



Quincy QSI



QUINCY QSI 600-1500
ROTARY SCREW
AIR COMPRESSORS
125-350 HORSEPOWER

QUINCY QSI 125-350 HP

UNPARALLELED PERFORMANCE

The Quincy QSI® rotary screw compressor combines around-the-clock dependability with one of the most efficient, positive displacement airends available. Oversized rotors, low RPMs, and the Q-Control Power\$ync® advanced controller ensures maximum air production using minimum horsepower, which means bottom-line productivity.

Backed by a ten-year airend warranty, the Quincy QSI features an exclusive Triplex bearing arrangement, a triple lip shaft seal, and boasts an airend life of more than 130,000 hours. This is the standard of True Blue Reliability that perpetuates the value of Quincy.

The Quincy QSI airend is the result of over 30 years of proven performance and machining expertise. Starting with a state-of-the-art rotor profile, each rotor is measured using a polar coordinate measuring machine with an allotted tolerance of 0.0005 of an inch.

Beyond a highly efficient rotor profile and unparalleled precision manufacturing standards, Quincy rotors are oversized – almost 62% larger than most competitors. And the Quincy QSI is designed to turn these oversized rotors at a slow 1,800 rpm. This means long compressor life and increased efficiency. Every Quincy QSI features a direct coupling drive and C-faced motors with a flanged connection to the airend on models through the Quincy QSI 1000. This flanged drive system ensures a permanent alignment and a simple drive system.

An oversized, heavy-duty inlet filter and oversized fluid and aftercoolers are standard on the Quincy QSI. With these and other standard features designed to work in harsh operating conditions, the Quincy QSI is truly one of the most reliable compressors available.





ROYAL BLUE WARRANTY

When it comes to reliability, everyone is making the same promise. But when it comes to keeping the promise, Quincy Compressor stands alone with our exclusive ten-year airend warranty that covers both parts and labor. Reliability is about confidence, performance, and trust – every day. Our warranty program is how we’re keeping our promise of True Blue Reliability for the next ten years*.

* Applicable to machines 150 psig and below

STANDARD FEATURES

- Triplex discharge end bearings
- Full-flow fluid pump
- Axial flow inlet housing
- 460 or 575 volt, 3-phase, 60hz, 1800 rpm motor
- Wye-Delta magnetic starter, mounted and wired, 460 volt
- Flexible dropout coupling with OSHA guard
- Heavy-duty structural steel base
- Two-stage air/fluid separation
- Full-flow, 12-micron fluid filter
- Heavy-duty intake filter
- Q-Control microprocessor
- Factory fill – QuinSyn family of synthetic fluids
- 5-degree approach aftercooler with pre-piped moisture separator and trap
- Package discharge check valve

SAFETY DEVICES

- UL listed electrical controls
- High pressure unload switch
- High pressure relief valve
- Dual probe, high air/fluid temperature shutdown system
- Control line filtration with auto drain
- Power-on light
- Emergency stop button
- Safety oil fill cap

OPTIONAL EQUIPMENT

- Full metal canopy
- Low sound canopy
- TEFC motors*
- Solid-state reduced voltage starter
- Salt water coolers
- Lifting bails
- Phase monitor
- Auto-dual control with modulation
- Load/no load control
- Power\$ync variable displacement airend
- Remote coolers
- Systems package
- Customized configurations

* Note: If a specific motor efficiency is required, please consult the factory.

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All normal maintenance items are conveniently located at one end of the machine for easy serviceability.

Quincy uses a 12-micron absolute fluid filter with a special micro-fiberglass media to provide the best protection for the airend and bearings.

The QSI line of compressors uses aftercoolers

capable of a 3-10 degree approach at standard conditions. This means more moisture is removed by the aftercooler, improving dryer efficiency and air quality.

Quincy's air/fluid separator design and engineered fluids combine to produce fluid make-up rates of less than 3 ppm and downstream carryover rates of 1 ppm or less.

Rugged canopy with a powder coated finish reduces sound levels to as low as 73 dBA.

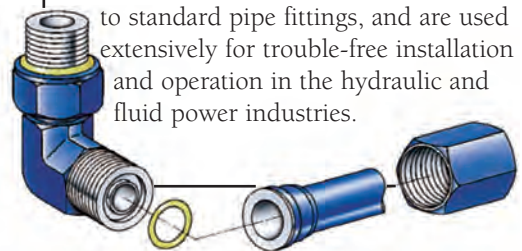
Two control options make the QSI easy to operate.



Quincy Compressor proudly participates in the Compressed Air and Gas Institute's (CAGI) Performance Verification Program. When you purchase a Quincy compressor, rest assured your machine performs as promised.

