipe Cooling	Four-pipe Heating	Coil Connection
A • 3-Row	Y • None	Y • None
B • 4-Row	6 • 1-Row	S • Same End
D • 2-Row	7 • 2-Row	O • Opposite End

Voltage**	kW*	Stages
C • 120V	BY • 1.00	Y • Single Stage Only
D • 208V	CY • 1.50	
E • 240V	DY • 2.00	
F • 277V	FY • 3.00	
V • 220V (50)*	GY • 4.00	
U • 240V (50)*	HY • 5.00	
	JY • 6.00	

Voltage**	System	Thermostat
B • 24 V	Manual Fan Operation	A • Basic Electronic Wall Series, 155, Vertical
C • 120V	A1 • Standard Unit Mount (Switch Only)	B • Basic Electronic Wall Series, 155, Horizontal
D • 208V	A2 • Standard Wall Mount (Switch Only)	C • Basic Series, 156, Unit Mounted
E • 240V	Function Control	P • Basic 24V Digital, 7-Day Programmable
F • 277V	G • 2 Pipe Heat Only	N • Basic 24V Digital, Non-Programmable
V • 220V (50)*	H • 2 Pipe Cool Only	F • Premium 24V Digital, 7-Day Programmable/ BACnet with Proportional Fan/ Valves Option
U • 240V (50)*	K • 2 Pipe Heat and Cool Only	G • Premium 24V Digital BACnet with Proportional Fan/ Valves Option
	M • 2 Pipe Heat and Cool w/Aux. Elec. Heat	W • Venture 24V Wi-Fi Programmable
	P • 2 Pipe Cool Only w/Total Elec. Heat	
	R • 4 Pipe Heat and Cool	

* Consult factory for 50 Hz applications.
 ** Note that kW's range from 1.0 to 6.0 depending on voltage and unit size.
 *** Standing in front of the unit, hand is determined by looking into the air supply and assigning the hand to match the location of the cooling coil connections.
 **** Nominal CFM for STW/STY size 03 units is 275.

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Rating and Listings

AHRI Certification

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



C-ETL-US Listing

IEC's Vertical Series 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.



Intertek
3061627

HEATING AND COOLING EQUIPMENT

PSC Motor Standard Ratings

Model	Size	Coil Rows	Air Flow Rating (SCFM)	Water Pressure Drop (ft. water)	Total Cap. (Btuh)	Sensible Cap. (Btuh)	Power Input (Watts)
FHY	02	3	200	2.5	4,800	3,500	80
	02	4	200	1.4	6,600	4,100	80
	03	3	290	6.0	7,200	5,300	80
	03	4	290	8.6	8,600	5,700	80
	04	3	400	13.1	11,200	7,900	130
	04	4	400	20.0	13,100	8,600	130
	06	3	600	7.0	13,900	10,400	180
	06	4	600	15.0	18,600	13,600	200
	08	3	700	8.4	18,500	13,500	210
	08	4	680	12.0	20,600	14,100	195
	10	3	820	4.2	22,000	16,800	250
	10	4	820	10.0	29,500	19,600	240
FXY, FSY	02	3	200	5.0	4,800	3,500	80
	02	4	200	1.4	6,600	4,100	80
	03	3	290	3.8	7,200	5,300	80
	03	4	290	8.6	8,600	5,700	80
	04	3	400	13.1	11,200	7,900	130
	04	4	400	20.0	13,100	8,600	130
	06	3	600	3.8	13,900	10,400	180
	06	4	600	8.6	18,600	13,600	170
	08	3	650	10.0	18,500	13,500	210
	08	4	680	12.0	20,600	14,100	195
	10	3	820	4.2	22,000	16,800	250
	10	4	820	10.0	29,500	19,600	240
12	3	1,060	6.4	26,300	20,000	370	
12	4	1,060	16.0	35,300	26,300	370	

Model	Size	Coil Rows	Air Flow Rating (SCFM)	Water Pressure Drop (ft. water)	Total Cap. (Btuh)	Sensible Cap. (Btuh)	Power Input (Watts)
LHA, LHW	02	3	220	13.0	5,500	3,800	90
	02	2	250	2.4	5,100	3,600	90
	03	3	340	25.0	10,900	7,100	130
	03	2	370	6.9	8,600	6,700	135
	04	3	430	9.0	13,400	8,800	145
	04	2	480	12.8	12,300	8,300	150
	06	3	670	11.3	21,100	14,600	250
	06	2	750	6.3	18,300	13,200	260
LXW, LXA	02	3	230	8.0	5,500	3,800	90
	02	2	250	2.4	5,100	3,600	90
	03	3	340	13.6	10,900	7,100	130
	03	2	370	6.9	8,600	6,700	135
	04	3	430	5.3	13,400	8,800	145
	04	2	480	12.8	12,300	8,300	150
	06	3	670	11.3	21,100	14,600	250
	06	2	750	10.0	18,300	13,200	260

Ratings and Listings, Cont'd.

EC Motor Standard Ratings

Model	Size	Coil Rows	Air Flow Rating (SCFM)	Water Pressure Drop (ft. water)	Total Cap. (Btuh)	Sensible Cap. (Btuh)	Power Input (Watts)
FHY	02	3	200	2.5	4,800	3,500	80
	02	4	200	1.4	6,600	4,100	80
	03	3	290	6.0	7,200	5,300	70
	03	4	290	8.6	8,600	5,700	80
	04	3	400	13.1	11,200	7,900	85
	04	4	400	20.0	13,100	8,600	130
	06	3	600	7.0	13,900	10,400	135
	06	4	600	8.6	18,600	13,600	170
	08	3	700	8.4	18,500	13,500	210
	08	4	680	12.0	20,600	14,100	195
	10	3	820	4.2	22,000	16,800	250
	10	4	820	10.0	29,500	19,600	240
	12	3	1,060	6.4	26,300	20,000	370
	12	4	1,060	16.0	35,300	26,300	370
FXY, FSY	02	3	200	5.0	4,800	3,500	55
	02	4	200	1.4	6,600	4,100	80
	03	3	290	3.8	7,200	5,300	80
	03	4	290	8.6	8,600	5,700	80
	04	3	400	13.1	11,200	7,900	130
	04	4	400	20.0	13,100	8,600	130
	06	3	600	3.8	13,900	10,400	180
	06	4	600	8.6	18,600	13,600	170
	08	3	700	10.0	18,500	13,500	175
	08	4	680	12.0	20,600	14,100	195
	10	3	820	4.2	22,000	16,800	250
	10	4	820	10.0	29,500	19,600	240
	12	3	1,060	6.4	26,300	20,000	370
	12	4	1,060	16.0	35,300	26,300	370

Model	Size	Coil Rows	Air Flow Rating (SCFM)	Water Pressure Drop (ft. water)	Total Cap. (Btuh)	Sensible Cap. (Btuh)	Power Input (Watts)
LHA, LHW	02	3	230	3.8	5,500	3,800	68
	02	2	250	2.4	5,100	3,600	68
	03	3	340	18.0	10,900	7,100	60
	03	2	370	6.9	8,600	6,700	135
	04	3	430	5.3	13,400	8,800	145
	04	2	480	12.8	12,300	8,300	150
	06	3	670	11.3	21,100	14,600	250
	06	2	750	6.3	18,300	13,200	260
LXW, LXA	02	3	230	9.0	5,500	3,800	68
	02	2	250	2.4	5,100	3,600	68
	03	3	340	13.6	10,900	7,100	130
	03	2	370	6.9	8,600	6,700	135
	04	3	430	5.3	13,400	8,800	145
	04	2	480	15.0	12,300	8,300	95
	06	3	670	11.3	21,100	14,600	250
	06	2	750	10.0	18,300	13,200	150

Shaded Pole Motor Standard Ratings

Model	Size	Coil Rows	Air Flow Rating (SCFM)	Water Pressure Drop (ft. water)	Total Cap. (Btuh)	Sensible Cap. (Btuh)	Power Input (Watts)
STY, STW	01	2	130	0.65	1,800	1,200	135
	03	2	275	5	6,100	4,700	270

- NOTES: 1. 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 airflow under dry coil conditions.
2. For all application ratings, use IEC's computer selection program, the quick-selection ratings provided in this catalog, or contact your local IEC representative.
3. For additional information, please consult the Directory of Certified Air-Conditioning, Heating, and Refrigeration Products or AHRI's website at www.ahrinet.org.

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Air Delivery (60 Hz)

Model	Coil	Unit Size	CFM @ 0.0 ESP For Fan Speed			High Speed CFM @ ESP Indicated						
			Low	Med	High	0.05	0.10	0.15	0.20	0.25	0.30	0.35
FHY	3-Row	02	167	217	275	256	236	217	197	178	158	138
		03	202	252	308	278	249	221	195	169	145	121
		04	248	318	455	435	413	386	357	323	286	245
		06	367	557	617	593	566	536	504	470	434	395
		08	343	586	669	639	608	576	542	507	470	432
		10	470	636	965	927	886	841	793	741	686	627
		12	686	1014	1119	1082	1040	993	942	886	826	762
	4-Row	02	188	229	268	249	227	204	177	148	116	82
		03	204	229	298	273	249	223	198	171	145	117
		04	242	322	467	440	412	384	353	322	290	256
		06	349	587	663	629	594	558	521	484	446	407
		08	333	563	658	629	600	569	536	503	468	432
		10	456	648	994	952	907	860	811	759	704	647
		12	700	1061	1132	1096	1055	1010	960	906	847	784
FSY FX Y	3-Row	02	177	217	266	244	222	200	178	155	131	108
		03	190	227	297	282	264	246	226	204	182	158
		04	258	334	454	429	403	375	346	316	284	251
		06	289	540	638	605	570	533	494	453	409	364
		08	314	554	665	641	614	585	553	519	483	444
		10	458	628	939	898	853	805	753	698	639	576
		12	550	948	1088	1046	1000	951	899	843	783	720
	4-Row	02	176	215	260	240	220	199	178	156	135	112
		03	182	223	275	254	233	212	190	168	145	122
		04	255	327	436	411	385	358	331	302	273	243
		06	289	531	614	580	546	512	480	447	415	384
		08	296	542	653	619	584	547	507	465	421	375
		10	443	573	850	814	774	730	683	631	575	515
		12	546	945	1047	1009	966	918	867	811	750	686
LHA LXA LHW LXW	2-Row	02	125	170	250	225	190	150	120			
		03	195	285	370	345	305	275	235			
		04	240	350	480	440	400	360	320			
		06	395	575	750	700	660	660	560			
	3-Row	02	115	155	220	210	180	145	115			
		03	185	265	345	315	285	255	230			
		04	230	335	460	420	385	345	310			
		06	355	510	670	625	580	540	495			

- NOTES: 1. Tabled values are standard CFM at sea level, 70°F with dry coil.
 2. Factory-installed throwaway air filter and supply air grille (where applicable) static pressure losses are included in all fan performances for all sizes.
 3. Consult factory for 50 Hz applications.

Motor Data

Thermal Overload Protection

All split-capacitor motors furnished by IEC contain internal thermal-overload protection. The overload automatically resets when the temperature returns to a safe limit. Electronics Testing Laboratories, Inc. (ETL) approves the motor and thermal overload combination at locked rotor conditions only.

PSC Motor Electrical Data — FHY, FXY, FSY

Voltage	Fan Speed	Unit Size	02	03	04	06	08	10	12
		Nominal HP	1/30	1/30	1/12	1/6	1/6	(2) 1/12	(2) 1/6
115V 60 Hz 1-Phase	High	Amps	0.53	0.83	1.40	2.50	2.50	2.80	5.00
		Watts	85	81	139	178	183	265	364
	Medium	Amps	0.31	0.48	0.70	1.30	1.30	1.30	2.50
		Watts	59	59	78	134	141	175	282
	Low	Amps	0.27	0.33	0.47	0.57	0.61	0.40	1.25
		Watts	45	46	52	77	72	131	174
208V 60 Hz 1-Phase	High	Amps	0.48	0.48	0.69	1.00	1.30	1.38	2.60
		Watts	89	89	111	141	145	240	287
	Medium	Amps	0.29	0.29	0.40	0.59	0.69	0.80	1.15
		Watts	67	67	83	92	95	182	201
	Low	Amps	0.14	0.14	0.22	0.47	0.47	0.45	0.84
		Watts	43	44	47	52	51	115	127
230V 60 Hz 1-Phase	High	Amps	0.48	0.48	0.69	1.00	1.30	1.38	2.60
		Watts	102	104	127	149	159	269	316
	Medium	Amps	0.31	0.31	0.43	0.71	0.71	0.85	1.40
		Watts	77	78	96	102	108	212	226
	Low	Amps	0.15	0.15	0.24	0.50	0.50	0.50	1.00
		Watts	50	50	56	62	64	137	150
277V 60 Hz 1-Phase	High	Amps	0.35	0.35	0.69	0.91	0.91	1.38	1.82
		Watts	91	90	126	170	176	286	374
	Medium	Amps	0.26	0.26	0.44	0.57	0.58	0.82	1.10
		Watts	71	88	115	121	213	273	374
	Low	Amps	0.16	0.17	0.25	0.34	0.35	0.45	0.65
		Watts	41	42	58	96	100	153	232

NOTES: 1. Total unit motor Amps and Watts are shown.
2. Consult factory for 50 Hz applications.

PSC Motor Electrical Data — STY/STW

Voltage	Fan Speed	Unit Size	01	03
		Nominal HP	1/20	(2) 1/20
115V 60 Hz 1-Phase Shaded Pole	High	Amps	1.60	3.20
		Watts	135	270
	Medium	Amps	1.00	1.91
		Watts	83	167
	Low	Amps	0.80	1.54
		Watts	69	138

NOTES: Total unit motor Amps and Watts are shown.

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Motor Data, Cont'd.

PSC Motor Electrical Data — LHA/LHW, LXA,LXW

Voltage	Fan Speed	Unit Size	02	03	04	06
		Nominal HP	1/20	1/12	1/12	(2) 1/12
115V 60 Hz 1-Phase	High	Amps	0.60	1.60	1.60	3.20
		Watts	72	135	150	260
	Medium	Amps	0.30	0.60	0.60	1.20
		Watts	45	65	65	125
	Low	Amps	0.20	0.30	0.30	0.80
		Watts	25	40	40	85
208V 60 Hz 1-Phase	High	Amps	0.50	0.66	0.66	1.32
		Watts	56	109	116	232
	Low	Amps	0.20	0.30	0.30	0.50
		Watts	35	55	58	103
230V 60 Hz 1-Phase	High	Amps	0.50	0.66	0.66	1.32
		Watts	64	128	138	245
	Low	Amps	0.22	0.28	0.30	0.52
		Watts	42	65	67	120
277V 60 Hz 1-Phase	High	Amps	0.30	0.50	0.50	1.00
		Watts	85	135	140	260
	Medium	Amps	0.12	0.33	0.34	0.65
		Watts	45	85	88	155
	Low	Amps	0.07	0.22	0.22	0.40
		Watts	35	55	57	100
220V 50 Hz 1-Phase	High	Amps	0.37	0.39	0.39	0.78
		Watts	64	128	138	245
	Medium	Amps	0.12	0.33	0.34	0.65
		Watts	45	85	88	155
	Low	Amps	0.07	0.22	0.22	0.40
		Watts	35	55	57	100

NOTES: Total unit motor Amps and Watts are shown.

EC Motor Performance Data — Vertical F**, L**, Standard Performance

Voltage	Unit Size	F**02	F**03	F**04	F**06	F**08	F**10	F**12	L**02	L**06
	Nominal HP	1/7	1/7	1/6	1/6	1/6	(2) 1/6	(2) 1/6	1/7	(2) 1/7
120V	Rated Motor FLA	2.3	2.3	2.4	2.4	2.4	2.4, 2.4	2.4, 2.4	2.3	2.3, 2.3
	Max Program Current	1.2	1.4	1.5	2.2	2.4	2.0, 2.0	2.4, 2.4	1.0	1.3, 1.3
208-240V	Rated Motor FLA	1.4	1.4	1.6	1.6	1.6	1.6, 1.6	1.6, 1.6	1.4	1.4, 1.4
	Max Program Current	0.7	0.9	1.0	1.4	1.6	1.3, 1.3	1.6, 1.6	0.6	0.8, 0.8
277V	Rated Motor FLA	1.2	1.2	1.3	1.3	1.3	1.3, 1.3	1.3, 1.3	1.2	1.2, 1.2
	Max Program Current	0.6	0.7	0.8	1.2	1.3	1.1, 1.1	1.3, 1.3	0.5	0.7, 0.7

Sound Data

FX, FS, FH Sound Power Data

UNIT SIZE	RATING	FAN SPEED	CFM	SOUND POWER LEVEL, Lw (dB reference one picowatt)							A-wgt (dBA)
				125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz	
2	CASING RADIATED	H	280	62	64	59	55	47	44	37	60
		M	255	61	62	57	52	44	40	34	58
		L	205	55	57	52	46	38	33	31	53
3	CASING RADIATED	H	300	65	64	59	55	47	44	38	61
		M	270	63	62	57	52	45	41	35	58
		L	215	59	56	51	45	37	33	31	52
4	CASING RADIATED	H	485	65	70	62	57	50	46	39	65
		M	370	60	63	56	50	42	37	32	58
		L	290	58	56	49	43	36	28	30	51
6	CASING RADIATED	H	660	66	69	63	59	52	48	41	65
		M	595	65	67	61	56	50	45	41	63
		L	380	58	56	51	46	39	30	31	53
8	CASING RADIATED	H	655	67	70	64	61	52	49	43	66
		M	585	66	67	61	58	49	45	39	63
		L	370	57	56	52	44	35	29	31	52
10	CASING RADIATED	H	865	69	72	66	60	54	50	43	67
		M	695	64	66	59	53	46	41	34	61
		L	560	61	60	53	47	39	32	31	55
12	CASING RADIATED	H	1080	71	74	68	65	56	53	46	70
		M	1020	71	72	66	62	54	50	43	68
		L	715	65	63	58	50	43	37	32	59

- NOTES: 1. Unit Test Configuration: Bottom Return/ Stamped Louver Top Supply, 3 Row 1/2" 10 FPI Coil, 115VAC PSC Motor, 1/2" dual density fiberglass insulation.
 2. Casing Radiated Testing per AHRI 350-2008: 4.2.2.3 Casing radiated with free inlet, Sound Rating of Ducted Air Moving and Conditioning Equipment.
 3. Sound power data is expressed in decibels, dB RE: 1 x 10⁻¹² w (picowatts).

