



Formerly A. O. Smith Electrical Products Company  
A Regal Beloit Company

# Comfort Select™ FB

High Efficient Furnace  
Blower Motors  
Utilizing ECM  
Technology

Comfort Select™ FB



*Comfort for your Home....*

*Comfort for your Environment!*



*Comfort Select™-FB* motors

offer *ultra quiet operation,*  
*premium air quality,* and

Green Choice® technology resulting

in *comfort for the home* and  
*comfort for the environment.*

The **Comfort Select~FB** motor is a brushless, direct current (BLDC), permanent magnet, electronically commutated motor (ECM). The motor is controlled by integrated electronics providing high efficiency, advanced motor protection, and has the same performance characteristics as a PSC motor. The Comfort Select~FB motor is designed as a direct replacement or retrofit product for a PSC motor.

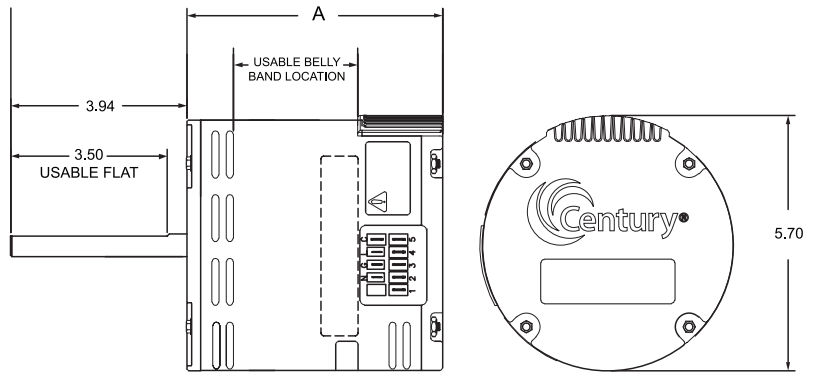
## Benefits

- Available in 115V AC or 208-277V AC input voltage
- Available in 1 HP and ½ HP configurations to replace 6-pole PSC motors that range from ¼ HP to 1 HP
- Peak efficiency of 82%
- Class F Motor Insulation
- Built-in overheating protection
- Rated for operation in 50° C ambient in a continuous air-over environment
- Advanced motor protection through electronics provides greater operating life and increased reliability
- Connects directly to the System Control Board the same way the PSC motor was connected
- No complex wiring modifications or signal wires
- Five speed taps provide speed-torque profiles similar to multi-speed PSC motors
  - High = 1100 RPM
  - Medium High = 1000 RPM
  - Medium = 900 RPM
  - Medium Low = 800 RPM
  - Low = 600 RPM (Fan)
- Automatic detection of correct rotation for both backward and forward curved blowers
- A learn mode that provides improved efficiency and greater flexibility for matching PSC motor performance in a furnace/air-handler unit

*Comfort for your Home....*

# This highly efficient motor

is a self-contained unit primarily intended for use in the indoor blower market, mostly in residential and light commercial HVAC systems (heating, ventilating, and air conditioning).



## The Comfort Select ~ FB motor is available in four different models

Stock #	Volts	HP	Speeds	Amps	RPM Range	Shaft Dia. & Length	Motor Length (A)	Frame Size
CSL1056	115V	1/2	5	6.3	1100-600	1/2" X 4"	5.72"	48
CSL1106	115V	1	5	11.6	1100-600	1/2" X 4"	7.21"	48
CS1056	208-277V	1/2	5	3.6-3.0	1100-600	1/2" X 4"	5.72"	48
CS1106	208-277V	1	5	6.9-5.7	1100-600	1/2" X 4"	7.21"	48

The following figure shows the Comfort Select~FB Motor Interface Module. There are seven cables that connect to the System Control Board and two connectors, power and signal, that connect to the Comfort Select~FB motor.



*Comfort for your Environment!*

The **Comfort Select~FB** motor is a standard 48 frame motor which requires a mounting bracket to mount to the blower housing. The belly band style mounting bracket from the existing PSC motor can be reused. See bulletin #1100 for the complete line of mounting brackets.



Stock #1479



# MOTOR COMPARISON

	PSC MOTOR	ECM RETROFIT Comfort Select™~FB
TECHNOLOGY	Induction Motor	Brushless DC
AVAILABLE HORSEPOWER	1/3, 1/2, 3/4, 1 HP	1/4, 1/3, 1/2, 3/4, 1 HP
SPEEDS	Select 1-5 taps	Select 1-5 profiles
SPEED RANGE	1100-800 RPM	1100-600 RPM
INTELLIGENT CONTROLS	NO	Speed, Compensated Profiles
ADVANCED FEATURES	NO	Auto Rotation and Learn Mode
PEAK MOTOR EFFICIENCY	59%	82%
SUMMARY	No Features, Baseline Product	Advanced Features, High Efficiency
APPLICATION	Retrofit & OEM	Retrofit for indoor PSC Motors

CROSS REFERENCE		
Century Stock Numbers	Emerson Stock Numbers	Mars Stock Numbers
CSL1056	5530ET	06005
CSL1106	5550ET	06010
CS1056	5531ET	06005
CS1106	5551ET	06010



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