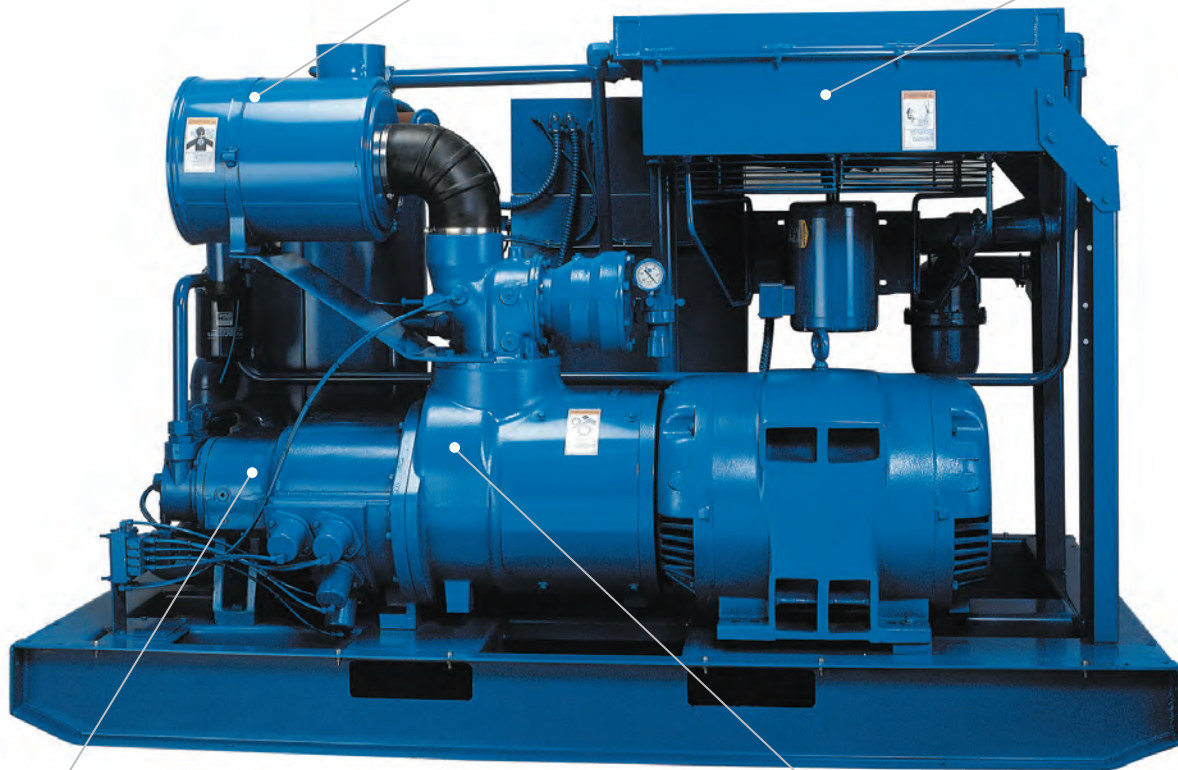
SAE O-RING FITTINGS

We've designed the Quincy QSI with far fewer potential leak points than other compressors in its class. One such feature is the use of castings in place of discharge piping. Another is the use of SAE o-ring fittings on all fluid pipe joints over 1/4" in diameter. These connections are superior to standard pipe fittings, and are used extensively for trouble-free installation and operation in the hydraulic and fluid power industries.



Heavy-duty intake filter
for quiet, trouble free
operation.

Generously sized coolers ensure reli-
able operation in ambient temperatures
as high as 115°F/46°C with aftercooler
approach as low as 3°F/16°C.



Rugged QSI airend with triplex
bearings for maximum
efficiency and operating life.

Axial flow inlet
housing.

QUINCY QSI 125-350 HP

LEGENDARY AIREND DURABILITY & RELIABILITY

Rotor diameter, length, and speed determine the acfm that can be produced. Logically, this means that a smaller airend with smaller rotors must turn faster than a larger airend with larger rotors to produce the same acfm.

Larger rotors turning slower produce more acfm per brake horsepower. The clearance between rotors is known as the "leakage path." Smaller rotors have a much greater "leakage path" than larger rotors. In addition, the faster the rotors are turning, the greater the drag coefficient. Combined with gear or belt friction, these smaller airend inefficiencies add up to increased power consumption.

The airend is the most expensive component of

Quincy's Rotor

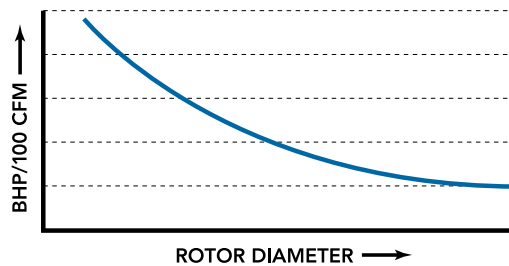
Competitor's Rotor



Quincy's rotors are 62% larger and ensure more acfm per brake horse power and reduce power consumption.

your compressor to replace and it determines a majority of your operating costs. The bottom-line – the Quincy QSI oversized airend can save you thousands of dollars in maintenance and energy costs.

