



EMS Series

The ETL listed Energy Management System is designed to automatically reduce exhaust and supply airflow quantities while still completely capturing & containing heat and smoke generated by the cooking appliances.

Exhaust and supply fans modulate between factory set low speed, while the appliances are idling, and high speed. This modulation is dependent on the duct temperature sensed. A 100% airflow override button is also supplied with an adjustable timer that is factory set at 30 minutes.

The modulation of the fans between low and high speed is adjusted by variable frequency drives. The use of variable frequency drives allows for a 20% reduction in airflow at the appliance idle temperature. The modulation of the fans during cooking operation allows for maximized energy savings versus a fan running on high speed during the same cooking period.



An adjustable, fully modulating temperature sensor is mounted in the exhaust duct and monitors the exhaust air temperature. The sensor then works in conjunction with a panel mounted temperature controller. The EMS panel is capable of controlling up to four inverter duty motors.

Standard Features and Benefits

- Full capture and containment of heat loads while still reducing energy costs
- 20% reduction in fan speed equates to a 48% reduction in fan energy costs
- 100% Airflow Override button with a fully adjustable timer
- Controls up to (4) 5HP inverter duty motors
- Low Maintenance – Monthly temperature probe cleaning only
- Adjustable Set-Points Include: Fan Low Speed, Fan High Speed, Fan Activation Temperature, Fan High Speed Temperature, and Ramping Rate
- Meets the requirements of IMC 507.2.1.1. which require exhaust fans to activate when cooking appliances are energized
- Installed in Exhaust Hood utility cabinet and can be factory wired. Panel can also be wall mounted.
- Fully modulating Digital Temperature Control

Options

Option Code	Description
00	Standard EMS Wiring Package
02	Exhaust on in Fire
28	Exhaust on in Fire, Connection for Fan activated Gas Valve Reset Relay
47	2 (18) amp contactors on with fan switch, exhaust on in fire
83	Exhaust on in Fire, Lights Out in Fire
E2	Exhaust on in Fire, Lights Out in Fire, Connection for Fan activated Gas Valve Reset Relay
EG	Cooling Thermostat and Relays to control Condenser. Exhaust on in Fire
H8	Exhaust on in Fire, Duct Stats in risers to trigger alarm and trigger shunt trip at 212 deg F, Audible Alarm
HK	Exhaust on in Fire, Lights out in Fire, Audible Alarm
JT	Outside Air Damper Control with Exhaust on in Fire (0-10VDC signal & Condensing unit Stage two interlock)
MR	Panel accepts a 120V signal to start fans. No fan switches supplied. Works with ESP, AM-2 and TAC unit. Exhaust on in Fire
NG	Exhaust in Fire, Exhaust and Supply Proving, Connection to Heater
NM	Exhaust on in Fire, 2 Starters ON with fan switch and ON in Fire
NZ	SCS Panel Connection, Exhaust on in Fire. Relay to start fan and Relay for Wash Cycle Fan interlock
W4	Hot Water Wash with Exhaust on in Fire
W7	Hot Water Wash and OAD Control with Exhaust on in Fire (W4 + JT)
WB	Hot Water Wash with Exhaust on in Fire and Lights Out in Fire
WE	CORE PROTECTION with Hot Water Wash and Exhaust on in Fire
WL	Hot Water Control, Exhaust in Fire. Controls only. Use with AM-2 M40 Panel

Models Available

- EMS101XX – 1 Exhaust Fan
- EMS111XX – 1 Exhaust Fan, 1 Supply Fan
- EMS201XX – 2 Exhaust Fans
- EMS211XX – 2 Exhaust Fans, 1 Supply Fan
- EMS301XX – 3 Exhaust Fans
- EMS311XX – 3 Exhaust Fans, 1 Supply Fan
- EMS401XX – 4 Exhaust Fans
- EMS411XX – 4 Exhaust Fans, 1 Supply Fan
- EMS501XX – 5 Exhaust Fans

CERTIFICATIONS

The EMS Model has been certified by ITS. This certification mark indicates that the product has been tested to and has met the minimum requirements of a widely recognized (consensus) U.S. and Canadian products safety standard, that the manufacturing site has been audited, and that the applicant has agreed to a program of periodic factory follow-up inspections to verify continued performance.



Model EMS Series are ETL Listed under file number 3132576CRT-001a and comply with UL508A Standards and CAN/CSA C22.2, No. 14-05 Standards.