



# Breakthrough Motor Efficiency

Q-Sync<sup>®</sup> 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



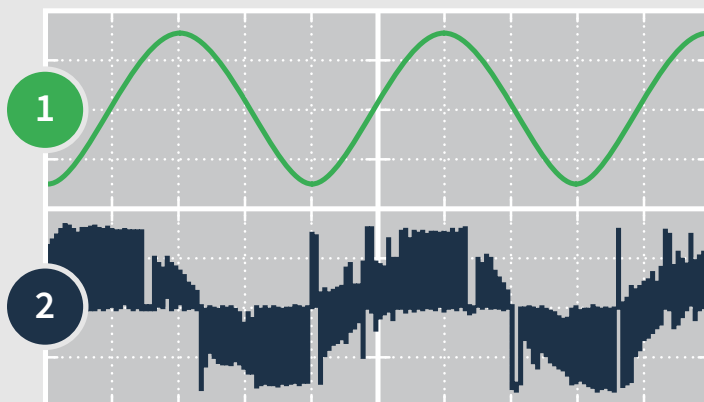
Ease of Install



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.



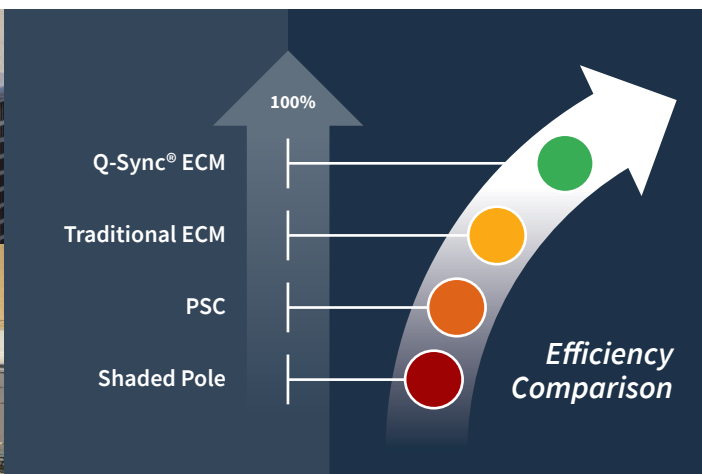
Q-Sync® is recognized by the US Department of Energy as a High Impact Technology For Commercial Refrigeration

# 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

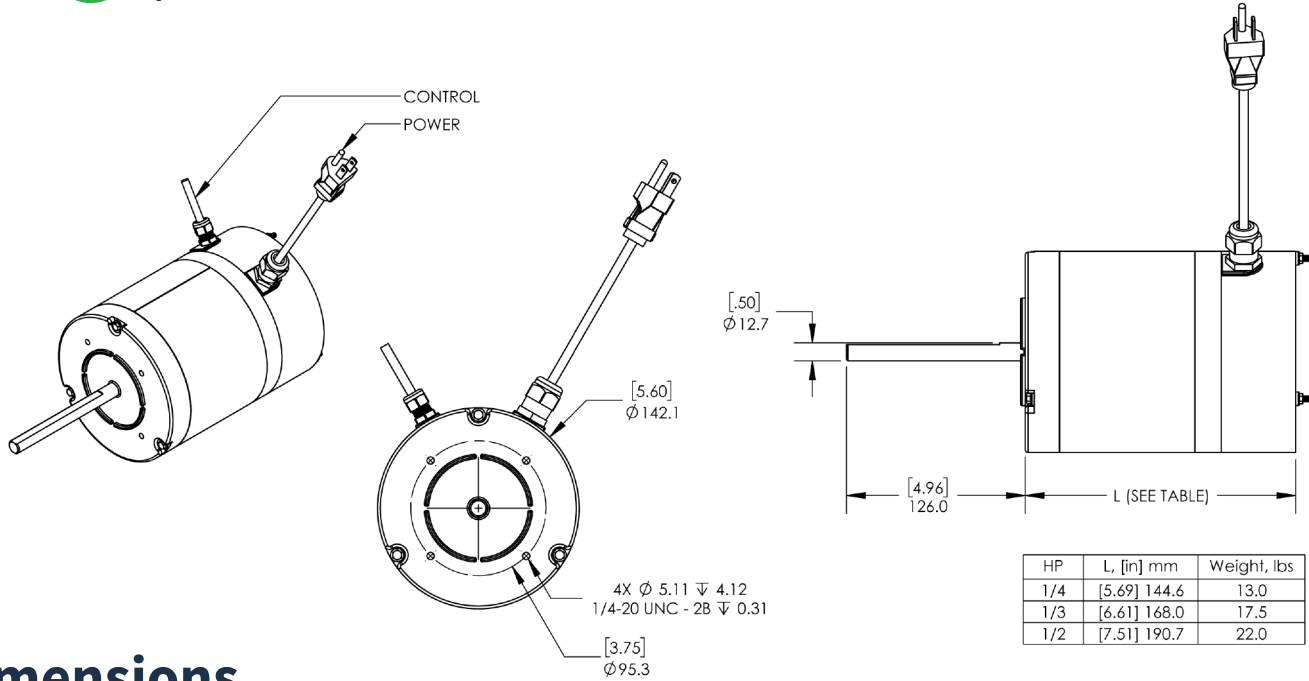
Frame Size	48
Motor Type	TEAO (*Note 1)
Enclosure Protection	IP65
Insulation Class	Class F
Protection	Thermal (Class A, 105°C)

\*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)



## Dimensions

### COMPLETE MOTOR CATALOG # BUILDER

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

Contact us today to discuss putting the world's most efficient control technologies to work for you. Sample motors for testing are available to ship today. Contact our sales team to set up a pilot.

**QM Power, Inc.**  
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