

Breakthrough Motor Efficiency

Q-Sync® VS Variable Speed Fan Motors



QM Power is an innovative market disruptor in energy efficient motors and control technologies.

We foster strong **industry relationships** to bring these innovations to market.

With over **50 patents worldwide** awarded based on the efforts of internal talent, we also work closely with our academic and industry alliances.

Our focus is to **reimagine** and create **new technologies** rather than to improve on current technology.

Reduce total cost of ownership with patented motor control technology, industry-leading efficiency, long operating life, ease of installation, and rebate eligibility.



Industry-leading efficiency



Design life of >10 years



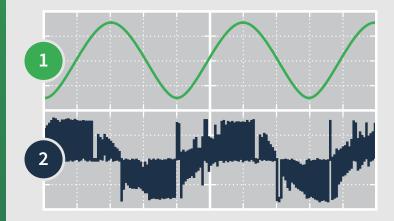
Ease of Install



Rebate-friendly

How Q-Sync® Patented Control Technology Works

By operating the motor at the same frequency as the AC power line and eliminating the AC to DC power conversions from its circuit (no AC-to-DC rectifier, no DC link, and no DC-to-AC inverter), Q-Sync® delivers unparalleled energy savings



1 Q-Sync®

Q-Sync® maximizes efficiency from direct motor-to-AC line connection at full speed

2 ECM

Other systems have less efficient and constant power conversions

Why VS?



Q-Sync® VS delivers market leading efficiency and consumes 20-40% fewer watts compared to ECM motors. The Control Design eliminates start-stop capacitors creating longer life and high reliability.



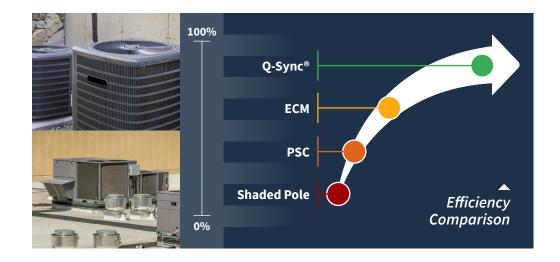
Q-Sync® is recognized by the US Department of Energy as a High Impact Technology For Commercial Refrigeration

Applications



Q-Sync® VS Variable Speed Motors

- Light Industrial Fans
- Commercial Fans
- Evaporator and Condenser Fans
- Rooftop HVAC Fans



Current Product Range

PRODUCT SELECTION

Q-Sync [®] VS								
Line Voltage (VAC) / Phases / Freq	120V / 1 / 60			208-230V / 1 / 60				
Horsepower (Rated full load)	1/4	1/3	1/2	1/4	1/3	1/2		
Running Current (Amps)	1.82	2.45	3.67	0.91	1.23	1.84		
Full Load Efficiency (%)	89.5	91.2	90.5	89.7	92.1	92.9		
Power Factor (Full Load)	0.92	0.95	0.91	0.98	0.98	0.96		
Catalog Number	QVD-P25- 1ACW- P06E1C	QVD-P33- 1ACW- P06E1C	QVD-P50- 1ACW- P06E1C	QVD-P25- 2ACW- P06E1C	QVD-P33- 2ACW- P06E1C	QVD-P50- 2ACW- P06E1C		



Q-Sync[®] VS

MOTOR SPECIFICATIONS

Frame Size	48
Motor Type	TEAO (*Note 1)
Enclosure Protection	IP65
Insulation Class	Class F
Protection	Thermal (Class A, 105°C)

^{*}Note 1 - Totally Enclosed Air Over

^{**}Note 2 - Factory default set to CW

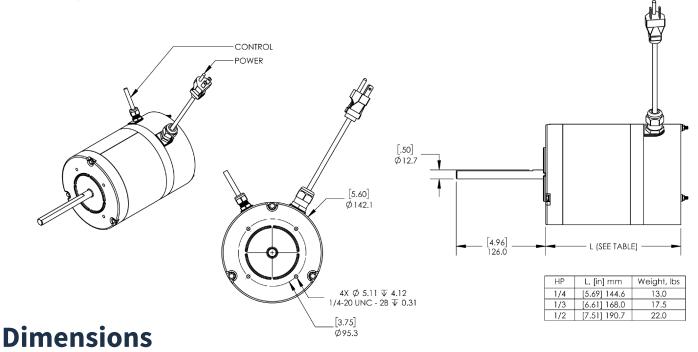




GENERAL SPECIFICATIONS

Speed Control	Variable
Speed Range (RPM)	600-1200
Ambient Temperature Rating	-40°C to 55°C (-40°F to 122°F)
Rotation (from opposite shaft end)	Selectable (**Note 2)
Certifications / Approvals	UL, CSA
CSA / UL File Number	E465664
Surge Protection	2kV
Maximum Operating Altitude	3,048 m / 10,000 ft
Warranty Term (from shipment date)	2 Years (24 Months)





		Example Catalog Number Complete Motor							
COMPLETE MOTOR CATALOG # BUILDER		QVD-	P33-	2	Α	CW-	P06	E1	С
Q-Sync VS (1-ph, Variable Speed) Discrete/PWM interface	QVD								
Power Rating 0.25 HP 0.33 HP 0.50 HP	P25- P33- P50-								
Input (Line) Voltage 115 VAC 208-230 VAC	1 2								
Input Frequency 60 Hz	A-								
Direction of Rotation CW (OSE) CCW (OSE)	CW CC								
Motor Type 6 Pole PM (1200 RPM Base Speed)	P06								
Enclosure TEAO / IP65 / 55C	E1								
Mounting Face	С								