

# Profile Fan Convectors Series

# MODELS PSU 10/15/23/30/40

## SUBMITTAL DATA INFORMATION

### Engineering Specifications

**Construction.** All PSU fan convectors are constructed of an internal "Heatpack" section mounted to a well designed back chassis. All components are then enclosed under a shroud (cover) which is made of high grade zinc coated steel painted with a dove grey baked enamel finish.

**"Heatpack" Section.** A uniquely designed internal component consisting of the coil, fan and motor assembly and all controls integrally mounted.

**Heat Exchanger.** A highly efficient, headered coil, made of copper tubes expanded into smooth aluminum plate fins (10 FPI), tested at 300 PSI, and sealed for quality. The heat exchanger is positioned in each PSU unit for maximum heat transfer over the coil.

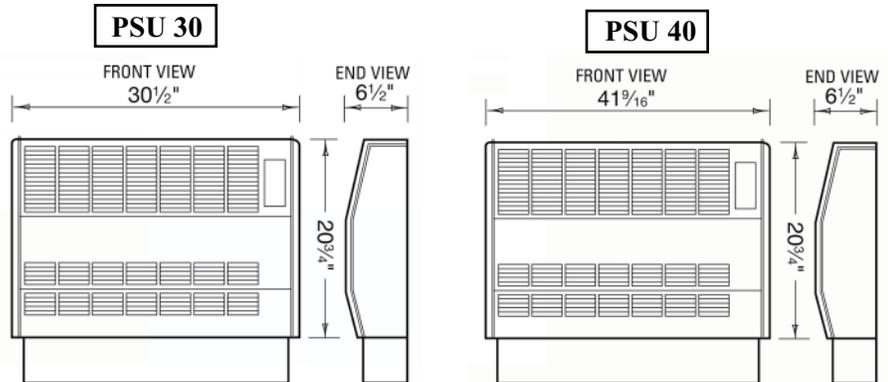
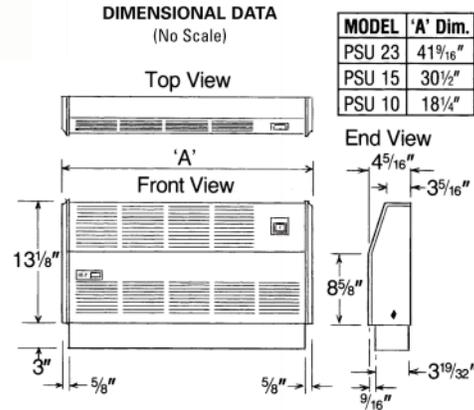
**Fan and Motor Assembly.** High spec tangential SEL fan and motor assembly consists of high static fan wheel and scroll, detachable motor, replaceable "easy glide" sleeve bearings, and the fan and motor cut out are protected to UL/CSA specifications. This fan and motor assembly is designed to run whisper quiet without vibration.

**Controls.** All PSU units have integral two speed, max.-off-min., and switches (optional wall mounted fan speed controller is available). The LTC - low limit aquastat is also a high spec item with a close tolerance designed to close on a rise to 110°F+/-3°F and open at 90°F+/-3°F.

**Water Connections.** Supply and return connections are 1/2" sweat connections located on the left hand side of the unit as you face the grille. A water vent with wide convenient screwdriver slot is accessible on the left of the unit underneath.

**Electrical Connections.** 120/60/1 power supply is required. The cover shroud (i.e. the cover) must be removed to bleed the unit.

Job Name: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Engineer: \_\_\_\_\_  
 Model Number: \_\_\_\_\_



MODEL	UNIT WEIGHT	WT. PACKED	CUBIC FT./MINUTE	
			MAX.	MIN.
PSU-10	24.6 lbs.	28 lbs.	75	50
PSU-15	33 lbs.	37 lbs.	140	100
PSU-23	44 lbs.	50 lbs.	210	150
PSU-30	37.75 lbs.	45.25 lbs.	270	196
PSU-40	53.56 lbs.	62.86 lbs.	378	275

## OUTPUTS

Capacity BTU/HR @ 65°F Entering Air										
Model	Fan Speed	Pressure Drop (Ft.)	ENTERING WATER TEMPERATURE (Deg. F.) - BTU/Hrs.							
			140°	150°	160°	170°	180°	190°	200°	210°
PSU-10	max.	2.75	4278	5325	6192	7024	7957	9081	9736	10598
	min.		2994	3727	4334	4915	5570	6350	6810	7415
PSU-15	max.	3.07	5120	6255	7382	8933	10590	12250	14349	15430
	min.		3580	4375	5163	6250	7412	8575	10040	10800
PSU-23	max.	3.82	8790	10932	13070	15210	17370	19500	21530	23820
	min.		6150	7651	9145	10645	12160	13645	15072	16675
PSU-30	max.	4.6	10050	12750	15800	19150	22000	24900	27750	30450
	min.		7030	8900	11020	13380	15350	17400	19425	21310
PSU-40	max.	4.6	19720	21384	23166	25300	29402	31600	35640	40700
	min.		17000	18250	20050	23008	25200	27055	29184	31040

### NOTES:

- PSU 10, 15 & 23 capacities based on 2 gpm correction factors for: .5 gpm = .80; 1.5 gpm = .96; 2.5 gpm = 1.07; 3 gpm = 1.12; and 5 gpm = 1.23. PSU 30 & 40 capacities based on 3 gpm correction factors for: 1 gpm = .85; 5 gpm = 1.18.
- Aquastat set to close on a rise to 110°F and to open on a drop to 90°F.
- It is recommended that selections be made at low speed at the desired water temperature.



## ENVIRONMENTAL PRODUCTS

300 Pond St., Randolph, MA 02368 ~ (781) 986-2525 www.smithsenvironmental.com