

**SC-EFC**

**Exhaust Fan Controller**  
For electronically commutated motors  
Used in constant pressure applications

The SC-EFC is designed to control exhaust air in various building applications. The system includes a controller with integral pressure transducer, pressure tap, 24 VAC step-down transformer, along with 3 enclosure options. The SC-EFC can be used with any ECM motor to control the fan speed, and is capable of maintaining pressure at up to 1" w.c. of pressure. The SC-EFC is available with either BACnet™ or LonWorks™ compatibility and can be integrated into virtually any building automation system.

**CONTROLLER**

The SC-EFC includes a fully configurable BACnet™ or LonWorks™ controller. The simple pressure setpoint adjustment takes place at the controller which is located inside the enclosure. The tubing is connected to the controller and terminated with the pressure tap at the desired pressure reading location. Tubing should not be longer than 200 ft.

**PRESSURE TAP**

The brass pressure tap should be mounted in the duct of the system that is intended to be controlled. The pressure tap should be mounted with self-tapping screws. The location should be determined by the engineer that designs the system. It is recommended that the tap be located a minimum of 1/3 of the total duct length run from the fan.

**24VAC STEP-DOWN TRANSFORMER**

The 24 VAC step-down transformer is factory mounted inside the enclosure within a handy box to ensure that all control wiring is separated from line voltage. A disconnect switch (provided by other) should be mounted to the outside of the control box. 115 Volt single phase power should be connected to the disconnect. The factory mounted stepdown transformer should be connected to 115 Volt single phase power.

**CONTROL ENCLOSURE**

The 12" x 12" x 6" control enclosure should be mounted vertically and located in an easily accessible location. Consideration should be given to the location of the pressure tap and motor. A standard NEMA 1 enclosure is for INDOOR USE ONLY. NEMA 3R enclosure is available for outdoor use.

**CONTROL INTERFACE**

The LCD display automatically switches every 5 seconds between the Motor Output Percentage and Duct Pressure given in inches of water column. The static pressure set point can be adjusted from the controller simply by pushing the up or down arrows. The LCD display also allows for quick BMS integration through the Set up menu.

**Selection**

|  |                  |                                  |
|--|------------------|----------------------------------|
|  | <b>SC-EFC-NE</b> | <b>No Enclosure</b>              |
|  | BACnet™          |                                  |
|  | LonWorks™        |                                  |
|  | <b>SC-EFC-N1</b> | <b>Standard NEMA 1 Enclosure</b> |
|  | BACnet™          |                                  |
|  | LonWorks™        |                                  |
|  | <b>SC-EFC-N3</b> | <b>Outdoor NEMA 3R Enclosure</b> |
|  | BACnet™          |                                  |
|  | LonWorks™        |                                  |

