

QPVS Series

Variable Speed
Refrigerated Air Dryers
210 - 635 cfm



Designed To Keep Your Business Running Efficiently

Maximum
Efficiency,
Minimum
Disruptions



✓ A Machine Designed For Efficiency & Reliability

We understand that in order to maintain the quality we hold high, we must maintain the reliability that keeps your business running efficiently. Deliberate design choices to maximize reliability include:

- Variable speed technology that provides consistently dry air even at high ambient temperatures.
- A drive that matches speed with air demand, but maintains trim power to stabilize dew point even during compressor startup
- Coolant filtration and a hot gas bypass valve that helps to prevent freezing and cooling system failures

Lowest Total
Cost of
Ownership



✓ Leading System Efficiency

The QPVS touchscreen controller has three different control modes. These control modes are controlled by ambient temperature and can be changed to increase energy savings. To keep operation running smoothly and without delay, the remote monitoring program ICONS is integrated into the programming as well. This smart technology monitors the machine operation and recognizes and warns when potential production disruptions can occur.

Decreased
Environmental
Impact



✓ Safety For You And The Environment

Safety is always a priority with Quincy products. Because of the high quality smart design, the QPVS is virtually maintenance and waste free. Deliberate design choices to decrease maintenance and environmental affects:

- A self contained cooling system cycles independently and only at the speed you need.
- A more efficient and environmentally friendly R410A refrigerant.



Designed To Solve Your Production Problems



Reduce Your Risk

A consistently stable dew-point ensures that your product maintains reliable quality. The QPVS variable speed drive and compressor work together to protect the dew point you need.



Reduce Your Cost

Increased VSD energy saving gives you a quick return on investment that is as low as 1.5 years. This equates to increased long-term financial savings.



Reduce Your Footprint

Compact in physical size and environmental presence. Not only is the QPVS up to 33% physically smaller in size than thermal mass dryers, but also emits up to 55% less CO².



Our Customers Say It All

We don't need to talk about why we're the smarter choice or how great our systems are. Our awesome customers do that for us. If you ask, they'll probably tell you that Quincy builds the most reliable compressors on the market. Or, they might say that Quincy systems experience less downtime and require less maintenance.



“ Quincy dryers deliver all the fresh air you need and save the life of your tools. ”

- Sam Memmolo
Two Guys Garage



“

We knew we needed an air system that was going to be able to expand along with our business.

”

- Neil Henderson
Mississippi Laminators



“

From compressors to dryers, and all in between, reliability is the foundation of our product designs.

”

- Jon Davis
Product Marketing Manager

Our customers believe in us, in our company and in our commitment to gain and keep their trust. They rely on Quincy to give them the help and information they need to make the best decisions about air systems. Yes, we would love to sell everyone a Quincy solution, but we believe that if we give you honest informative assistance, we will gain trust and business.

Core Technologies

Variable Speed

The QPVS utilizes variable speed technology that matches energy usage with compressed air demand. The rugged integrated ABB variable speed drive and energy efficient compressor work together creating up to 80% turn down. This allows for a stable dew-point with the lowest energy required.



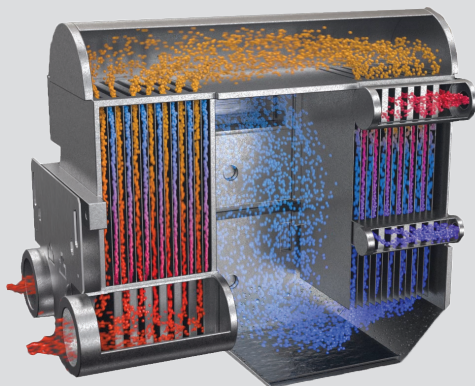
Customizable Control Modes

The integrated advanced controller with color touchscreen comes with customizable control modes. This allows for further customization based off of a site conditions and actual requirements. This equates to even more energy savings.



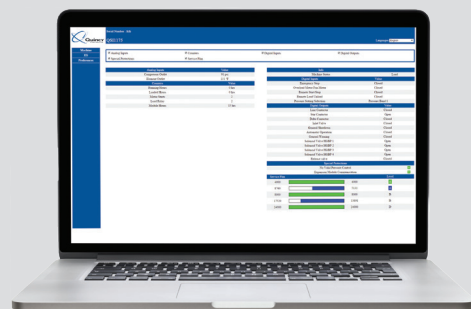
High-Efficiency Heat Exchanger

The high-efficiency heat exchanger utilizes three chambers and a patented air-to-air side design that reduces pressure drop. This decreased pressure drop creates increased compressor energy savings by reducing the need for excess pressure loss compensation.



Remote Monitoring

The latest Quincy controller provides on-board tools that make staying connected easier than ever due to networking, monitoring and integrated cellular connectivity. In-cloud analysis of the data helps schedule optimum service intervention, predicts failure and measures overall machine health.



Variable Speed Refrigerated Air Dryers

Specifications & Engineering Data: VSD

Model No.	CFM at 100 PSIG	Refrigerant	Voltage/Phase Hertz	Power Consumption kW	Max PSIG	Dimensions			Approx. Wt lbs.	Connections In/Out
						Length (in)	Width (in)	Height (in)		
QPVS-210	212	R410A	460/3/60	1.70	210	41	32	38	287	1-1/2" NPT
QPVS-300	297	R410A	460/3/60	2.27	210	41	32	38	287	2" NPT
QPVS-380	381	R410A	460/3/60	2.30	210	41	32	38	295	2" NPT
QPVS-465	466	R410A	460/3/60	4.29	210	41	32	38	315	2-1/2" NPT
QPVS-550	551	R410A	460/3/60	5.07	210	41	32	38	331	2-1/2" NPT
QPVS-635	635	R410A	460/3/60	6.09	210	41	32	38	364	2-1/2" NPT

Correction Factors

Inlet Air Pressure Correction

A	PSI	85	100	115	130	145	160	175	190
	Factor	0.97	1	1.03	1.05	1.07	1.09	1.11	1.12

Inlet Air Temperature Correction

B	Temperature °F	80	90	100	110	120	130	140
	Factor	1.1	1.05	1	0.82	0.68	0.56	0.47

Ambient Air Temperature Correction

C	Temperature °F	100	110	115
	Factor	1.00	0.91	0.85

Example One: Calculations

$$\begin{aligned} \text{Dryer Required} &= \text{CFM required} / (A) \times (B) \times (C) \\ &= 500 / (1.03) \times (.82) \times (1) \\ &= 592 \text{ CFM dryer required} \end{aligned}$$

Select QPVS-635 for this application

Example Two: Calculations

$$\begin{aligned} \text{Corrected Capacity} &= \text{Dryer Capacity} \times (A) \times (B) \times (C) \\ &= 551 \times (1.03) \times (.82) \times (1) \\ &= 465 \text{ CFM} \end{aligned}$$

Example One: Conditions Requirement

Capacity	500 CFM
Inlet Pressure	115 PSIG
Inlet Air Temperature	110 °F
Ambient Temperature	100 °F

Example Two: Conditions QPVS 550 Corrected Flow

Inlet Pressure	115 PSIG
Inlet Air Temperature	110 °F
Ambient Temperature	100 °F

Notes: Capacity in accordance with recommended NFPA standards and CAGI standards ADF 100. Ratings based on 100°F inlet temperature, 100 PSIG inlet pressure and 100°F max ambient.

Compressed Air Systems Best Practice