L** Sound Power Data

UNIT SIZE	RATING	FAN SPEED	CFM	SOUND POWER LEVEL, Lw (dB reference one picowatt)							A-wgt (dBA)
				125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz	
2	CASING RADIATED	H	260	58	61	58	53	48	42	36	59
		M	165	51	52	49	42	37	28	31	50
		L	120	47	45	38	32	25	24	30	40
3	CASING RADIATED	H	350	61	65	59	57	54	49	43	63
		M	260	54	57	53	50	46	39	33	55
		L	160	46	46	43	37	31	25	30	44
4	CASING RADIATED	H	445	63	68	61	59	56	51	48	65
		M	310	55	56	53	49	45	39	35	55
		L	200	51	47	42	38	31	25	30	44
6	CASING RADIATED	H	665	67	70	65	63	59	54	50	68
		M	555	64	65	61	58	54	49	43	63
		L	445	61	59	55	51	48	40	35	57

- NOTES: 1. Unit Test Configuration: Stamped Louver Front Return / Top Supply, 2 Row, 12 FPI Coil, 115VAC PSC Motor.
 2. Casing Radiated Testing per AHRI 350-2008: 4.2.2.3 Casing radiated with free inlet, Sound Rating of Ducted Air Moving and Conditioning Equipment.
 3. Sound power data is expressed in decibels, dB RE: 1 x 10⁻¹² w (picowatts).

Vertical Series

FAN COIL TECHNICAL CATALOG

Sound Data, Cont'd.

ST* Sound Power Data

UNIT SIZE	RATING	FAN SPEED	CFM	SOUND POWER LEVEL, L _w (dB reference one picowatt)						A-wgt (dBA)	
				125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz		8K Hz
1	CASING RADIATED	H	125	62	64	59	57	55	53	50	63
		M	105	58	60	56	54	51	49	44	59
		L	70	55	55	54	50	47	44	39	56
3	CASING RADIATED	H	265	72	67	62	60	59	57	54	67
		M	230	64	60	57	55	53	51	46	61
		L	195	56	53	51	47	45	42	36	53

- NOTES: 1. Unit Test Configuration: Stamped Louver Front Return / Front Supply, 2 Row, 10 FPI Coil, 115VAC SP Motor.
 2. Testing per AHRI 350-2008: 4.2.2.3 Casing radiated with free inlet, Sound Rating of Ducted Air Moving and Conditioning Equipment.
 3. Sound power data is expressed in decibels, dB RE: 1×10^{-12} w (picowatts).

Electric Heating

Electric heaters are available on IEC Vertical Series fan coil 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.

Auxiliary Electric Heat

Auxiliary electric heat is ideal for tempering room air between seasons and during the cooling season when chilled water is being circulated. Individual room controls are supplied to provide electric heat only when chilled water is being circulated. During the regular heating season, heating is provided by hot water being circulated in the system.

Construction

The heater coils of high-grade resistance wire is centered in a 1/2-inch diameter tube and has helically wound 1-1/4-inch diameter fins. The terminal ends have an unheated section to isolate the terminals from the heat source. The heater is finished with a baked-on heat- and moisture-resistance coating.

The sheath heater element is mounted directly above the coil. 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

Voltage	kW	Unit Size						
		02	03	04	06	08	10	12
120V	1.0	F/L	F/L	F/L	F/L	-	-	-
	1.5	-	F/L	F/L	F/L	-	-	-
	2.0	-	-	F/L	F/L	F	-	-
	3.0	-	-	-	F/L	F	F	F
208V	1.0	F/L	F/L	F/L	F/L	-	-	-
	1.5	-	F/L	F/L	F/L	-	-	-
	2.0	-	-	F/L	F/L	F	-	-
	3.0	-	-	-	F/L	F	F	F
	4.0	-	-	-	-	F	F	F
240V 277V 220/240V 50 Hz	1.0	F/L	F/L	F/L	F/L	-	-	-
	1.5	-	F/L	F/L	F/L	-	-	-
	2.0	-	-	F/L	F/L	F	-	-
	3.0	-	-	-	F/L	F	F	F
	4.0	-	-	-	-	F	F	F
	5.0	-	-	-	-	-	F	F
6.0	-	-	-	-	-	-	F	

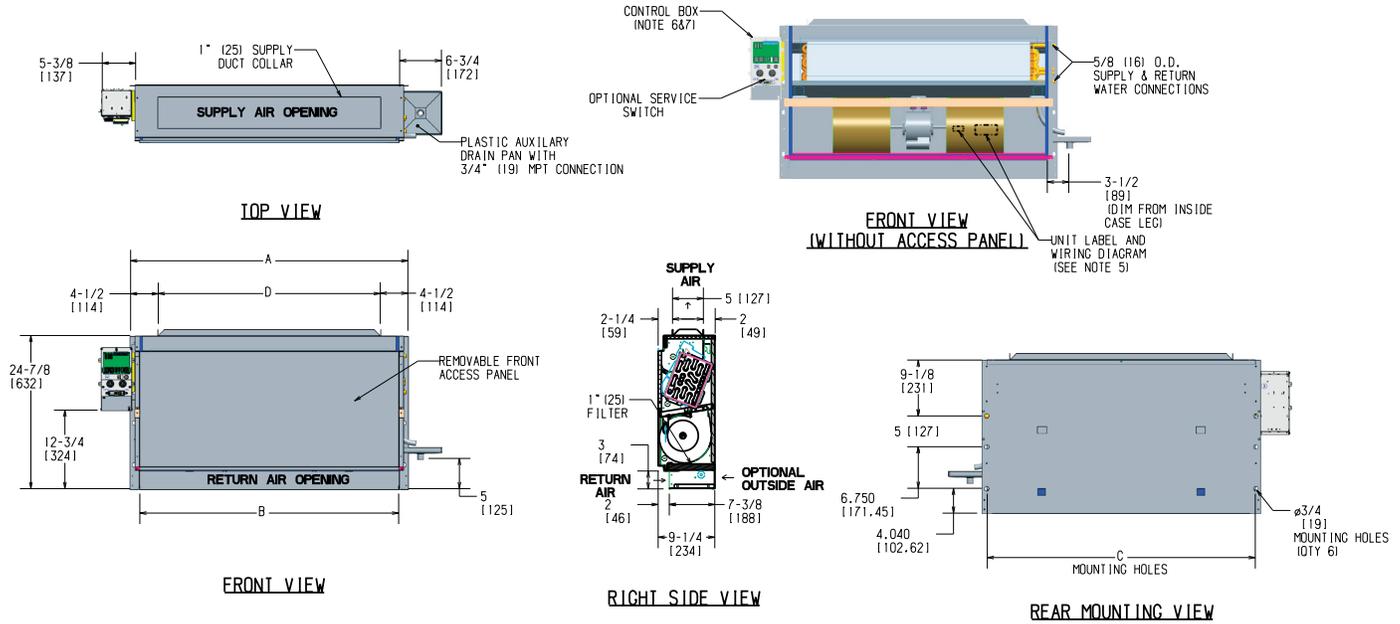
- NOTES: 1. F=Floor Cabinet Units; L=Lowboy Cabinet Units (LHW, LXW units only).
 2. All heaters are single stage and single phase.
 3. Electric heaters are available with top air discharge only.
 4. Electric Heating Capacities (BTUH) = Heater kW x 3413
 5. Electric Heater Amperage = (Heater kW x 1000)/Applied Voltage

Vertical Series

FAN COIL TECHNICAL CATALOG

Submittal Data – F*Y

FHY – Vertical Hideaway Top Supply



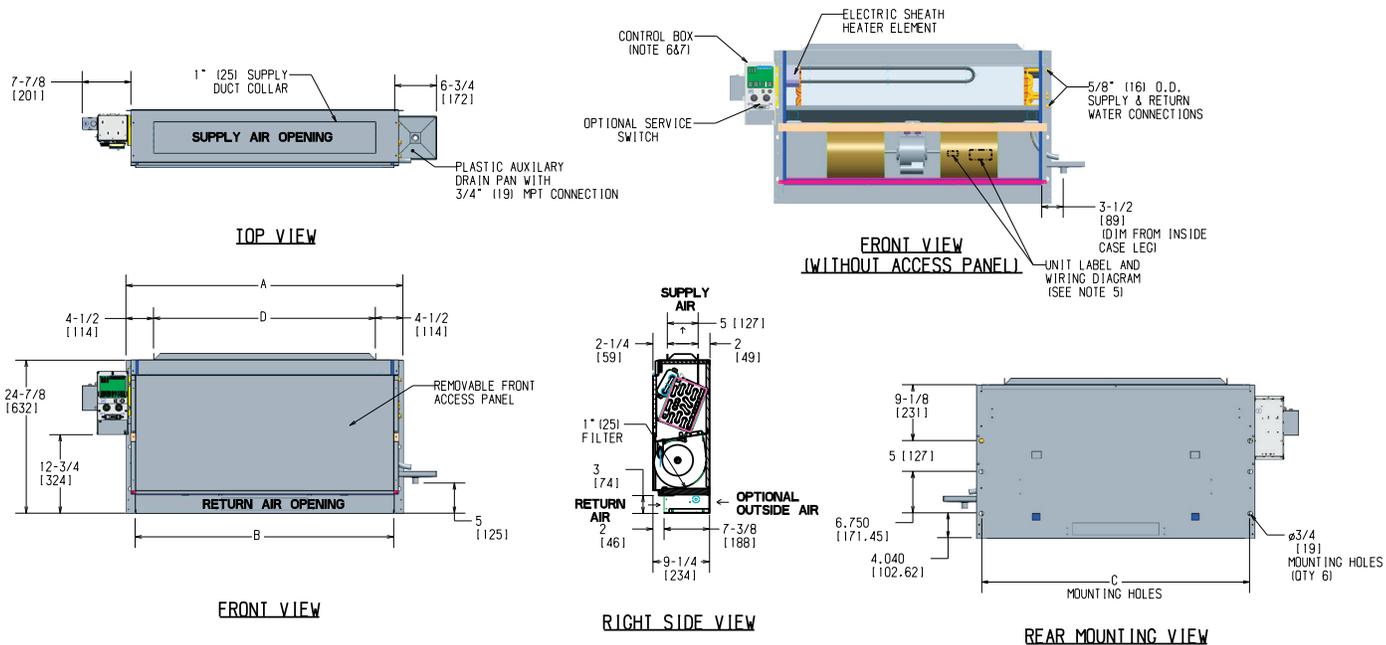
Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
FHY02	25 (635)	22 (559)	23-1/2 (597)	16 (406)	1	1	65
FHY03	29 (737)	26 (660)	27-1/2 (698)	20 (508)	1	1	80
FHY04	35 (889)	32 (813)	33-1/2 (851)	26 (660)	2	1	90
FHY06	45 (1143)	42 (1067)	43-1/2 (1105)	36 (914)	2	1	112
FHY08	47 (1194)	44 (1118)	45-1/2 (1156)	38 (965)	2	1	115
FHY10	61 (1549)	58 (1473)	59-1/2 (1511)	52 (1321)	4	2	140
FHY12	69 (1753)	66 (1676)	67-1/2 (1715)	60 (1524)	4	2	170

- NOTES: *
- Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.
 - RH coil shown, LH opposite.
 - All dimensions +/- .25 (6). Drawing not to scale.
 - Product specifications are subject to changes without notice.
 - Control box size and position may vary (consult factory).
 - Position may vary.
 - Service access is located on the front of the control box.
 - Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is provided for reference only.
Dimensions may vary with options ordered.
Consult IEC website for submittal drawings.

Submittal Data – F*Y, Cont'd.

FHY – Vertical Hideaway Top Supply with Electric Heat



Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
FHY02	25 (635)	22 (559)	23-1/2 (597)	16 (406)	1	1	65
FHY03	29 (737)	26 (660)	27-1/2 (698)	20 (508)	1	1	80
FHY04	35 (889)	32 (813)	33-1/2 (851)	26 (660)	2	1	90
FHY06	45 (1143)	42 (1067)	43-1/2 (1105)	36 (914)	2	1	112
FHY08	47 (1194)	44 (1118)	45-1/2 (1156)	38 (965)	2	1	115
FHY10	61 (1549)	58 (1473)	59-1/2 (1511)	52 (1321)	4	2	140
FHY12	69 (1753)	66 (1676)	67-1/2 (1715)	60 (1524)	4	2	170

- NOTES: *
- Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.
 - RH coil shown, LH opposite.
 - All dimensions +/- .25 (6). Drawing not to scale.
 - Product specifications are subject to changes without notice.
 - Control box size and position may vary (consult factory).
 - Position may vary.
 - Service access is located on the front of the control box.
 - Knockouts on the bottom and side of the control box for incoming power connections.

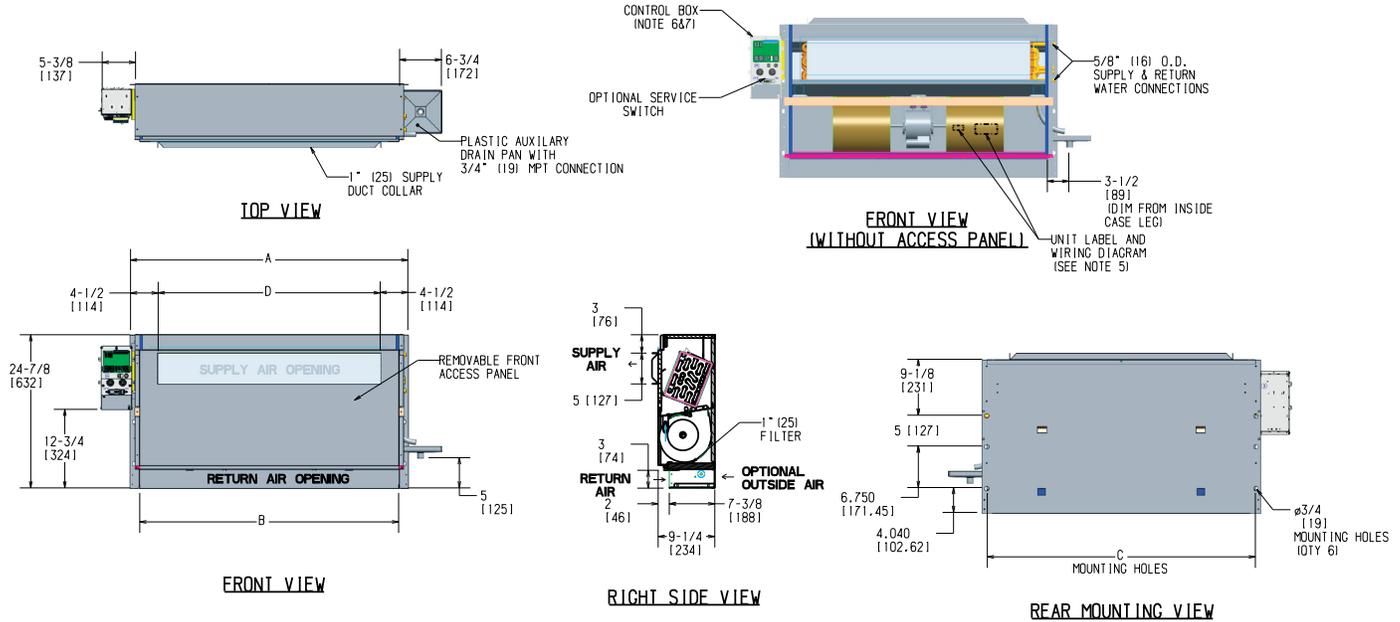
Drawing is provided for reference only. Dimensions may vary with options ordered. Consult IEC website for submittal drawings.

Vertical Series

FAN COIL TECHNICAL CATALOG

Submittal Data – F*Y, Cont'd.

