

Energy management control systems for industrial dust collection & ventilation

APPLICATIONS

How EcoBOSS® can work for you:

EcoBOSS® Energy Management Control Systems deliver up to 80% reduction in kW consumption for typical industrial ventilation systems.

Boss Products engineers have spent years of research & testing to verify that the key to significant energy savings is to regulate fan performance capacity to deliver the suction volume based on spindle run time.

Typical industrial ventilation systems are designed to operate at full capacity. Extensive observation and case studies have shown that **actual spindle run time** rarely approaches 50% of full capacity during 90% of an average monthly production cycle!

EcoBOSS® Energy Management Control Systems have been designed to take full advantage of the Fan Affinity Law which clearly illustrates how an **EcoBOSS®** installation will work for you.

Advanced technology, systems engineering and modern components have been combined to create the EcoBOSS® Energy Management Controls. Three levels of EcoBOSS® controls have been developed & field tested to optimize the function of industrial ventilation control applications.





20 10 H.P. = 12.5% of full load 0 10 20 30 40 50 60 70 80 90 100

Air volume (CFM 50%) Power (H.P. %)

When a fan's airflow is reduced by 50% the kW consumption is reduced to 12.5% of full load.

CERTIFICATIONS & STANDARDS













PRODUCT CODES: 55001, 55010, 55020, 55030 & 55040

PRODUCT CODE: 55010

ECOBOSS® LOOP BOX - EB-LB

Regulates fan speed dependent on varying filter pressure and resistance conditions to deliver optimum CFM. Remote start capable and designed to reduce energy consumption based on equipment utilization and spindle run time demand.



PRODUCT CODE: 55020

ECOBOSS® POWER BOX - EB-PB

Regulates fan speed dependent on varying filter pressure and resistance conditions to deliver optimum CFM. Integrated logic controller sequencing auxiliary motors and operates automatic gates based on real time equipment utilization (spindle run time) through a simple integrated network system. Remote start capable and designed to reduce energy consumption based on equipment utilization and spindle run time demand.



PRODUCT CODE: 55030

ECOBOSS® POWER BOX ULTIMATE - EB-PBU

Advanced technology Energy Saving Control System with external color touch screen programming for operation interface and expanded system capacity for larger systems. It regulates fan speed dependent on varying filter pressure and resistance conditions to deliver optimum CFM. A powerful logic controller operates automatic gates based on real time equipment utilization (spindle run time) through a simple integrated network and can sequence control of discharge valves, transfer fans, dirty filter alarms, fire extinguishing and/or suppression, explosion isolation, clean air abort return and variable pulse filter cleaning systems.



PRODUCT CODE: 55040

ECOBOSS® STAND-ALONE VARIABLE SPEED DRIVE - EB-SVD

Critical component for all **EcoBOSS®** energy saving control systems. It drives the primary fan motor speed based on constant communication and feedback from an **EcoBOSS®** control panel for the most efficient operation. Proven technology and programming ensures optimum fan performance based on real time production conditions and safety requirements.



PRODUCT CODE: 55001

ECOBOSS® POWER SUPPLY PANELS - EB-MPK

Stand-alone solution to power Automatic Blast Gate and sensor. It automatically starts and stops the exhaust fan. Models available with adjustable delay timer and manual override.

