



## ECM Fan Coil Replacement Motor

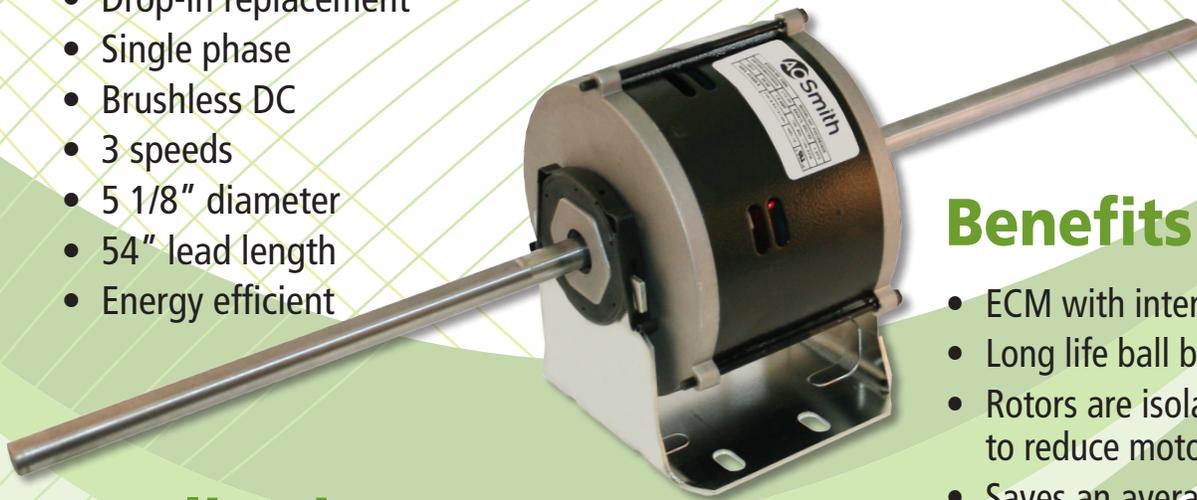
(Electronically Commutated Motor)



A. O. Smith's new Comfort Select~FC is a brushless DC high efficiency motor that runs off 120 volt single phase input. The motor is controlled by integrated electronics providing advanced motor protection with the same performance characteristics as a shaded pole or PSC (permanent split capacitor) motor. The Comfort Select~FC is designed as a direct replacement or retrofit product for shaded pole and PSC motors and may be used in fan coil and PTAC\* applications as an energy saving retrofit.

### Features

- Drop-in replacement
- Single phase
- Brushless DC
- 3 speeds
- 5 1/8" diameter
- 54" lead length
- Energy efficient



### Benefits

- ECM with internal control
- Long life ball bearings
- Rotors are isolated from shaft to reduce motor vibration
- Saves an average of 69% on energy usage
- Runs cooler
- Easy to install

### Applications

Fan Coils, Air Conditioners, Blowers, Shaded Pole, PSC Retrofit, Trane, Carrier, Amana, GE, Fan Coil & PTAC Units



### Specifications

| Stock Number | HP   | Speeds | RPM          | Volts | Amps | Frame | Rotation | Shaft Dia. & Length |
|--------------|------|--------|--------------|-------|------|-------|----------|---------------------|
| CS89         | 1/10 | 3      | 1100,900,700 | 120   | 1.56 | 42    | CWLE     | 9.3 x 1/2" x 9.3    |

\*Packaged Terminal Air Conditioner

# Comfort Select™ FC

The Affordable Energy Saver



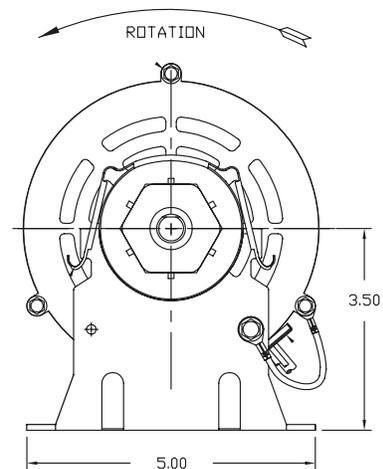
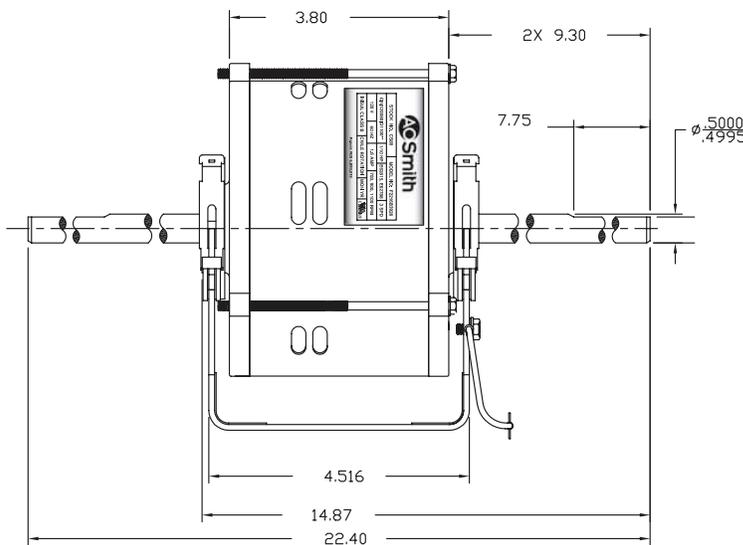
## Energy Saving Comparison

| Motor Reference | Amp  | Volts | Input Watts | Hours of Operation | kWh Per Day | kWh Per Year | Cost Per kWh | Annual cost to operate | % kWh Saved | Annual Savings |
|-----------------|------|-------|-------------|--------------------|-------------|--------------|--------------|------------------------|-------------|----------------|
| Shaded Pole     | 3.07 | 120   | 197.00      | 8                  | 1.58        | 575.24       | \$0.10       | \$57.52                |             |                |
| CS89 High       | 1.56 | 120   | 94.00       | 8                  | 0.75        | 274.48       | \$0.10       | \$27.45                | 52%         | \$30.08        |
| Shaded Pole     | 2.61 | 120   | 188.50      | 8                  | 1.51        | 550.42       | \$0.10       | \$55.04                |             |                |
| CS89 MED        | 0.86 | 120   | 49.00       | 8                  | 0.39        | 143.08       | \$0.10       | \$14.31                | 74%         | \$40.73        |
| Shaded Pole     | 2.14 | 120   | 151.90      | 8                  | 1.22        | 443.55       | \$0.10       | \$44.35                |             |                |
| CS89 LOW        | 0.55 | 120   | 30.00       | 8                  | 0.24        | 87.60        | \$0.10       | \$8.76                 | 80%         | \$35.59        |

kWh= KiloWatt hours

**Average Annual Savings: | 69% | \$106.40**

| Total Building Savings     | Single Unit Savings | (X) | Number of Units | (=)         |
|----------------------------|---------------------|-----|-----------------|-------------|
| CS89 Replacing Shaded Pole | \$106.40            |     | 95              | \$10,108.46 |



Divisional Headquarters  
 A. O. Smith Electrical Products Company  
 531 North Fourth Street  
 Tipp City, OH 45371  
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