FHY – Vertical Hideaway Front Supply



Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
FHY02	25 (635)	22 (559)	23-1/2 (597)	16 (406)	1	1	65
FHY03	29 (737)	26 (660)	27-1/2 (698)	20 (508)	1	1	80
FHY04	35 (889)	32 (813)	33-1/2 (851)	26 (660)	2	1	90
FHY06	45 (1143)	42 (1067)	43-1/2 (1105)	36 (914)	2	1	112
FHY08	47 (1194)	44 (1118)	45-1/2 (1156)	38 (965)	2	1	115
FHY10	61 (1549)	58 (1473)	59-1/2 (1511)	52 (1321)	4	2	140
FHY12	69 (1753)	66 (1676)	67-1/2 (1715)	60 (1524)	4	2	170

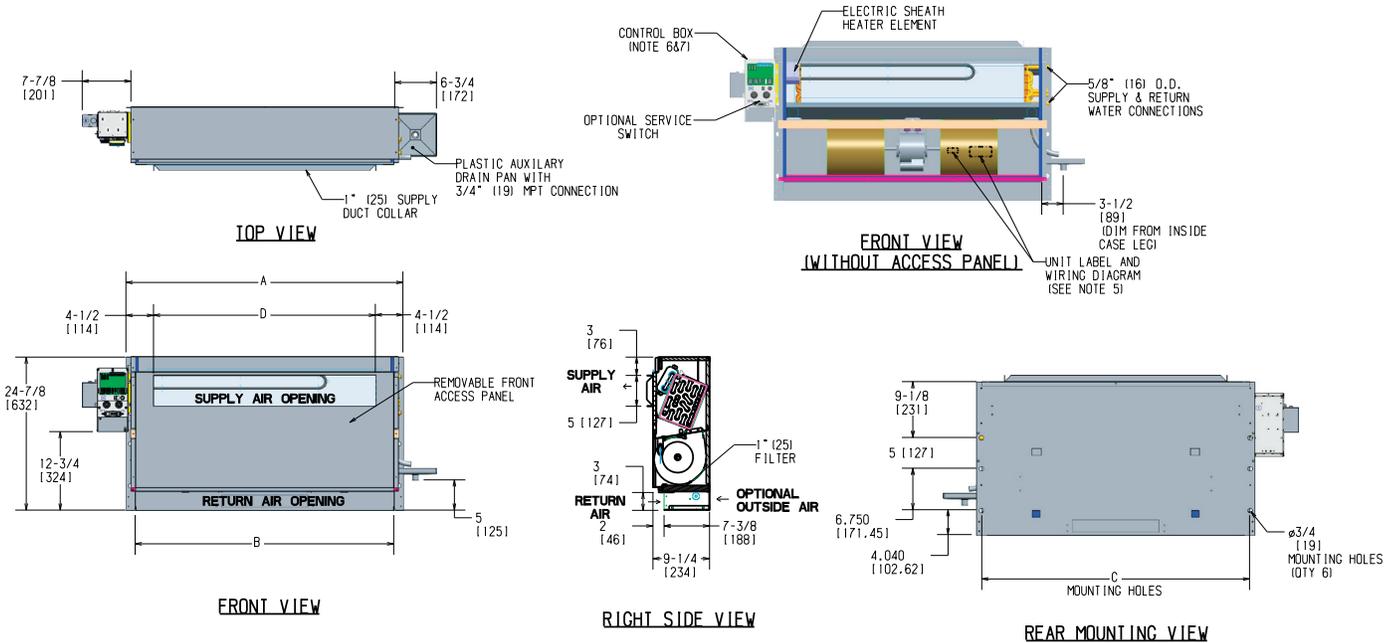
NOTES: * Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.

1. RH coil shown, LH opposite.
2. All dimensions +/- .25 (6). Drawing not to scale.
3. Product specifications are subject to changes 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 provided for reference only.
Dimensions may vary with options ordered.
Consult IEC website for submittal drawings.

Submittal Data – F*Y, Cont'd.

FHY – Vertical Hideaway Front Supply with Electric Heat



Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
FHY02	25 (635)	22 (559)	23-1/2 (597)	16 (406)	1	1	65
FHY03	29 (737)	26 (660)	27-1/2 (698)	20 (508)	1	1	80
FHY04	35 (889)	32 (813)	33-1/2 (851)	26 (660)	2	1	90
FHY06	45 (1143)	42 (1067)	43-1/2 (1105)	36 (914)	2	1	112
FHY08	47 (1194)	44 (1118)	45-1/2 (1156)	38 (965)	2	1	115
FHY10	61 (1549)	58 (1473)	59-1/2 (1511)	52 (1321)	4	2	140
FHY12	69 (1753)	66 (1676)	67-1/2 (1715)	60 (1524)	4	2	170

NOTES: * 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 +/- .25 (6). Drawing not to scale.
3. Product specifications are subject to changes 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.

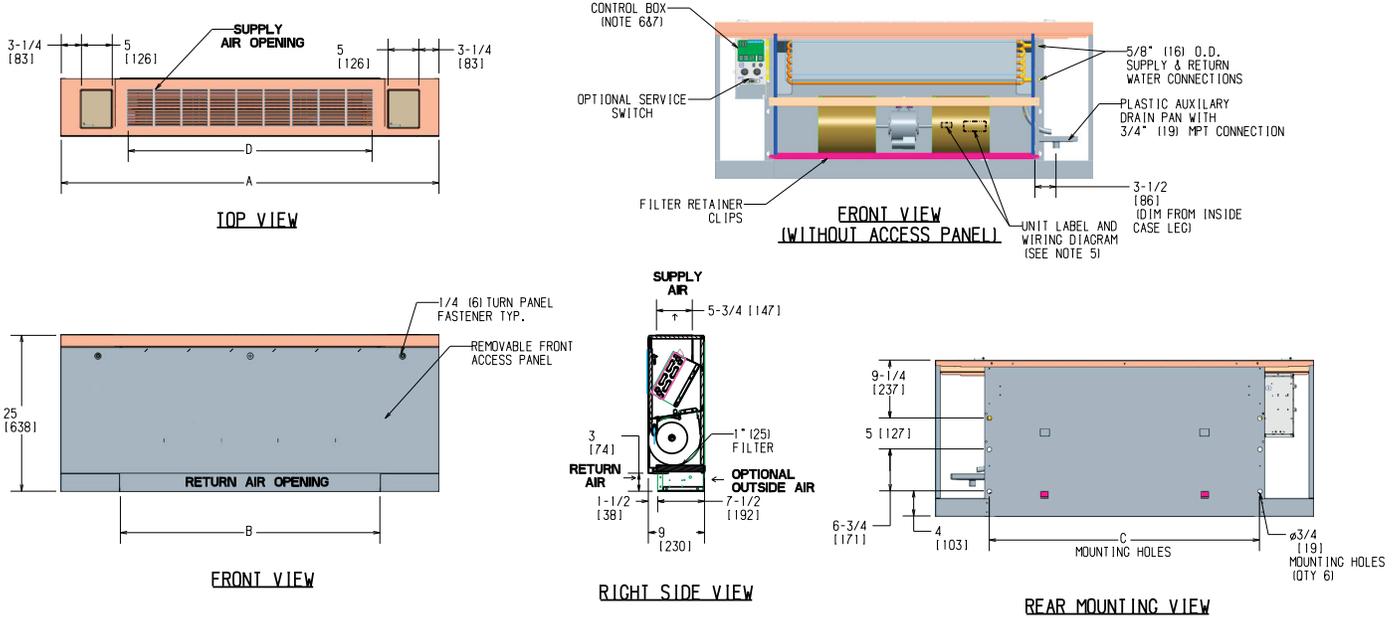
Drawing is provided for reference only.
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 Consult IEC website for submittal drawings.

Vertical Series

FAN COIL TECHNICAL CATALOG

Submittal Data – F*Y, Cont'd.

FX Y – Vertical Cabinet Top Supply



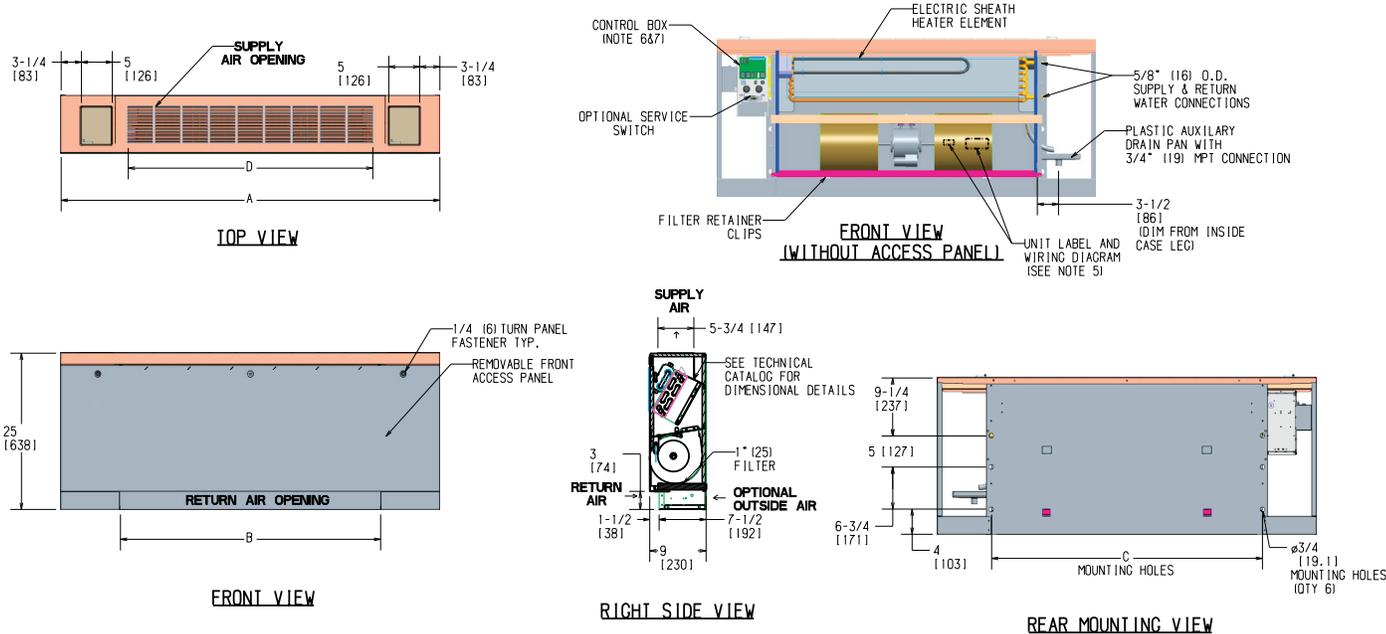
Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
FX Y02	41 (1041)	22 (559)	23-1/2 (597)	17-1/4 (438)	1	1	89
FX Y03	45 (1143)	26 (660)	27-1/2 (698)	21-1/2 (546)	1	1	95
FX Y04	51 (1295)	32 (813)	33-1/2 (851)	26 (660)	2	1	116
FX Y06	61 (1549)	42 (1067)	43-1/2 (1105)	39 (991)	2	1	134
FX Y08	63 (1600)	44 (1118)	45-1/2 (1156)	39 (991)	2	1	137
FX Y10	77 (1956)	58 (1473)	59-1/2 (1511)	52 (1321)	4	2	169
FX Y12	85 (2159)	66 (1676)	67-1/2 (1715)	61 (1549)	4	2	192

- NOTES: *
- Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.
 - RH coil shown, LH opposite.
 - All dimensions +/- .25 (6). Drawing not to scale.
 - Product specifications are subject to changes without notice.
 - Control box size and position may vary (consult factory).
 - Position may vary.
 - Service access is located on the front of the control box.
 - Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is provided for reference only.
 Dimensions may vary with options ordered.
 Consult IEC website for submittal drawings.

Submittal Data – F*Y, Cont'd.

FX Y – Vertical Cabinet Top Supply with Electric Heat



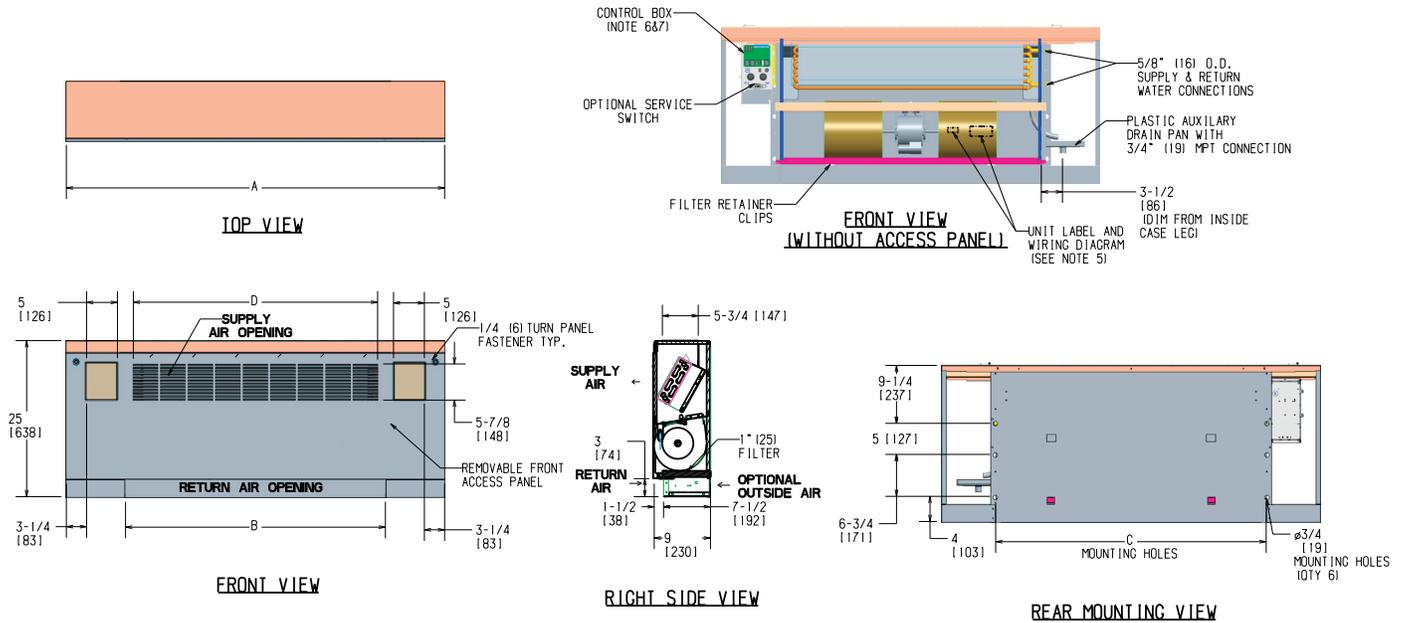
Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
FX Y02	41 (1041)	22 (559)	23-1/2 (597)	17-1/4 (438)	1	1	89
FX Y03	45 (1143)	26 (660)	27-1/2 (698)	21-1/2 (546)	1	1	95
FX Y04	51 (1295)	32 (813)	33-1/2 (851)	26 (660)	2	1	116
FX Y06	61 (1549)	42 (1067)	43-1/2 (1105)	39 (991)	2	1	134
FX Y08	63 (1600)	44 (1118)	45-1/2 (1156)	39 (991)	2	1	137
FX Y10	77 (1956)	58 (1473)	59-1/2 (1511)	52 (1321)	4	2	169
FX Y12	85 (2159)	66 (1676)	67-1/2 (1715)	61 (1549)	4	2	192

- NOTES: *
- Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.
 - RH coil shown, LH opposite.
 - All dimensions +/- .25 (6). Drawing not to scale.
 - Product specifications are subject to changes without notice.
 - Control box size and position may vary (consult factory).
 - Position may vary.
 - Service access is located on the front of the control box.
 - Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is provided for reference only. Dimensions may vary with options ordered. Consult IEC website for submittal drawings.

Submittal Data – F*Y, Cont'd.

FX Y – Vertical Cabinet Front Supply



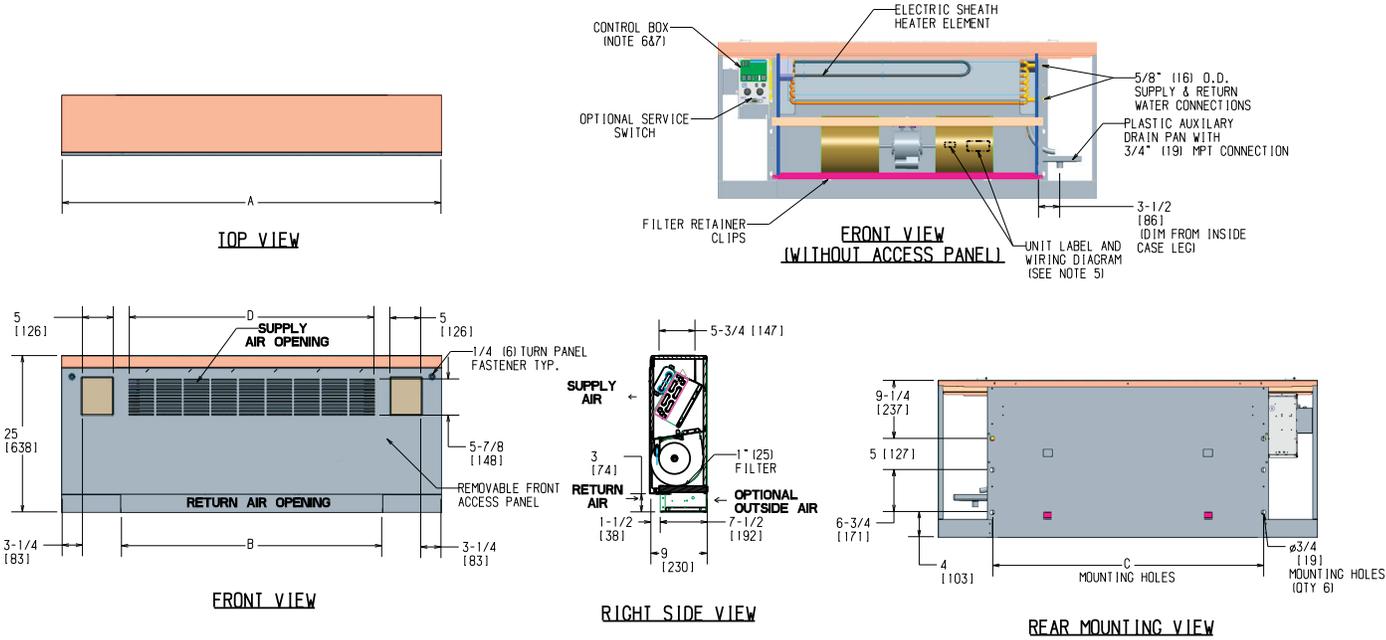
Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
FX Y02	41 (1041)	22 (559)	23-1/2 (597)	17-1/4 (438)	1	1	89
FX Y03	45 (1143)	26 (660)	27-1/2 (698)	21-1/2 (546)	1	1	95
FX Y04	51 (1295)	32 (813)	33-1/2 (851)	26 (660)	2	1	116
FX Y06	61 (1549)	42 (1067)	43-1/2 (1105)	39 (991)	2	1	134
FX Y08	63 (1600)	44 (1118)	45-1/2 (1156)	39 (991)	2	1	137
FX Y10	77 (1956)	58 (1473)	59-1/2 (1511)	52 (1321)	4	2	169
FX Y12	85 (2159)	66 (1676)	67-1/2 (1715)	61 (1549)	4	2	192

- NOTES: *
- Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.
 - RH coil shown, LH opposite.
 - All dimensions +/- .25 (6). Drawing not to scale.
 - Product specifications are subject to changes without notice.
 - Control box size and position may vary (consult factory).
 - Position may vary.
 - Service access is located on the front of the control box.
 - Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is provided for reference only.
 Dimensions may vary with options ordered.
 Consult IEC website for submittal drawings.

