

AC Smith

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.

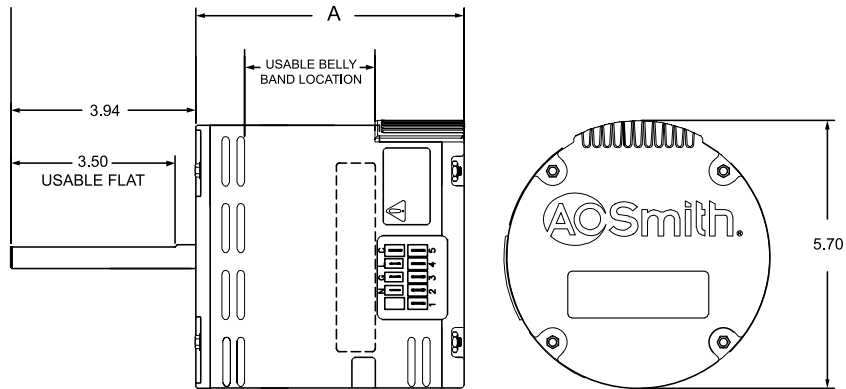
Benefits

- 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		
A. O. Smith Stock Numbers	Emerson Stock Numbers	Mars Stock Numbers
CSL1056	5530ET	06005
CSL1106	5550ET	06010
CS1056	5531ET	06005
CS1106	5551ET	06010



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