

# PSP Products Inc. introduces the next generation of

# PACKAGED MAKE-UPAIR with unique multi-speed control\*

## **APPLICATIONS**

Packaged Make-Up Air units are designed for today's tighter homes where unhealthy negative pressure can be created by appliances such as kitchen vent hoods, fireplaces, dryers, gas furnaces, water heaters, bathroom exhaust fans or any appliance without sealed combustion.

These high efficiency units provide fresh air to keep the home or building at positive pressure, reducing backdrafting combustion gasses that could create a health risk.

International Residential Code (IRC) requires exhaust hood systems of 400 CFM and greater to have make-up air equal to the exhaust air and to automatically open and close with the operation of the fan.

# **STANDARD FEATURES**

- WarmFlo<sup>®</sup> Digital Proportional Temperature Control

   utilizes full element modulation with solid state relay, inlet and outlet temperature sensors, to maintain precise user defined temperature set point
- Integrated powered inlet damper
- Aluminum mesh permanent washable filter
- All models include (1) CT "doughnut"

- Simple installation, mounting kit included
- Listed for horizontal or vertical installation
  - Can be easily wall-hung
- = 20-year finned rod element warranty
- 2-year parts warranty
- Made in the USA

# **EXCLUSIVE FEATURES OF 3-22 KW MODELS**

\* Unique control adapts to multi-speed range hoods or multiple fan applications:

- Multiple Fan Speed Output Low, Medium, and High fan speed output to match multi-speed range hoods.
- **Multiple Control Input Options** Three current transformer (CT) inputs allow for multiple fan applications. CT inputs will also provide variable blower speeds to more closely match multi-speed exhaust fans. Activation can also be as simple as an end switch or contact closure.
- LCD Display Interactive display used for multiple fan speed calibration and real time estimated CFM output. Also
  displays desired target temperature as well as incoming and supply air temperatures.

# FEATURES OF 1-2 KW MODELS

- Variable Fan Speed Output Easy to adjust fan speed knob allows for precise CFM output.
- 120VAC Power Connection Plug-in cord allows for simple power connection.
- Control Input Options Activated through a basic end switch connection, thermostat, or current sensing relay.

## **SPECIFICATIONS** (Reference Installation & Operating Instructions, EI906/EI907)

Model	kW	Btu/h	Amps	Inter- nal CB	Motor FLA	Motor HP	Phase	Voltage	CFM		Max Fuse/	Duct	Shipping
									Max	Static	HACR	Connection	Weight
EM-MA01-120-1-06	1	3,410	8.3	N/A	0.5	1/16	1-50/60	120	150	0.03"	15	6"	31
EM-MA02-120-1-06	1.6	5,460	13.3	N/A	0.5	1/16	1-50/60	120	150	0.03"	20	6"	32
EM-MA05-240-1-08	5	17,070	20.8	N/A	0.4	1/10	1-50/60	240	350	0.03"	30	8"	55
EM-MA10-240-1-10	10	34,150	41.6	N/A	0.8	1/5	1-50/60	240	625	0.03"	60	10"	56
EM-MA15-240-1-14	15	51,220	62.4	60 + 30	1.7	1/3	1-50/60	240	1050	0.25"	90	14"	115
EM-MA20-240-1-14	20	68,300	83.2	60 + 60	2.5	1/2	1-50/60	240	1200	0.25"	120	14"	120
EM-MA03-208-3-08	3	10,240	8.3	N/A	0.4	1/10	3-50/60	208	350	0.03"	15	8"	55
EM-MA06-208-3-08	6	20,480	16.7	N/A	0.4	1/10	3-50/60	208	350	0.03"	25	8"	58
EM-MA14-208-3-14	14.4	49,170	40.0	50	1.7	1/3	3-50/60	208	900	0.25"	50	14"	115
EM-MA22-208-3-14	21.6	73,760	60.0	50 + 30	2.5	1/2	3-50/60	208	1250	0.25"	80	14"	125

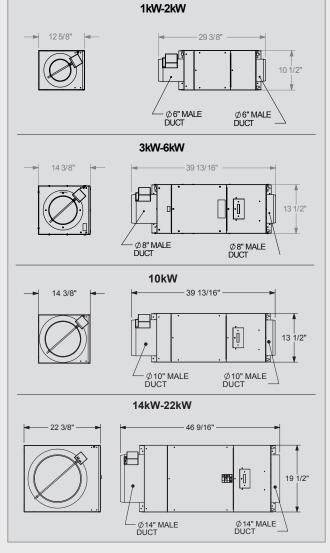
# **TEMPERATURE RISE - Selecting the best model for your application:**

- 1 Choose your desired temperature rise (this is the difference between the coldest design day temperature and desired duct air temperature).
- **2** Move across the chart from your desired temperature rise to the CFM required (you may have to select a model with a higher CFM and adjust down to your required CFM at installation).

**Example:**In an application where your coldest day averages 0° F and you require 50° F duct air, choose 50° F temperature rise. If you require 400 CFM you would select the MA10.

			SI	NGLE PHA	THREE PHASE MODELS						
	Model	→MA01	MA02	MA05	MA10	MA15	MA20	MA03	MA06	MA14	MA22
Required Temp Rise		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
	80° F	39	71	197	395	604	790	119	237	553	869
	70° F	45	81	225	451	677	903	135	271	632	993
	60° F	53	95	260	526	790	1053	158	316	737	1160
	50° F	63	114	316	632	948	1264	190	379	885	N/A
	40° F	79	158	N/A	N/A	1185	N/A	237	N/A	N/A	N/A
Re	30° F	105	168	N/A	N/A	N/A	N/A	316	N/A	N/A	N/A

# DIMENSIONS\*



\*Dimensional drawings shown in side view.

Specifications subject to change without notice, all rights reserved.

# INSTALLATION SPECIFICATIONS

This product is designed for zero clearance, but use the following mounting and spacing criteria:

- 1. Unit can be installed vertically or horizontally. When vertical, inlet must face down.
- 2. When using CT doughnut, use Class II low voltage wiring methods to connect CT to Make-Up Air unit.
- 3. Make mounting provisions for a 1" air space at the top.
- 4. The sides, any location, can be in direct contact with wood framing materials.
- No materials shall be in contact with the cabinet housing which has a flame point less than wood, 300° F (150° C).
- 6. Product shall be installed in a conditioned space only.
- Heating elements are locked out when entering air temperature is > 55° F (12.8° C).

## **Dealer Pricing**

### **120 Volt Single Phase**

EM-MA01-120-1-06 \$668.00 EM-MA02-120-1-06 \$668.00

### 240 Volt Single Phase

EM-MA05-240-1-08 \$1395.00 EM-MA10-240-1-10 \$1598.00 EM-MA15-240-1-14 \$2070.00 EM-MA20-240-1-14 \$2220.00

#### 240 Volt Single Phase

EM-MA03-208-3-08 \$1860.00 EM-MA06-208-3-08 \$2002.00 EM-MA14-208-3-14 \$2370.00 EM-MA22-208-3-14 \$2580.00

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