Submittal Data – F*Y, Cont'd.

FX Y – Vertical Cabinet Front Supply with Electric Heat



Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
FX Y02	41 (1041)	22 (559)	23-1/2 (597)	17-1/4 (438)	1	1	89
FX Y03	45 (1143)	26 (660)	27-1/2 (698)	21-1/2 (546)	1	1	95
FX Y04	51 (1295)	32 (813)	33-1/2 (851)	26 (660)	2	1	116
FX Y06	61 (1549)	42 (1067)	43-1/2 (1105)	39 (991)	2	1	134
FX Y08	63 (1600)	44 (1118)	45-1/2 (1156)	39 (991)	2	1	137
FX Y10	77 (1956)	58 (1473)	59-1/2 (1511)	52 (1321)	4	2	169
FX Y12	85 (2159)	66 (1676)	67-1/2 (1715)	61 (1549)	4	2	192

- NOTES: *
- Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.
 - RH coil shown, LH opposite.
 - All dimensions +/- .25 (6). Drawing not to scale.
 - Product specifications are subject to changes without notice.
 - Control box size and position may vary (consult factory).
 - Position may vary.
 - Service access is located on the front of the control box.
 - Knockouts on the bottom and side of the control box for incoming power connections.

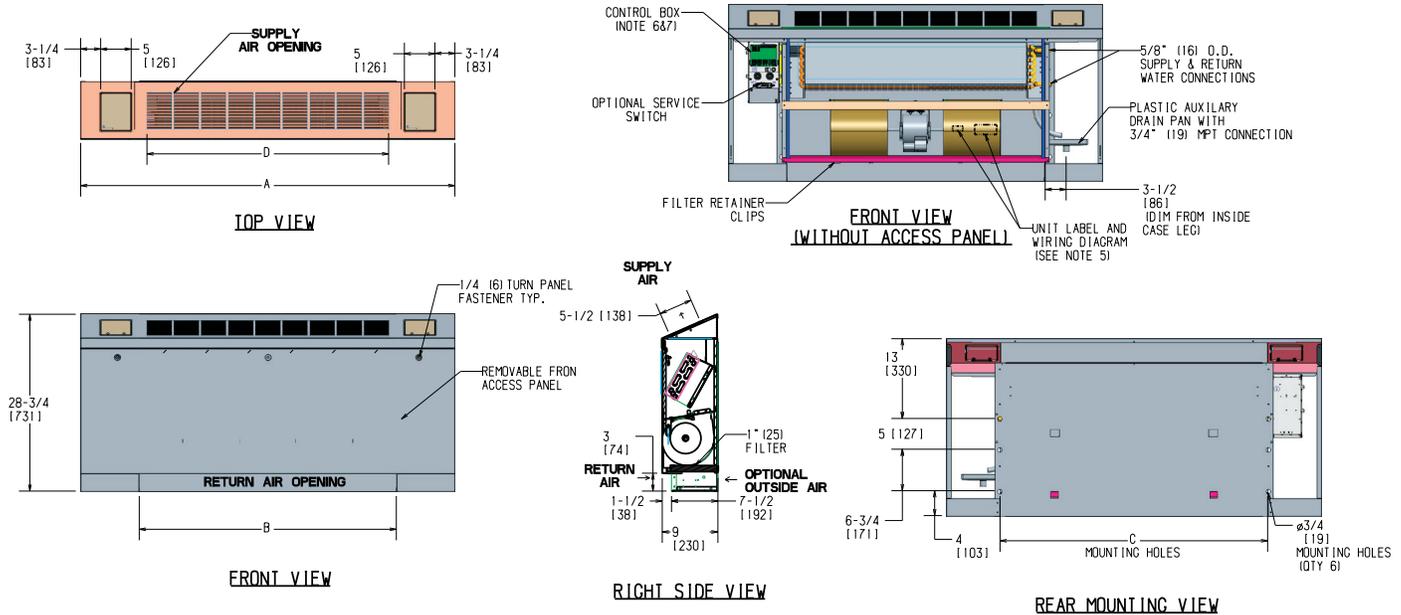
Drawing is provided for reference only.
Dimensions may vary with options ordered.
Consult IEC website for submittal drawings.

Vertical Series

FAN COIL TECHNICAL CATALOG

Submittal Data – F*Y, Cont'd.

FSY – Vertical Sloped Cabinet Top Supply



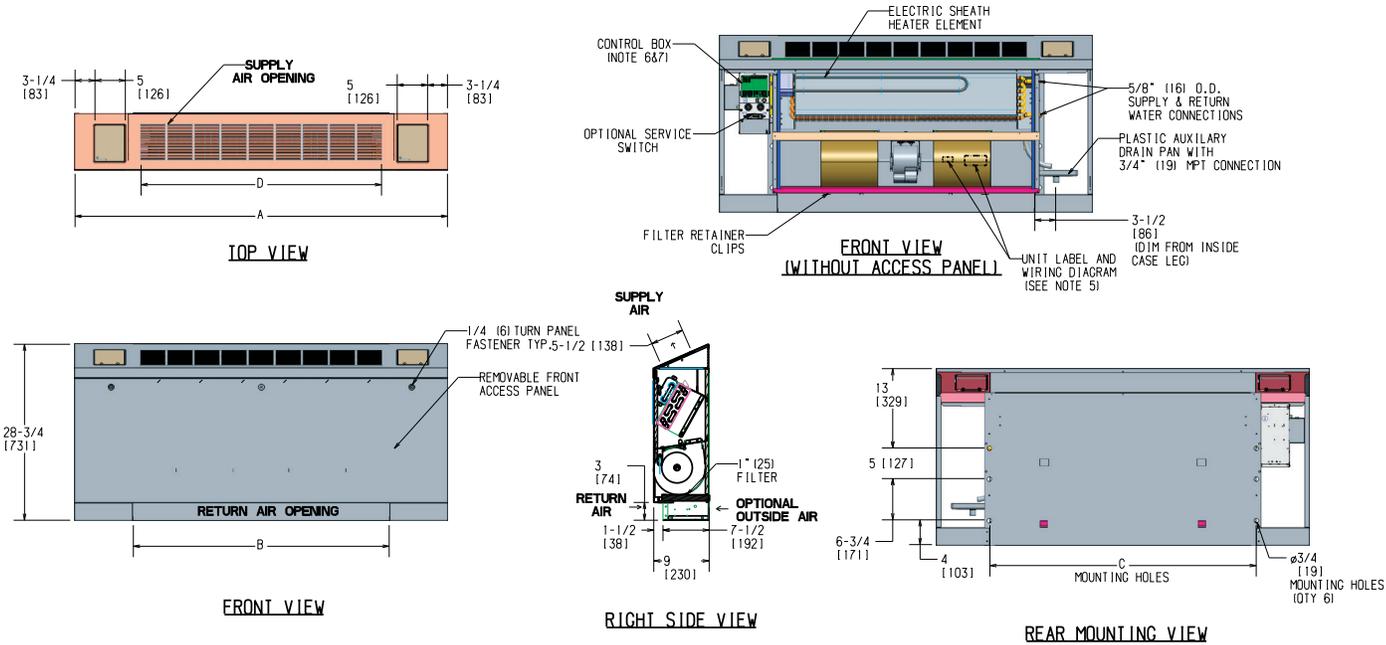
Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
FSY02	41 (1041)	22 (559)	23-1/2 (597)	17-1/4 (438)	1	1	92
FSY03	45 (1143)	26 (660)	27-1/2 (698)	21-1/2 (546)	1	1	98
FSY04	51 (1295)	32 (813)	33-1/2 (851)	26 (660)	2	1	122
FSY06	61 (1549)	42 (1067)	43-1/2 (1105)	39 (991)	2	1	141
FSY08	63 (1600)	44 (1118)	45-1/2 (1156)	39 (991)	2	1	144
FSY10	77 (1956)	58 (1473)	59-1/2 (1511)	52 (1321)	4	2	178
FSY12	85 (2159)	66 (1676)	67-1/2 (1715)	61 (1549)	4	2	205

- NOTES: *
- Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.
 - RH coil shown, LH opposite.
 - All dimensions +/- .25 (6). Drawing not to scale.
 - Product specifications are subject to changes without notice.
 - Control box size and position may vary (consult factory).
 - Position may vary.
 - Service access is located on the front of the control box.
 - Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is provided for reference only.
 Dimensions may vary with options ordered.
 Consult IEC website for submittal drawings.

Submittal Data – F*Y, Cont'd.

FSY – Vertical Sloped Cabinet Top Supply with Electric Heat



Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
FSY02	41 (1041)	22 (559)	23-1/2 (597)	17-1/4 (438)	1	1	92
FSY03	45 (1143)	26 (660)	27-1/2 (698)	21-1/2 (546)	1	1	98
FSY04	51 (1295)	32 (813)	33-1/2 (851)	26 (660)	2	1	122
FSY06	61 (1549)	42 (1067)	43-1/2 (1105)	39 (991)	2	1	141
FSY08	63 (1600)	44 (1118)	45-1/2 (1156)	39 (991)	2	1	144
FSY10	77 (1956)	58 (1473)	59-1/2 (1511)	52 (1321)	4	2	178
FSY12	85 (2159)	66 (1676)	67-1/2 (1715)	61 (1549)	4	2	205

- NOTES:** * 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 +/- .25 (6). Drawing not to scale.
 3. Product specifications are subject to changes 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.

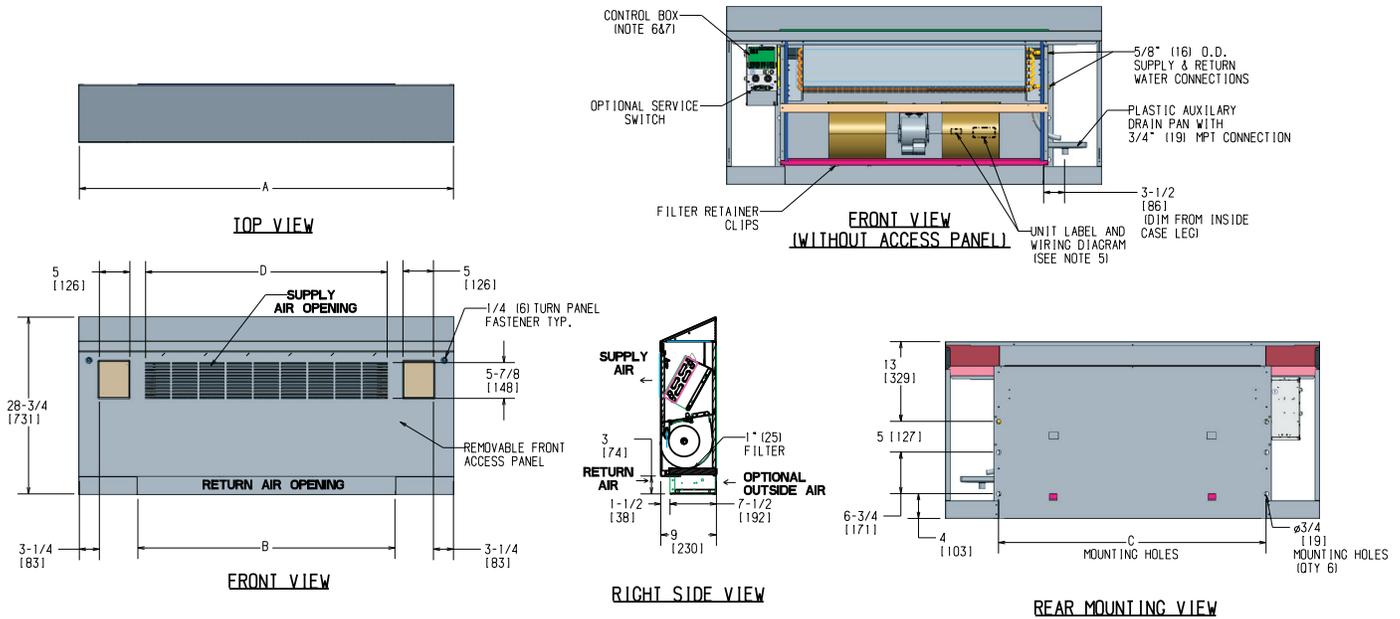
Drawing is provided for reference only.
Dimensions may vary with options ordered.
Consult IEC website for submittal drawings.

Vertical Series

FAN COIL TECHNICAL CATALOG

Submittal Data – F*Y, Cont'd.

FSY – Vertical Sloped Cabinet Front Supply



Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
FSY02	41 (1041)	22 (559)	23-1/2 (597)	17-1/4 (438)	1	1	92
FSY03	45 (1143)	26 (660)	27-1/2 (698)	21-1/2 (546)	1	1	98
FSY04	51 (1295)	32 (813)	33-1/2 (851)	26 (660)	2	1	122
FSY06	61 (1549)	42 (1067)	43-1/2 (1105)	39 (991)	2	1	141
FSY08	63 (1600)	44 (1118)	45-1/2 (1156)	39 (991)	2	1	144
FSY10	77 (1956)	58 (1473)	59-1/2 (1511)	52 (1321)	4	2	178
FSY12	85 (2159)	66 (1676)	67-1/2 (1715)	61 (1549)	4	2	205

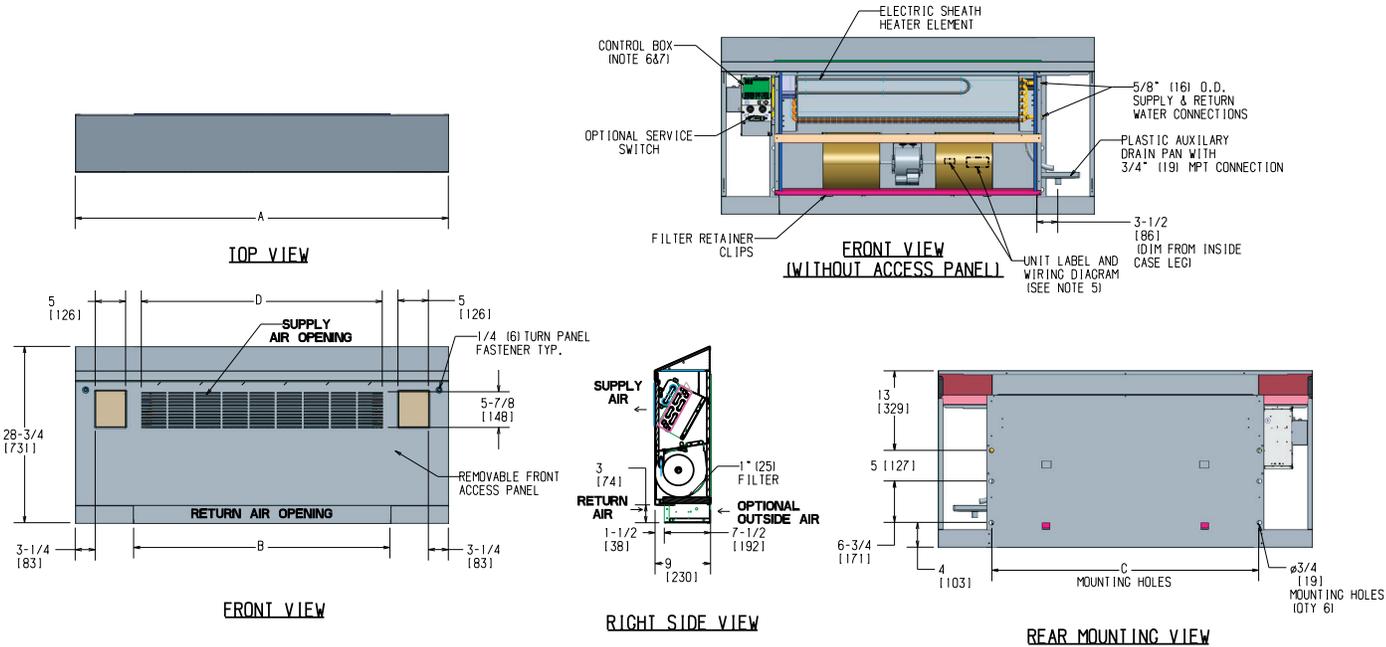
NOTES: * Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.

1. RH coil shown, LH opposite.
2. All dimensions +/- .25 (6). Drawing not to scale.
3. Product specifications are subject to changes 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 provided for reference only.
 Dimensions may vary with options ordered.
 Consult IEC website for submittal drawings.

Submittal Data – F*Y, Cont'd.

