# Specification Sheet - Packaged Electric Make-Up Air Heater

## STANDARD EQUIPMENT

- Integrated powered inlet damper •
- . WarmFlo digital proportional temperature control
- . Variable CFM, auto adjust based on CT input
- Included CT detects LO/MED/HI exhaust fan levels
- Full element modulation
- Inlet and supply air temperature sensors
- Three CT inputs available for multiple fan applications
- LCD display:
  - Convenient CFM exhaust fan calibration
  - Real time estimated CFM
  - Desired target temperature
  - Incoming and supply temperature

- Listed for horizontal or vertical installation
- Unique design allows for simplified installation
- Hi-limits, automatic and manual reset
- Multiple interfacing options to external controls
- Aluminum mesh permanent washable filter
- Thermostat end switch connection point
- Includes chain for suspended installations
- Can be easily wall-hung
- 20-year finned rod element warranty
- 2-year parts warranty
- Made in the USA

#### TEMPERATURE RISE & CFM CHART - 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  $0^{\circ}$  F and you require  $50^{\circ}$  F duct air, choose  $50^{\circ}$  F temperature rise. If you require 400 CFM you would select the MA10.

	[		SI	NGLE PHA	THREE PHASE MODELS						
	$Model \mathrel{\textbf{\rightarrow}}$	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
	30° F	105	168	N/A	N/A	N/A	N/A	316	N/A	N/A	N/A

### **SPECIFICATIONS**

Model	kW	Btu/h	Amps	Inter- nal CB	Motor FLA	Motor HP	Phase	Voltage	CFM		Max Fuse/	Duct	Shipping
Model	KVV								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"	59
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"	65
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



Specifications subject to change without notice, all rights reserved.



ELECTRO INDUSTRIES, INC. 2150 West River Street, PO Box 538, Monticello, MN 55362 763.295.4138 • 800.922.4138 • fax 763.295.4434 sales@electromn.com · www.electromn.com

#### Installation Specifications (Reference Installation & Operating Instructions, EI906)

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.
- 5. 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.
- 7. Heating elements are locked out when entering air temperature is > 55° F (12.8° C).