FSY – Vertical Sloped Cabinet Front Supply with Electric Heat



Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight*
	A	B	C	D	Blower	Motor	
FSY02	41 (1041)	22 (559)	23-1/2 (597)	17-1/4 (438)	1	1	92
FSY03	45 (1143)	26 (660)	27-1/2 (698)	21-1/2 (546)	1	1	98
FSY04	51 (1295)	32 (813)	33-1/2 (851)	26 (660)	2	1	122
FSY06	61 (1549)	42 (1067)	43-1/2 (1105)	39 (991)	2	1	141
FSY08	63 (1600)	44 (1118)	45-1/2 (1156)	39 (991)	2	1	144
FSY10	77 (1956)	58 (1473)	59-1/2 (1511)	52 (1321)	4	2	178
FSY12	85 (2159)	66 (1676)	67-1/2 (1715)	61 (1549)	4	2	205

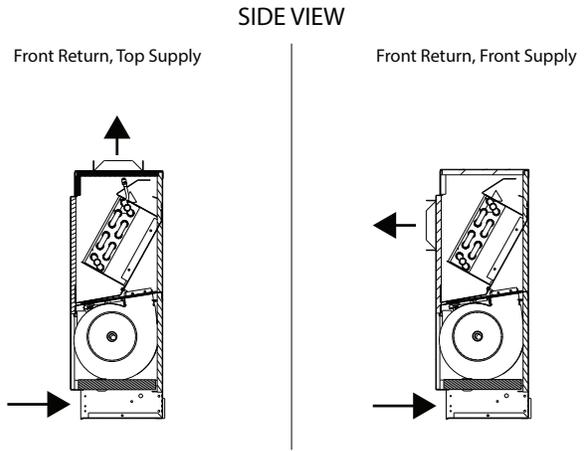
NOTES: * Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.

1. RH coil shown, LH opposite.
2. All dimensions +/- .25 (6). Drawing not to scale.
3. Product specifications are subject to changes 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.

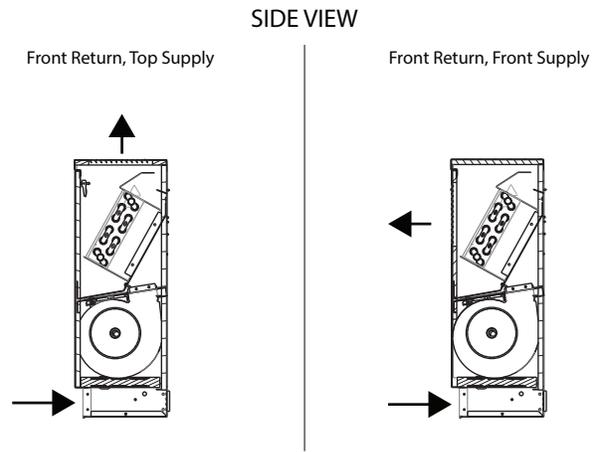
Drawing is provided for reference only.
Dimensions may vary with options ordered.
Consult IEC website for submittal drawings.

Air Flow Arrangements – F*Y

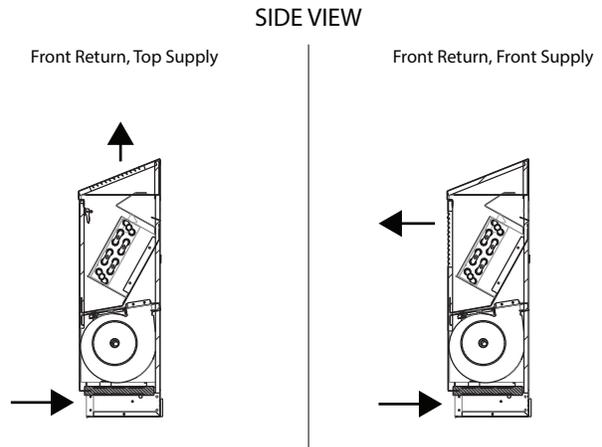
FHY – Vertical Hideaway Cabinet Heater



FX Y – Vertical Cabinet Heater

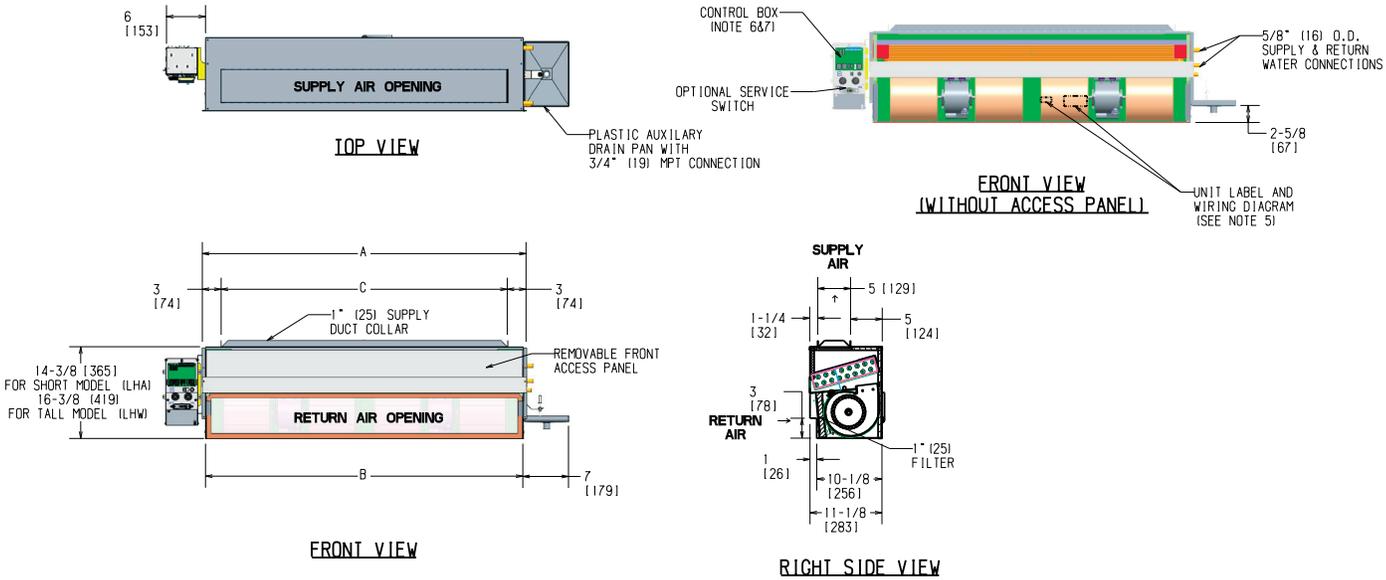


FSY – Vertical Sloped Top Cabinet Heater



Submittal Data – L**

LHA/LHW – Vertical Lowboy Hideaway



Unit Model	Dimensions – Inches (Millimeters)			Quantity/Unit		Unit Weight*
	A	B	C	Blower	Motor	
LHA/LHW02	23 (584)	22 (559)	17 (432)	2	1	50
LHA/LHW03	28 (711)	27 (686)	22 (559)	2	1	60
LHA/LHW04	36 (914)	35 (889)	30 (762)	2	1	72
LHA/LHW06	50 (1270)	49 (1245)	44 (1118)	4	2	110

- NOTES:** * 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 +/- .25 (6). Drawing not to scale.
 3. Product specifications are subject to changes 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.

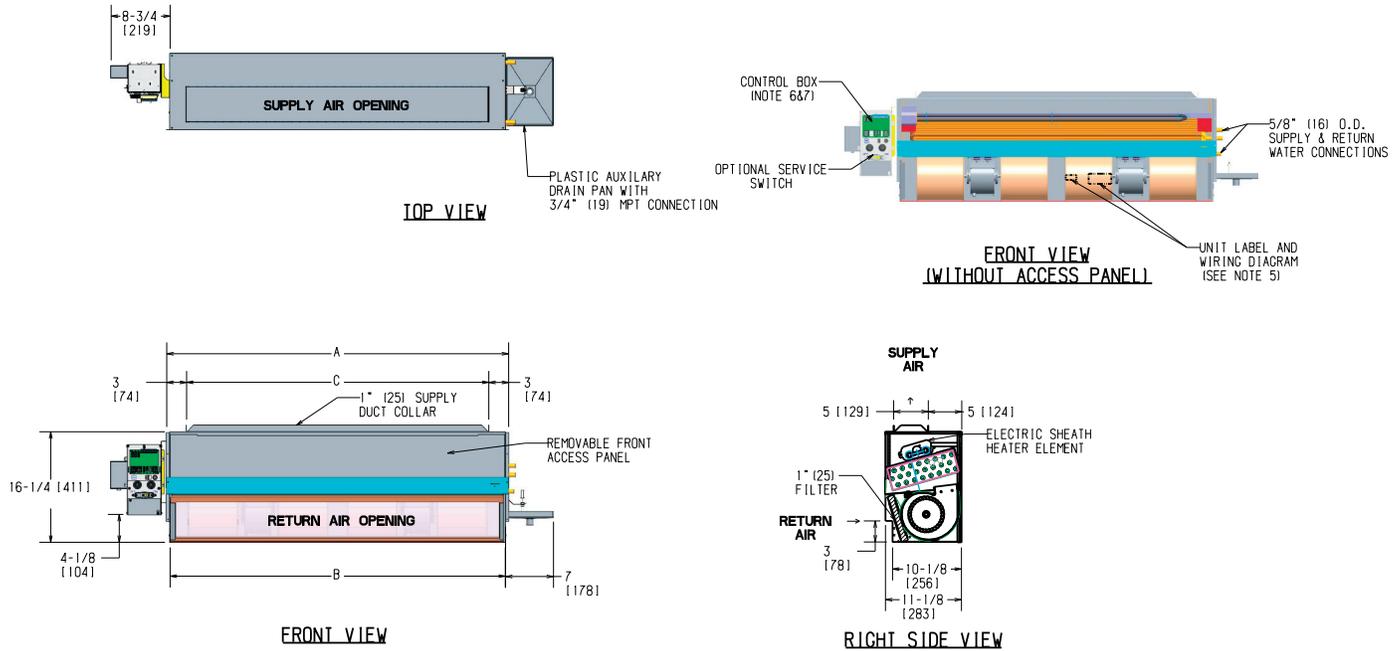
Drawing is provided for reference only.
Dimensions may vary with options ordered.
Consult IEC website for submittal drawings.

Vertical Series

FAN COIL TECHNICAL CATALOG

Submittal Data – L**, Cont'd.

LHW – Vertical Lowboy Hideaway with Electric Heat



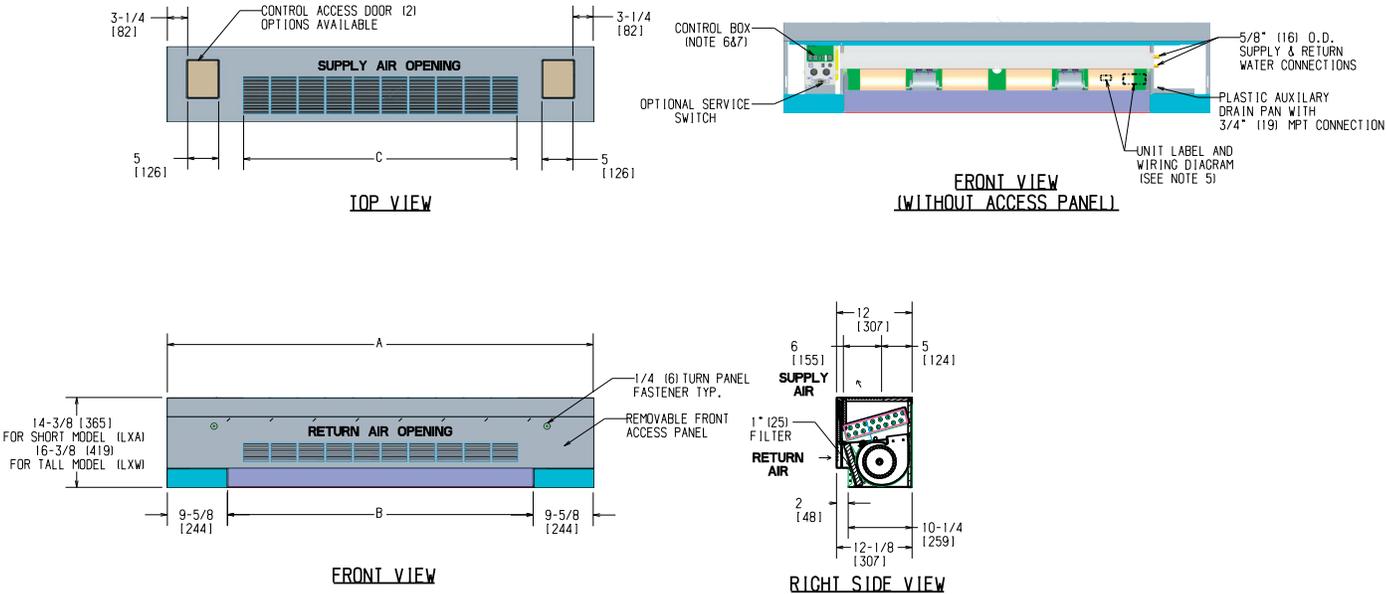
Unit Model	Dimensions – Inches (Millimeters)			Quantity/Unit		Unit Weight*
	A	B	C	Blower	Motor	
LHW02	23 (584)	22 (559)	17 (432)	2	1	50
LHW03	28 (711)	27 (686)	22 (559)	2	1	60
LHW04	36 (914)	35 (889)	30 (762)	2	1	72
LHW06	50 (1270)	49 (1245)	44 (1118)	4	2	110

- NOTES:**
- * 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 +/- .25 (6). Drawing not to scale.
 - 3. Product specifications are subject to changes 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 provided for reference only.
 Dimensions may vary with options ordered.
 Consult IEC website for submittal drawings.

Submittal Data – L**, Cont'd.

LXA/LXW – Vertical Lowboy and Vertical Lowboy Tall Cabinet



Unit Model	Dimensions – Inches (Millimeters)			Quantity/Unit		Unit Weight**
	A	B	C	Blower	Motor	
LXA/LXW02	41 (1041)	22 (559)	17 (432)	2	1	72
LXA/LXW03	46 (1168)	27 (686)	21-1/2 (546)	2	1	100
LXA/LXW04	54 (1372)	35 (889)	30-1/4 (768)	2	1	108
LXA/LXW06	68 (1727)	49 (1245)	43-3/8 (1102)	4	2	154

- NOTES: * Height dimensions different for LHA/LHW. See drawing.
 ** 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 +/- .25 (6). Drawing not to scale.
 3. Product specifications are subject to changes 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.

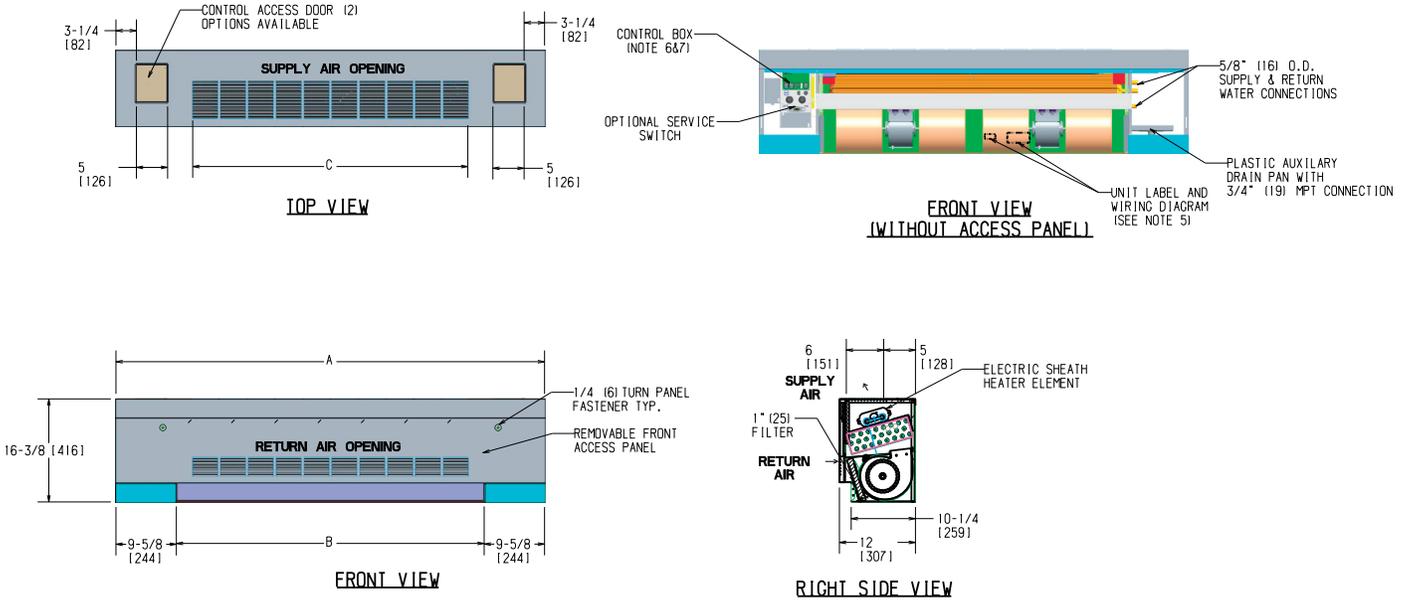
Drawing is provided for reference only.
 Dimensions may vary with options ordered.
 Consult IEC website for submittal drawings.

Vertical Series

FAN COIL TECHNICAL CATALOG

Submittal Data – L**, Cont'd.

LXW – Vertical Lowboy Tall Cabinet with Electric Heat



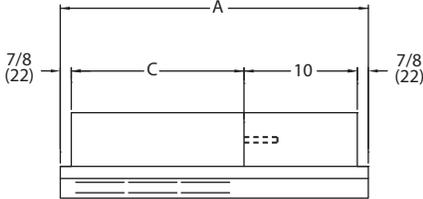
Unit Model	Dimensions – Inches (Millimeters)			Quantity/Unit		Unit Weight**
	A	B	C	Blower	Motor	
LXW02	41 (1041)	22 (559)	17 (432)	2	1	72
LXW03	46 (1168)	27 (686)	21-1/2 (546)	2	1	100
LXW04	54 (1372)	35 (889)	30-1/4 (768)	2	1	108
LXW06	68 (1727)	49 (1245)	43-3/8 (1102)	4	2	154

- NOTES: * Height dimensions different for LHA/LHW. See drawing.
 ** 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 +/- .25 (6). Drawing not to scale.
 3. Product specifications are subject to changes 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.

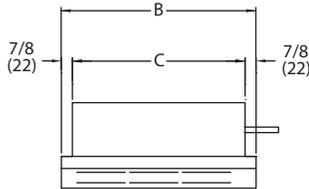
Drawing is provided for reference only.
 Dimensions may vary with options ordered.
 Consult IEC website for submittal drawings.

Submittal Data – ST*

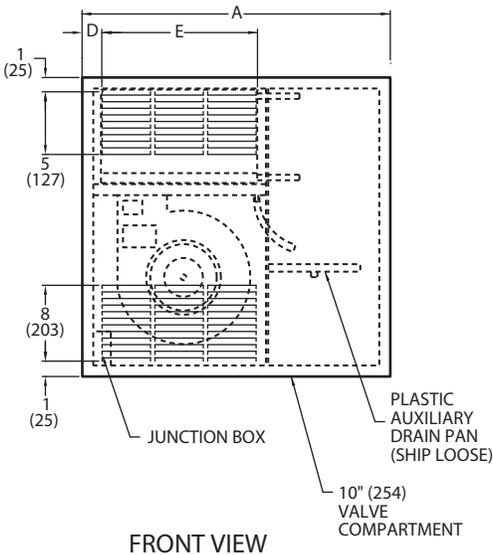
STY/STW – Vertical Recessed Cabinet



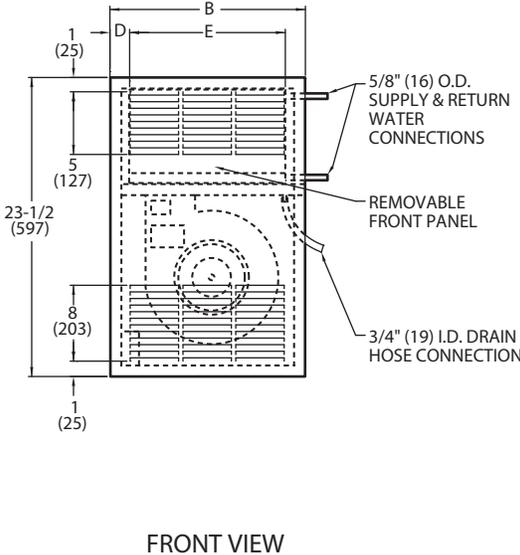
TOP VIEW
(EXTENDED MODEL)
STW



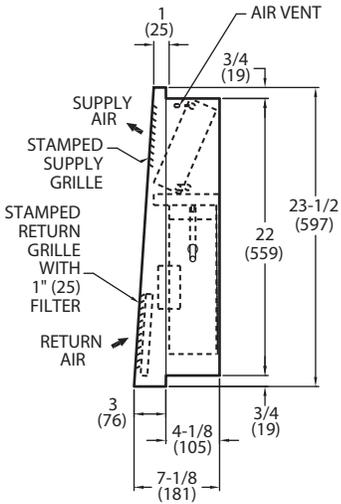
TOP VIEW
(STANDARD MODEL)
STY



FRONT VIEW



FRONT VIEW



RIGHT SIDE VIEW

Unit Model	Dimensions – Inches (Millimeters)					Quantity/Unit		Unit Weight*
	A	B	C	D	E	Blower	Motor	
STY/STW01	25-3/4 (654)	15-3/4 (400)	14 (356)	1-1/2 (38)	12-3/4 (324)	1	1	40
STY/STW03	39-3/4 (1010)	29-3/4 (756)	28 (711)	1-15/16 (49)	25-7/8 (657)	2	2	74

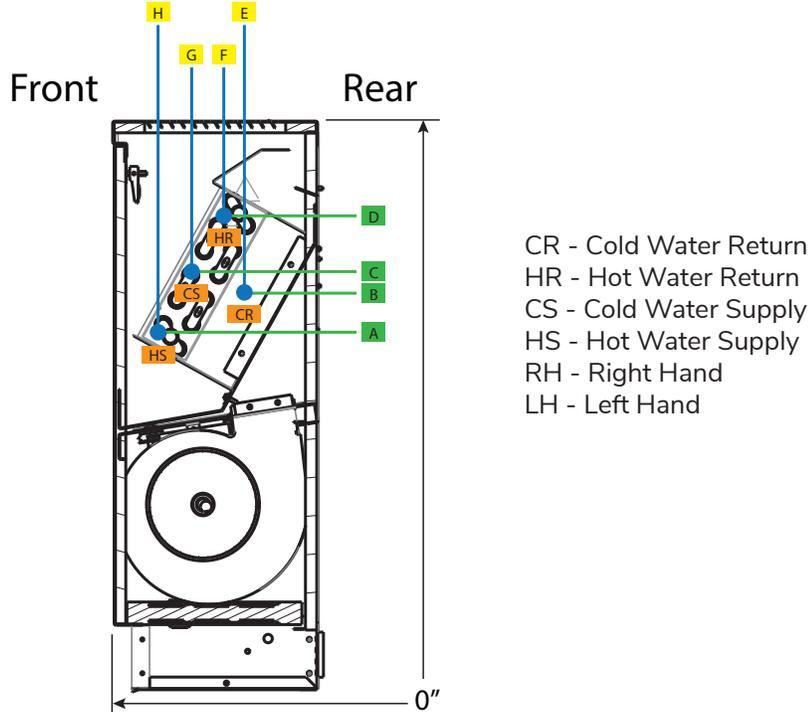
- NOTES:** * Unit weights (shown in pounds) are based on dry coils, minimum rows and exclude packaging, valves or other components.
- Any modifications to product specifications by any person are subject to acceptance of the IEC Home Office. Product specifications are subject to change without notice.
 - All dimensions are +/- 1/4" (6).
 - RH shown, LH opposite.

Drawing is provided for reference only.
Dimensions may vary with options ordered.
Consult IEC website for submittal drawings.

Piping Connections – F*Y

Piping Connection Location – Hydronic Cooling & Heating Coils

Right hand unit with re-heat coil shown.



UNIT SIZE	COIL ROWS		CIRCUITS		A	B	C	D	E	F	G	H	Notes
	COOL	HEAT	COOL	HEAT									
F*Y02	2		1			21 6/7	15 1/3		4 1/2		6 7/8		
	3		1			17 1/2	18 4/7		4 3/7		6 1/3		
	3		2			18	19 1/8		4 1/9		6		
	4		1			17 5/9	18 4/7		3 1/6		6 1/3		
	3	1	1	1	16 2/5	17 5/9	18 3/5	21 6/7	3 1/6	4 1/2	5	7 1/2	
	3	1	1	1	12 1/6	17 5/9	18 3/5	12	3 1/6	5	5	7	OE
	3	2	1	1	15 4/7	16 3/4	17 4/5	22 1/8	3	5	4 8/9	7 1/3	
	3	2	1	1	11 1/3	16 3/4	17 4/5	12 1/4	3	5 1/2	4 8/9	7	OE
	4	1	1	1	16 2/3	16 3/4	18 6/7	22 1/8	3	5	5 1/2	8	
	4	1	1	1	12 3/7	16 3/4	18 6/7	12 1/4	3	5 1/2	5 1/2	7 1/2	OE
F*Y03	2		1			21 6/7	15 1/3		4 1/2		6 7/8		
	3		1			17 1/2	18 4/7		4 3/7		6 1/3		
	4		1			17 5/9	18 4/7		3 1/6		6 1/3		
	3	1	1	1	16 2/5	17 5/9	18 3/5	21 6/7	3 1/6	4 1/2	5	7 1/2	
	3	1	1	1	12 1/6	17 5/9	18 3/5	12	3 1/6	5	5	7	OE
	3	2	1	1	15	16 7/9	17 5/9	21 5/6	3	5 3/5	5	7	
	3	2	1	1	11	16 7/9	17 5/9	12	3	4 3/4	5	6	OE
	4	1	1	1	16	16 7/9	18 1/2	21 5/6	3	5 3/5	5 5/7	7 6/7	
4	1	1	1	11 7/8	16 7/9	18 1/2	12	3	4 3/4	5 5/7	6 5/6	OE	

- NOTES: 1. OE designates opposite end connection.
 2. Piping connection dimensions are consistent for either right hand or left hand connections.
 3. Horizontal dimensions measured from rear panel. Vertical dimensions measured from bottom panel.
 4. Measurements do not apply to same side piping and controls. Special Feature Requests (SFRs) may change piping stupout locations. Contact Applications.

Table continued on Next Page

Piping Connections – F*Y, Cont'd.

Piping Connection Location – Hydronic Cooling & Heating Coils, Cont'd.

Table continued from Previous Page

UNIT SIZE	COIL ROWS		CIRCUITS		A	B	C	D	E	F	G	H	Notes
	COOL	HEAT	COOL	HEAT									
F*Y04	2		1			21 6/7	15 1/3		4 1/2		6 7/8		
	3		1			17 1/2	18 4/7		4 3/7		6 1/3		
	4		1			17 5/9	18 4/7		3 1/6		6 1/3		
	3	1	1	1	16 2/5	17 5/9	18 3/5	21 6/7	3 1/6	4 1/2	5	7 1/2	
	3	1	1	1	12 1/6	17 5/9	18 3/5	12	3 1/6	5	5	7	OE
	3	2	1	1	15	16 7/9	17 5/9	21 5/6	3	5 3/5	5	7	
	3	2	1	1	11	16 7/9	17 5/9	12	3	4 3/4	5	6	OE
	4	1	1	1	16	16 7/9	18 1/2	21 5/6	3	5 3/5	5 5/7	7 6/7	
	4	1	1	1	11 7/8	16 7/9	18 1/2	12	3	4 3/4	5 5/7	6 5/6	OE
F*Y06	2		2			21 1/3	15 6/7		4 1/6		7 1/5		
	3		2			18	19 1/8		4 1/9		6		
	4		2			17	19 1/8		3 1/2		6		
	3	1	2	1	16 2/5	17	18	21 6/7	3 1/2	4 1/2	5 3/8	7 1/2	
	3	1	2	1	12 1/6	17	18	12	3 1/2	5	5 3/8	7	OE
	3	2	2	2	15 1/2	17 3/8	18 1/7	21 1/3	2 2/3	5 2/9	4 5/7	7 1/2	
	3	2	2	2	11 2/5	17 3/8	18 1/7	11	2 2/3	4 1/3	4 5/7	6 3/7	OE
	4	1	2	1	16	17 3/8	18	21 5/6	2 2/3	5 3/5	6	7 6/7	
	4	1	2	1	11 7/8	17 3/8	18	12	2 2/3	4 3/4	6	6 5/6	OE
F*Y08	2		2			22 2/5	15 6/7		4 1/5		7 1/5		
	3		2			19 1/6	19 1/8		3 1/2		6		
	4		2			17	19 1/8		3 1/2		6		
	3	1	2	1	16 2/5	18 1/9	18	21 6/7	2 6/7	4 1/2	5 1/3	7 1/2	
	3	1	2	1	12 1/6	18 1/9	18	12	2 6/7	5	5 1/3	7	OE
	3	2	2	2	15 1/2	18 1/2	18 1/7	22 3/7	2 1/4	5 2/5	4 5/7	7 1/2	
	3	2	2	2	11 2/5	18 1/2	18 1/7	12	2 1/4	4 1/2	4 5/7	6 3/7	OE
	4	1	2	1	16	17 1/3	18	21 5/6	2 2/3	5 3/5	6	7 6/7	
	4	1	2	1	11 7/8	17 1/3	18	12	2 2/3	4 3/4	6	6 5/6	OE
F*Y10	2		2			22 2/5	15 6/7		4 1/5		7 1/5		
	3		4			19 1/6	19 1/8		3 1/2		6		
	4		4			18 1/9	19 1/8		2 6/7		6		
	3	1	4	1	16 2/5	18 1/9	18 1/9	21 6/7	2 6/7	4 1/2	5 1/3	7 1/2	
	3	1	4	1	12 1/6	18 1/9	18	12	2 6/7	5	5 1/3	7	OE
	3	2	4	2	15 1/2	18 1/2	18 1/7	22 3/7	2 1/4	5 2/5	4 5/7	7 1/2	
	3	2	4	2	11 2/5	18 1/2	18 1/7	12	2 1/4	4 1/2	4 5/7	6 3/7	OE
	4	1	4	1	16	17 3/8	19 1/9	21 5/6	2 2/3	5 3/5	5 1/2	7 6/7	
	4	1	4	1	11 7/8	17 3/8	19 1/9	12	2 2/3	4 3/4	5 1/2	6 5/6	OE
F*Y12	2		2			22 2/5	15 6/7		4 1/5		7 1/5		
	3		4			19 1/6	19 1/8		3 1/2		6		
	4		4			18 1/9	19 1/8		2 6/7		6		
	3	1	4	1	16 2/5	18 1/9	18	21 6/7	2 6/7	4 1/2	5 1/3	7 1/2	
	3	1	4	1	12 1/6	18 1/9	18	12	2 6/7	5	5 1/3	7	OE
	3	2	4	2	15 1/2	18 1/2	18 1/7	22 3/7	2 1/4	5 2/5	4 5/7	7 1/2	
	3	2	4	2	11 2/5	18 1/2	18 1/7	12	2 1/4	4 1/2	4 5/7	6 3/7	OE
	4	1	4	1	16	17 3/8	19 1/9	21 5/6	2 2/3	5 3/5	5 1/2	7 6/7	
	4	1	4	1	11 7/8	17 3/8	19 1/9	12	2 2/3	4 3/4	5 1/2	6 5/6	OE

- NOTES: 1. OE designates opposite end connection.
2. Piping connection dimensions are consistent for either right hand or left hand connections.
3. Horizontal dimensions measured from rear panel. Vertical dimensions measured from bottom panel.
4. Measurements do not apply to same side piping and controls. Special Feature Requests (SFRs) may change piping stupoout locations. Contact Applications.

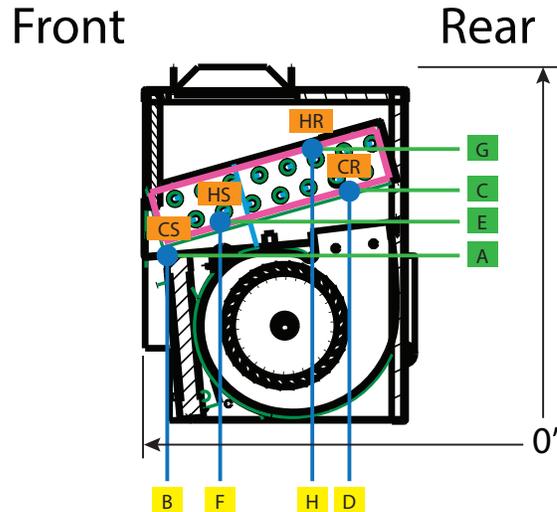
Vertical Series

FAN COIL TECHNICAL CATALOG

Piping Connections – Lowboys L**

Piping Connection Location – Hydronic Cooling & Heating Coils

Right hand unit with re-heat coil shown.



CR - Cold Water Return
 HR - Hot Water Return
 CS - Cold Water Supply
 HS - Hot Water Supply
 RH - Right Hand
 LH - Left Hand

UNIT SIZE	COIL ROWS		CIRCUITS		LXA, LHA (1-3 ROWS)								Notes
	COOL	HEAT	COOL	HEAT	CS		CR		HS		HR		
					A	B	C	D	E	F	G	H	
L**02	2		1		9 1/2	9 6/7	10 2/3	1 3/4					
	3		1		10 3/5	9 4/5	10 8/9	4/5					
	2	1	1	1	9 2/5	10 1/8	10 8/9	4/5	10 3/5	9 4/5	13	1 2/5	
	2	1	1	1	9 2/5	10 1/8	10 8/9	4/5	10 8/9	4/5	13	1 2/5	OE
L**03	2		1		9 1/2	9 7/9	10 2/3	1 2/3					
	3		1		10 3/5	9 4/5	10 8/9	4/5					
	2	1	1	1	9 2/5	10 1/8	10 8/9	4/5	10 3/5	9 4/5	13	1 2/5	
	2	1	1	1	9 2/5	10 1/8	10 8/9	4/5	10 8/9	4/5	13	1 2/5	OE
L**04	2		1		9 1/2	9 7/9	10 2/3	1 2/3					
	3		2		10	10	11 1/3	1 1/4					
	2	1	1	1	9 2/5	10 1/8	10 8/9	4/5	10 3/5	9 4/5	13	1 2/5	
	2	1	1	1	9 2/5	10 1/8	10 8/9	4/5	10 8/9	4/5	13	1 2/5	OE
L**06	2		2		8 8/9	9 8/9	11 2/7	1 1/2					
	3		2		10	10	11 1/3	1 1/4					
	2	1	2	1	9	9 2/3	11 1/3	1 1/4	10 3/5	9 4/5	13	1 2/5	
	2	1	2	1	9	9 2/3	11 1/3	1 1/4	10 8/9	4/5	13	1 2/5	OE
L**02	3	1	1	1	11	10 2/7	10 1/2	1 2/7	12 1/7	9 8/9	13 5/6	1 2/7	
L**03	3	1	1	1	11	10 2/7	10 1/2	1 2/7	12 1/7	9 8/9	13 5/6	1 2/7	
	2	2	1	1	8 5/6	9 8/9	11 5/7	8/9	11	10 2/7	13 5/6	1 2/7	
L**04	3	1	2	1	10 1/2	9 8/9	11	1	12 1/7	9 8/9	13 5/6	1 2/7	
	2	2	1	1	10	9 1/2	10 1/2	1 2/7	12 1/7	9 8/9	12 5/8	1 5/7	
L**06	3	1	2	1	10 1/2	9 8/9	11	1	12 1/7	9 8/9	13 5/6	1 2/7	
	2	2	2	2	9 3/7	9 2/3	11	1	11 5/9	10	13 2/9	1 1/2	

- NOTES: 1. OE designates opposite end connection.
 2. Piping connection dimensions are consistent for either right hand or left hand connections.
 3. Horizontal dimensions measured from rear panel. Vertical dimensions measured from bottom panel.
 4. Measurements do not apply to same side piping and controls. Special Feature Requests (SFRs) may change piping stupout locations. Contact Applications.

Standard Features and Options

Vertical floor cabinets are constructed with 18 gauge galvanized steel.

Features and Options	Standard	Factory Installed Option	Field Installed Option	Factory Special Quote
Air Flow Arrangement				
Front Return/Top Supply (FHY, FSY, FXY, LHA, LXA)	X			
Front Return/Front Supply (FHY, FXY, FSY)		X		
Front Return/Front Supply (STY, STW)	X			
Coils				
2-Rows 2-Pipe (LHA, LHW, LXA, LXW, STY, STW)	X			
2-Rows 2-Pipe (FXY, FSY, FHY)		X		
3-Rows 2-Pipe	X			
3-Row 2-Pipe		X		
4-Rows 2-Pipe		X		
2/1-Rows 4-Pipe (LHA, LHW, LXA, LXW)		X		
3/1, 3/2, or 4/1-Rows (FXY, FSY, FHY)		X		
0.025" Tube Thickness				X
Manual Air Vent	X			
Automatic Air Vent		X		
Steam Coils (F*Y, L**)		X		X
Coil Test Pressure 350	X			
Coil Test Pressure 400, 450		X		
Copper Coil Fins (2, 3, 4, 5)		X		
Connection				
Right or Left (Same End)	X			
Drain				
Galvanized Internally Coated with a 2 part closed cell foam	X			
Stainless Steel Externally Coated		X		
Plastic Auxiliary Drain Pan	X			
Fin Material				
Aluminum w/Galvanized End Sheets	X			
Copper w/Stainless End Sheets & Bottom Coil Baffle		X		X
Sheath Type Electric Heater (Total and Auxiliary) (F*Y, L**)				
Indoor Air Quality				
1" Throwaway Non-woven Synthetic (F*Y, L**, ST*)	X			
1" Permanent (F*Y, L**)		X		
1" MERV 8 Pleated (F*Y, L**, ST*)		X		
Bipolar Ionizer (F*Y, L**)		X		
Insulation				
1/2" Standard Fiberglass	X			
1/2" Premium IAQ Fiberglass				X
1/2" Foil Face		X		
1/4" Closed Cell		X		
Motor Type				
PSC Motors w/Quick Connect (F*Y, L**)	X			
ECM Motor w/Quick Connect (F*Y, L**)		X		
Shaded Pole (ST*)	X			
Motor Voltage				
120/1/60 3-Speed	X			
208/230/277/1/60, 220/1/50 3-Speed		X		

table continued on next page

Standard Features and Options, Cont'd.

Features and Options	Standard	Factory Installed Option	Field Installed Option	Factory Special Quote
Supply/Return Air Grilles				
Stamped Supply Grille (FXY, FSY, LXA, LXW, STY, STW)	X			
Stamped Return Grille (FXY, FSY)		X		
Stamped Return Grille (STY, STW)	X			
Paint Options (FXY, FSY, LX*, ST*)				
Arctic White	X			
Polar White, Flat Black, Ermine Gray, Champagne Beige, Toffee Brown		X		
Special Color				X
Controls				
Service Switch with Lockout Tabs		X		
Single Point Power Connection		X		
Incoming Power Fusing (F*Y, L**)		X		
24V Controls (F*Y, L**)		X		
Line Voltage Controls (F*Y, L**, ST*)		X		
Condensate Float Switch		X		
Three Speed Switch		X		
Thermostats				
Unit Mounted (F*Y, L**)		X		
Remote Mounted			X	
Custom Controls (DDC)		X		X
Outside Air Dampers				
Manual Controlled Damper (FHY, FXY, FSY, LHA, LHW, LXA, LXW)		X		
Remote Controlled Damper (FHY, FXY, FSY)		X		
Motorized Controlled Damper (FHY, FXY, FSY)		X		
Outside Air Box (FHY, FXY, FSY)				
			X	
Decorative Wall Panels (FHY)				
			X	
Cabinet Options (Gray/bold) (F*Y)				
1", 2.5" Leveling Legs		X		
16 gauge front access panel		X		
Stainless Steel Coil Wrapper		X		
Valve Package Options* (* Valve packages are assembled at the factory but field installed.)				
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	
Combination Supply/Return Valves			X	
Fixed Flow Control 1.0-8.0 GMP			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	

Standard Features and Options, Cont'd.

Filters

All Vertical Series units non-woven, synthetic throwaway filters furnished as standard equipment. Cleanable or MERV 8 pleated filters are optional.

Unit Size	Nominal One-Inch Filter Size – Inches (Millimeters)		
	FHY, FXY, FSY	LHA/LHW, LXA/LXW	STY/STW
01	–	–	10" x 14-1/2" (254 x 368)
02	7-3/4" x 21-3/4" (197 x 552)	7" x 21-3/4" (178 x 502)	–
03	7-3/4" x 25-3/4" (197 x 654)	7" x 26-3/4" (178 x 679)	10" x 28" (254 x 711)
04	7-3/4" x 31-3/4" (197 x 806)	7" x 34-3/4" (178 x 883)	–
06	7-3/4" x 41-3/4" (197 x 1060)	7" x 48-3/4" (178 x 1238)	–
08	7-3/4" x 43-3/4" (197 x 1111)	–	–
10	7-3/4" x 57-3/4" (197 x 1467)	–	–
12	7-3/4" x 65-3/4" (197 x 1670)	–	–

NOTES: Sizes shown are nominal ordering sizes.

Filter Static Resistance (in w.c.)

Model	Unit Data		Filter Pressure Drop		
	Unit Size	Nominal CFM	1" Throwaway	1" Permanent	1" Merv 8
L**	02	200	0.045	0.074	0.13
	03	300	0.054	0.100	0.15
	04	400	0.055	0.104	0.15
	06	600	0.058	0.115	0.16
F*Y	02	200	0.041	0.064	0.120
	03	300	0.051	0.090	0.140
	04	400	0.055	0.102	0.148
	06	600	0.061	0.125	0.163
	08	800	0.074	0.184	0.204
	10	1000	0.071	0.168	0.192
	12	1200	0.074	0.183	0.204

Standard Features and Options, Cont'd.

Bipolar Ionizer Specifications

SPECIFICATIONS:

Airflow Capacity: 2,400 CFM
 Pressure Drop: Less than 0.01 In. WG
 Housing Material: ABS
 Weight: 0.2 lbs.
 Maximum Operating Temperature: 200° F (93°C)
Electrical:
 Voltage: 24V AC (602)
 Power Consumption: Less than 1 watt
 Frequency: 50/60 hertz
 Over Current Protection:.. 500mA Glass Cartridge Fuse
 Lead Wires 50"(L)

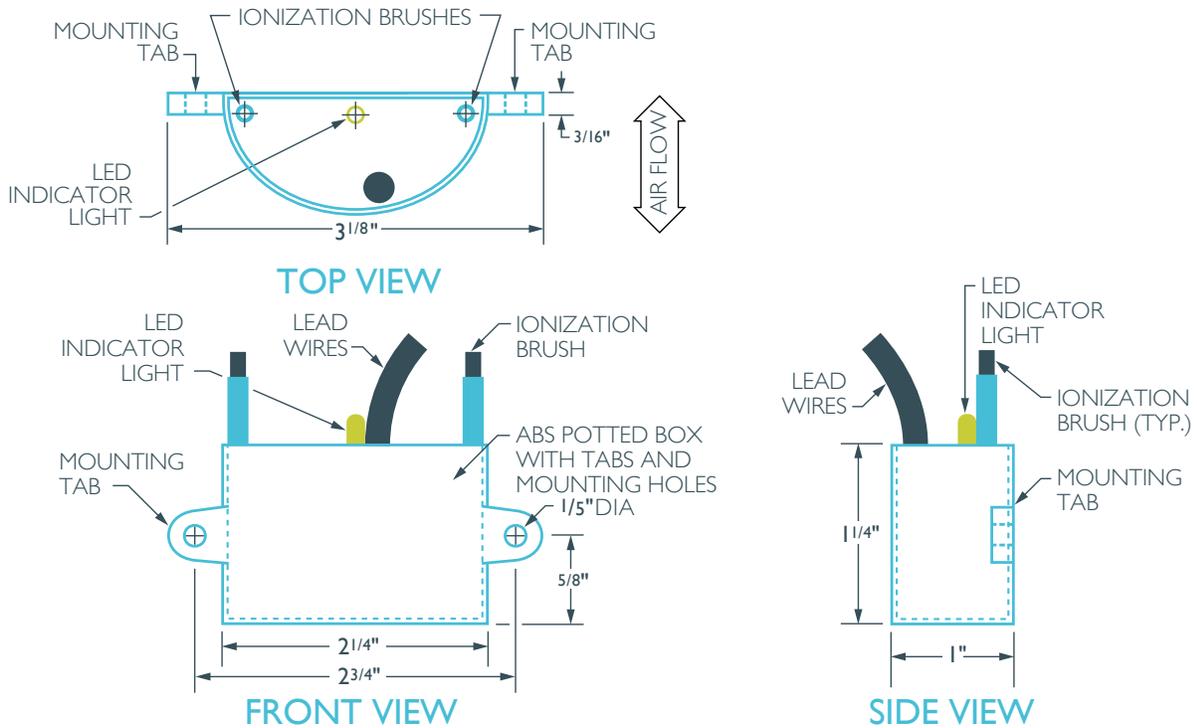
Ionization Output:

Mode of Operation Needlepoint Type
 Needle Configuration: Brush Type

DIMENSIONS: See Figure 1

APPROVALS: Intertek/ETL Standard UL 867

Figure 1. Dimensions not to scale.



Options and Accessories

Control Packages

Controls

As detailed in the table below and on page 30, we offer control packages that fit most customer needs. Additional controls and devices are available to meet even the most demanding operating logic.

Low Voltage Control (24V)

The 85 Control Board (see page 33) offers simplified install and service with its plug-in connections and QR code for quick wiring diagram reference. It also offers LED diagnostics and built-in design flexibility for added features such as staged cooling or BAS signal input. The 85 Control board is available with most control schemes.

85 Control Board Standard Features

- Simplified plug connections
- PSC or ECM control
- LED diagnostics (See IOM-100 for detailed LED function and outcome)
- QR code to wire diagram for ease of troubleshooting
- Conduit compatible for remote mounted control boxes
- Compatibility with all actuator types
- Removable thermostat connector

85 Control Board Options

- ECM fan speed adjustment
- Staged Cooling: compatible with IEC Venture Wi-Fi Thermostat (E055 - 1520330)
- BAS signal input to interrupt fan and actuators
- Fusing and service switch with electric heat
- Changeover or aquastat sensor
- Condensate switch LED indication
- Damper control

Condensate Float Switch

This switch shuts down the motor, actuator and electric heat (if applicable) when the water level in the drain pan reaches an unsafe level.

Service Switches

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).

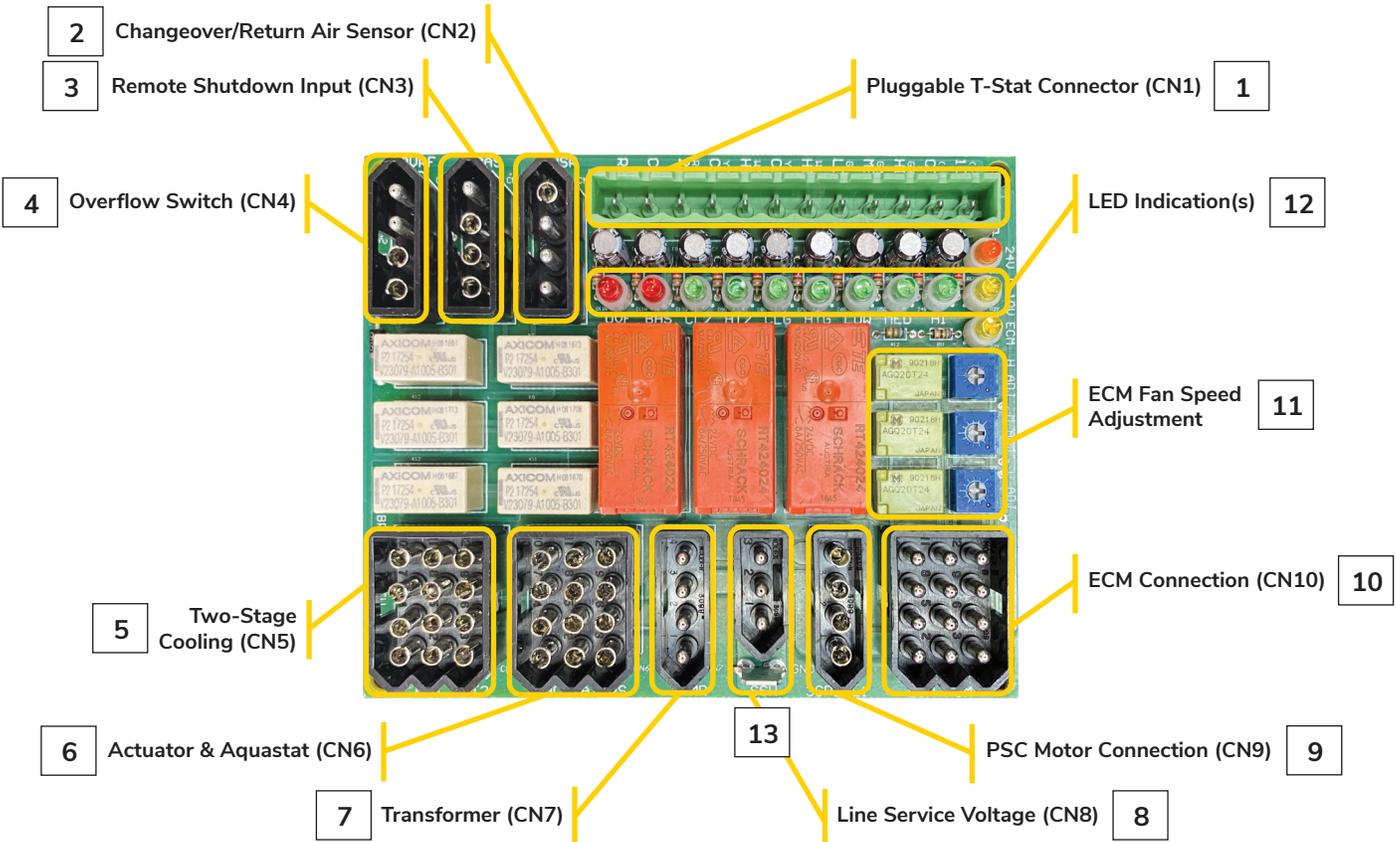
Other Control Options

- Unit mounted 3-speed switch (thermostat by others)
- 4-Speed silent switching board with potentiometers
- Low voltage remote shutdown relays (Special Quote)
- Fan and valve cycle applications (Special Quote)
- Thermostats available with large letter print for handicap applications (Special Quote)

Options and Accessories, Cont'd.

Controls Packages, Cont'd.

85 Control Board



1	CN1 – 24V Customer Input (Thermostat)
2	CN2 – Changeover/Return Air Sensor
3	CN3 – Remote Shutdown Input
4	CN4 – Condensate Overflow Switch
5	CN5 – Two Stage Cooling
6	CN6 – Actuator & Aquastat
7	CN7 – Transformer
8	CN8 – Line Service Voltage
9	CN9 – PSC Motor Connection
10	CN10 – ECM Connection
11	ECM Fan Speed Adjustment
12	LED Diagnostics
13	Ground Connection

Options and Accessories, Cont'd.

Thermostat Control Package Applications

Unit Type	Control Option	System Type	Changeover Type	W	P	N	F	G	A	B	C	
-	Manual Fan	Manual ¹	None	-	-	-	-	-	-	-	-	
2-Pipe	Valve Cycle*	Heat Only	None	•	•	•	•	•	•	•	•	
		Cool Only	None	•	•	•	•	•	•	•	•	
		Heat/Cool	Manual	-	-	-	-	-	-	•	•	•
			Automatic	•	•	•	•	•	•	•	•	•
		Heat/Cool with Auxiliary Electric Heat	Manual	-	-	-	-	-	-	•	•	•
			Automatic	•	•	•	•	•	•	•	•	•
Cool with Total Electric Heat	Manual	-	-	-	-	-	-	•	•	•		
	Automatic	•	•	•	•	•	•	•	•	•		
4-Pipe		Heat/Cool	Manual	-	-	-	-	-	•	•	•	
			Automatic	•	•	•	•	•	•	•	•	

NOTE: 1. Fan switch only; no thermostat

Thermostat Features

All listed controls include fan switching.	Control Type ¹							
	W	P	N	F	G	A	B	C
24V, 115V, 208V, 240V, 277V	24V only	24V only	24V only	24V only	24V only	•	•	•
Wi-Fi Enabled	•	-	-	-	-	-	-	-
Mobile and Web App for Remote Control	•	-	-	-	-	-	-	-
Staged Cooling	•	-	-	-	-	-	-	-
Programmable	•	•	-	•	-	-	-	-
Remote Wall Mounted	•	•	•	•	•	•	•	•
Manual Fan Switch Operation	•	•	•	•	•	•	•	•
Auto Fan Speed Control	•	•	•	•	•	-	-	-
Continuous 3-Speed Fan	•	•	•	•	•	•	•	•
Cycling Fan	•	•	•	•	•	•	•	•
O.A Damper Signal	•	•	•	•	•	-	-	-
Remote Temperature Sensor	Opt	Opt	Opt	Opt	Opt	•	•	•
Digital Display & Buttons	•	•	•	•	•	-	-	-
Local Temperature Set-Back	•	•	•	•	•	-	-	-
Water Temperature Purge Cycle	•	•	•	•	•	-	-	-
Proportional Control Valves	-	-	-	•	•	-	-	-
Floating Control Valves	-	-	-	•	•	-	-	-
Pipe Sensor	•	•	•	•	•	-	-	-

NOTES: 1. Control packages with valve cycle are continuous fan operation only.
 2. All wall-mounted control packages are shipped loose for field installation (Boxes, tile rings, plaster rings, etc. are not provided.).
 3. Aquastats are included in control packages, as required.

*LEGEND: A • Basic Electronic Wall Series, 155, Vertical
 B • Basic Electronic Wall Series, 155, Horizontal
 C • Basic Series, 156, Unit Mounted
 P • Basic 24 V Digital, 7-Day Programmable
 N • Basic 24 V Digital, Non-Programmable
 F • Premium 24 V Digital, 7-Day Programmable/BACnet with Proportional Fan/Valves Option
 G • Premium 24 V Digital BACnet with Proportional Fan/Valves Option
 W • Venture 24 V Wi-Fi Programmable

Options and Accessories, Cont'd.



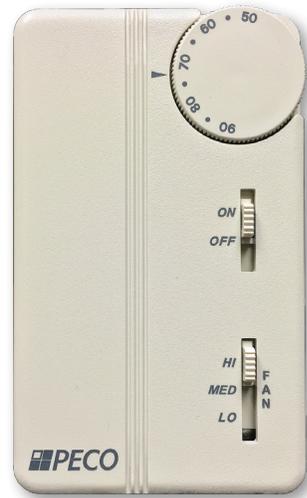
Venture 24V,
Wi-Fi Programmable



Basic 24V Digital
7-Day Programmable and
Non-Programmable Series



Premium 24V Digital
7-Day Programmable/BACnet



Basic Electronic Wall Series
155, Vertical and Horizontal

Options and Accessories, Cont'd.

Outside Air Dampers

FHY, FXY, FSY, LHA/LHW and LXA/LXW models may be supplied with an outside air inlet connection. A damper for control of the outside air is provided, and several styles of outside air damper control are available.

Style A

Control of the damper is by manual operation of the damper in the unit return air toe space. FHY, FXY and FSY models are provided with a lever arm on the damper. LHA/LHW and LXA/LXW models are provided with a sliding damper (not shown in illustration below).

Style B

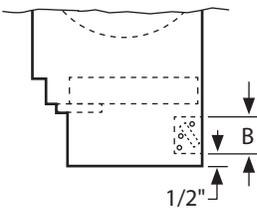
For FHY, FXY and FSY models only, a remote damper operator is provided which allows control of the damper from under one of the control access doors

Style C

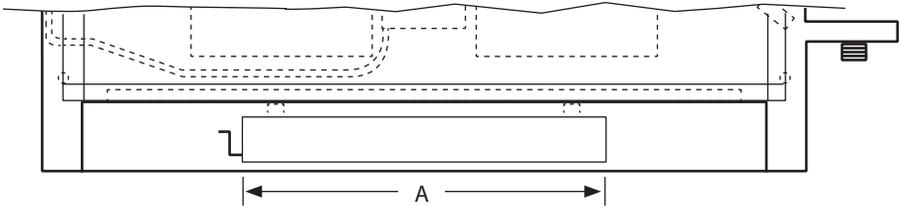
For FHY, FXY and FSY models only, control of the damper is achieved by a motorized operator installed in the left-hand end compartment. Consult the factory for application restrictions.

Unit Size	Nominal CFM	Outside Air Opening Dimensions – Inches (Millimeters)			
		FHY, FXY, FSY		LHA/LHW, LXA/LXW	
		Front View (A)	Side View (B)	Front View (A)	Side View (B)
02	200	8" (203)	2" (51)	6" (152)	2" (51)
03	300	10" (254)	2" (51)	6" (152)	2" (51)
04	400	12" (305)	2" (51)	6" (152)	2" (51)
06	600	14" (356)	2" (51)	6" (152)*	2" (51)*
08	800	18" (457)	2" (51)	–	–
10	1000	27" (686)	2" (51)	–	–
12	1200	27" (686)	2" (51)	–	–

NOTES: * Lowboy size 06 is provided with two 6" x 12" (152 x 51) openings.



Side View



Front View

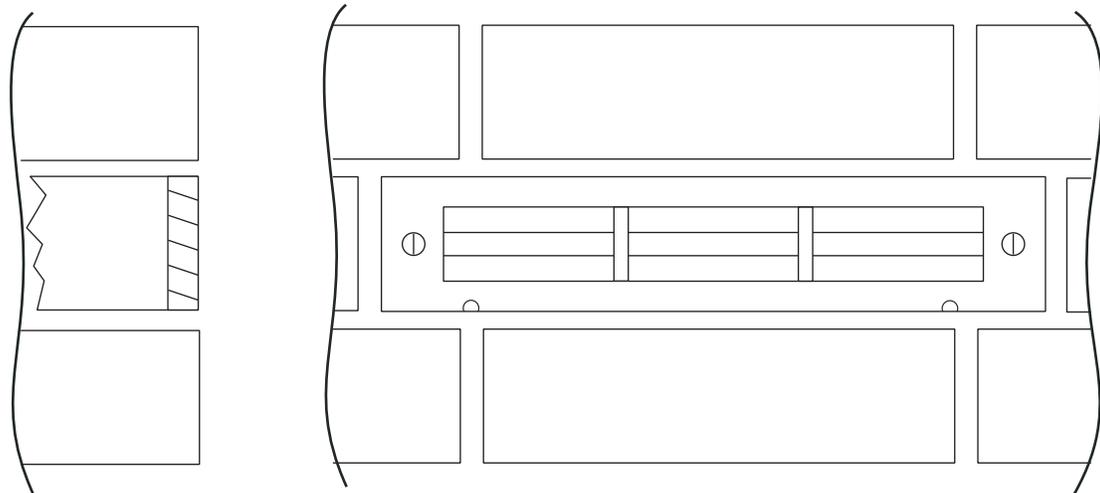
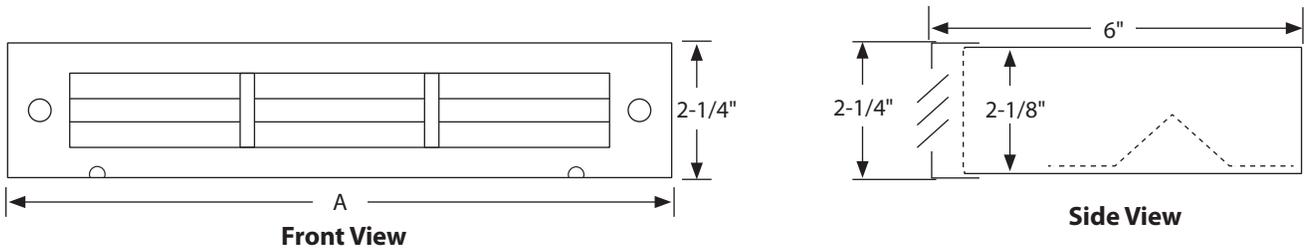
Options and Accessories, Cont'd.

Outside Air Wall Boxes

Optional outside air wall boxes are constructed of aluminum to minimize corrosion. A louvered grille caps the wall box on the exterior side. A fine mesh insect screen is installed behind the louver on the inside of the box.

Standard wall box depth is six inches with the width and length dimensions established to be used with the appropriate outside air openings.

Unit Size	Nominal CFM	Outside Air Opening Dimensions – Inches (Millimeters)	
		FHY, FXY, FSY	
		Front View (A)	Side View (B)
02	200	8-1/4" (203)	2-1/8" (54)
03	300	10-1/4" (260)	2-1/8" (54)
04	400	12-1/4" (311)	2-1/8" (54)
06	600	14-1/4" (362)	2-1/8" (54)
08	800	18-1/4" (464)	2-1/8" (54)
10	1000	27-1/4" (692)	2-1/8" (54)
12	1200	27-1/4" (692)	2-1/8" (54)



Typical Wall Installation

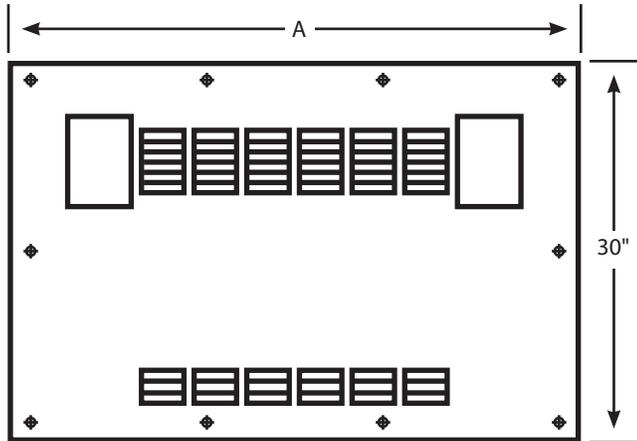
Options and Accessories, Cont'd.

Decorative Wall Panels

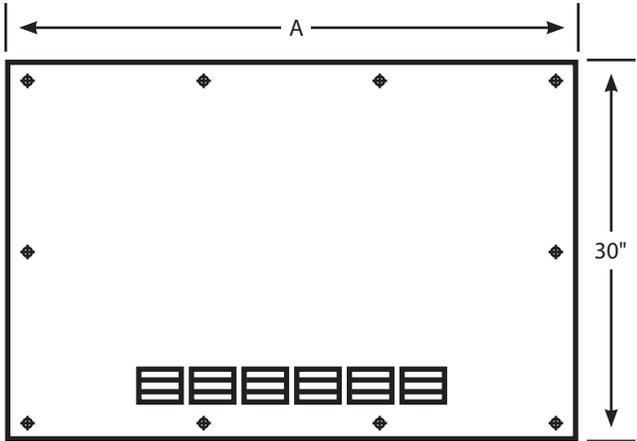
Optional decorative wall panels are used with FHY models when fully recessed into the wall of the conditioned space. The wall panels cover the recessed unit on all sides and can be removed for access to the unit for servicing. The wall panel provides the air seal for the front of the unit; therefore, installation alignment is critical.

Two styles of decorative wall panels are available:
 Style U - Stamped supply and return grilles and front facing hinged access doors; and Style V - stamped return grille only.

Nominal CFM	Styles U and V Panel Width (A) Inches (Millimeters)
200	40" (1016)
300	44" (1118)
400	50" (1270)
600	60" (1524)
800	62" (1575)
1000	76" (1930)
1200	84" (2134)



Style U - Stamped Supply and Return Grilles



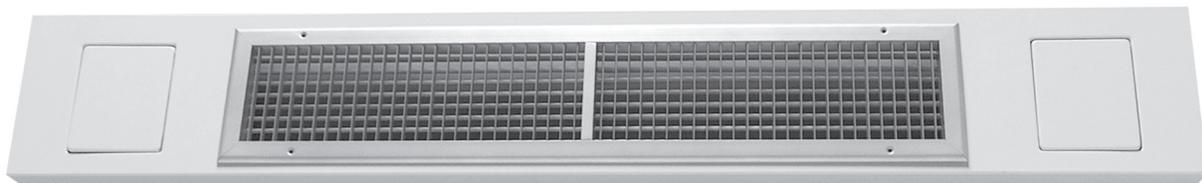
Style V - Stamped Return Grille Only

Options and Accessories, Cont'd.

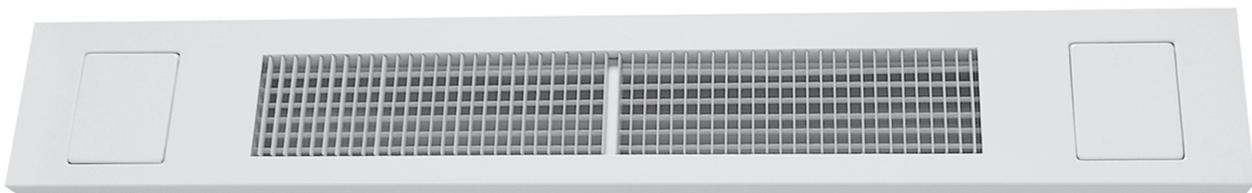
Supply Air Grilles

Unit Size	Nominal CFM	Recommended Grille Sizes – Inches (Millimeters)			
		FXY, FSY	LXA/LXW	FHY	LHA/LHW
02	200	16" x 6" (406 x 152)	16" x 6" (406 x 152)	16" x 5" (406 x 127)	16" x 5" (406 x 127)
03	300	20" x 6" (508 x 152)	22" x 6" (559 x 152)	20" x 5" (508 x 127)	22" x 5" (559 x 127)
04	400	26" x 6" (660 x 152)	30" x 6" (762 x 152)	26" x 5" (660 x 127)	30" x 5" (762 x 127)
06	600	36" x 6" (914 x 152)	44" x 6" (1118 x 152)	36" x 5" (914 x 127)	44" x 5" (1118 x 127)
08	800	38" x 6" (965 x 152)	–	38" x 5" (965 x 127)	–
10	1000	52" x 6" (1321 x 152)	–	52" x 5" (1321 x 127)	–
12	1200	60" x 6" (1524 x 152)	–	60" x 5" (1524 x 127)	–

- NOTES: 1. Refer to Submittal Data for actual unit supply air opening dimensions.
 2. FXY, FSY and LXA/LXW models supply air grilles are factory installed.
 3. Consult factory for application restrictions using double-deflection grilles with electric heat and maximum coil rows.
 4. FHY and LHA/LHW models supply air grilles are shipped loose.



Optional Double-deflection, Aluminum-finish Supply Grille
(Shown in Top Panel)



Optional Double-deflection, integral Supply Grille (FSY, FXY and LXA/LXW Models Only),
Painted to Match Color of Unit (Shown in Top Panel)

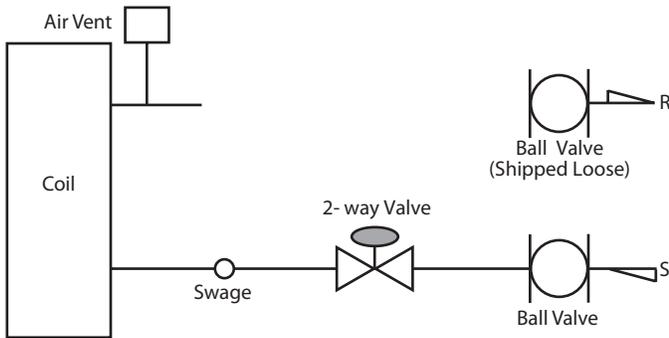


Optional Return Air Grille
(FXY and FSY Models Only)
Painted to Match Color of Unit

Piping Packages (Typical)

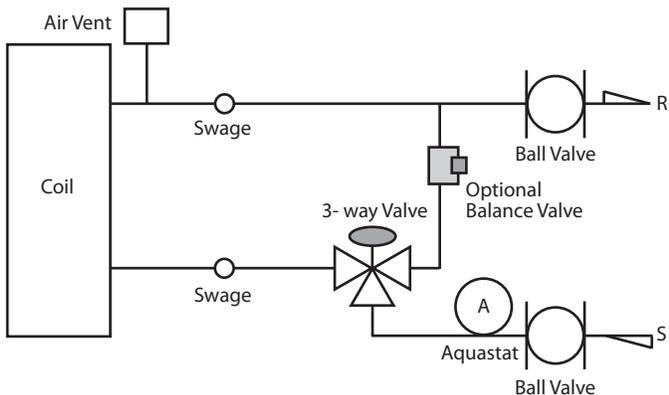
Two-way Motorized Control Valve

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.



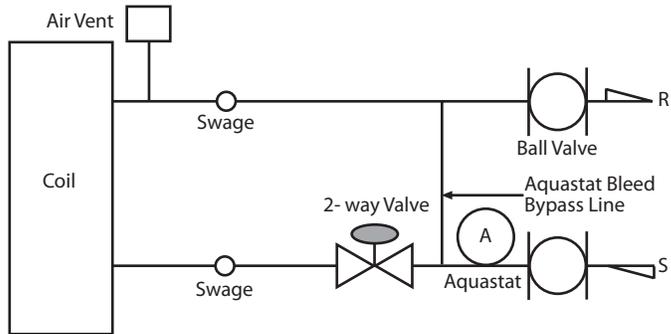
Three-way Motorized Control Valve

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 2-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.

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Vertical Series

FAN COIL TECHNICAL CATALOG



Contact your local IEC Sales Representative for further details and pricing applicable to this product. Visit our website (iec-okc.com) to find your local IEC Sales Rep.

IEC Part Number: I100-9002103
CA-030 Revision 14.1 (12/2021)

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