Larger Rotor/Greater Efficiency



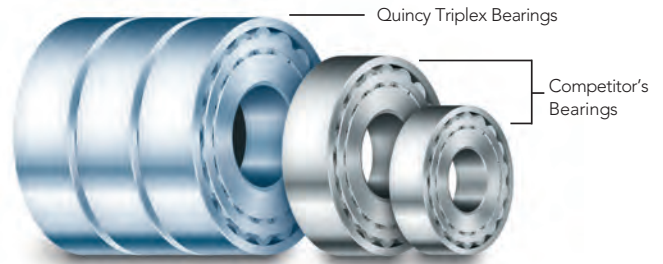
As rotor diameter size increases, brake horsepower per 100 acfm requirements generally decline.



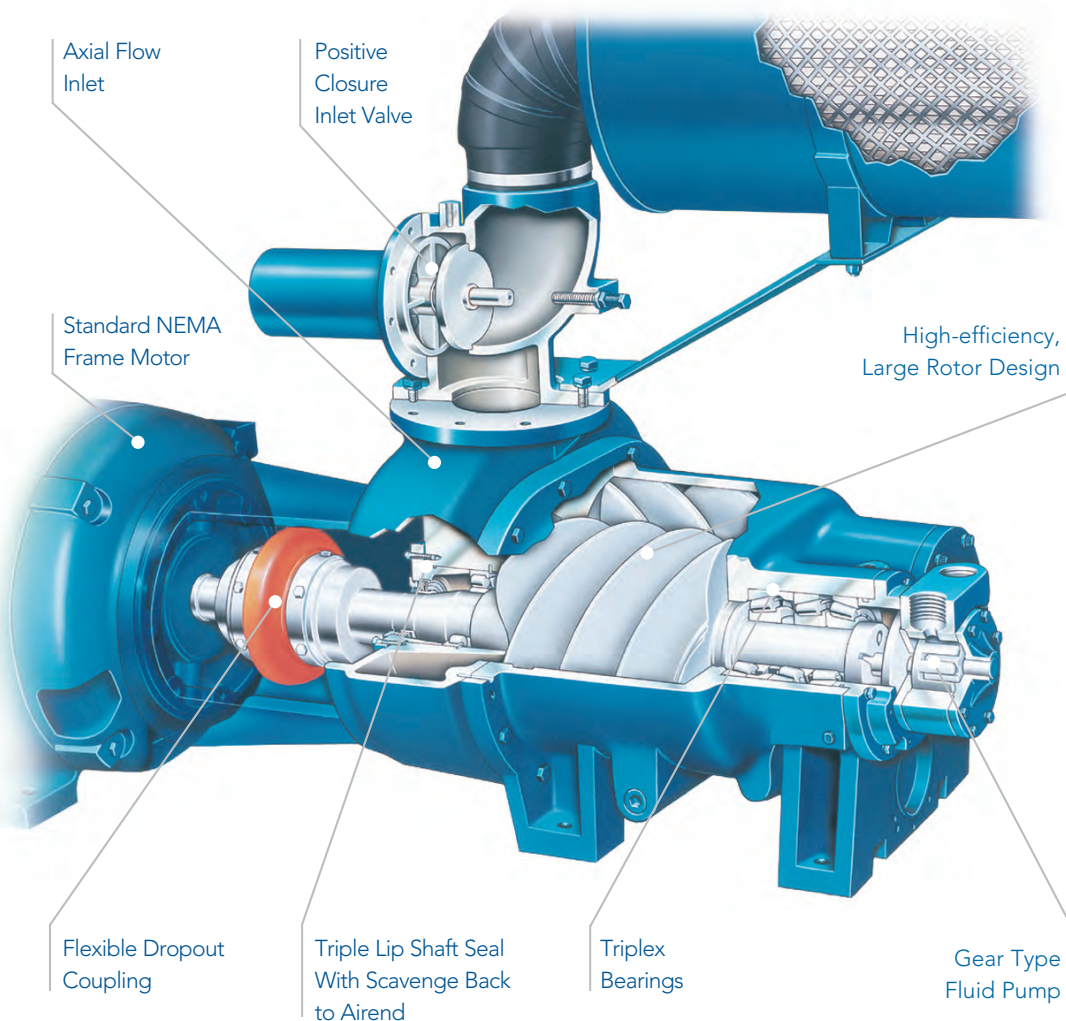
ENGINEERED SUPERIORITY

As you might expect, Quincy’s oversized rotors allow for oversized bearings – over 56% larger than most competitors. But more importantly, the Quincy QSI features an exclusive Triplex bearing arrangement. This superior “three bearing” arrangement is designed to deliver over 130,000 hours of operation, far exceeding the average life expectancy of competing compressors.

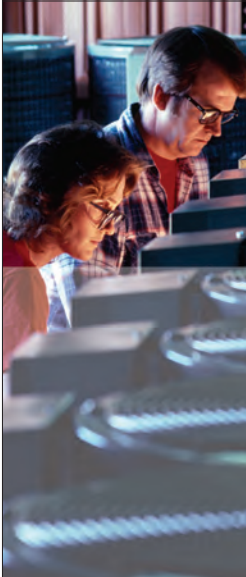
In addition, the Quincy QSI uses a positive displacement gear-type fluid pump to lubricate both the rotors and the bearings. This pump is driven by the rotor shaft, so as soon as the compressor starts, lubrication begins instantly. During unloaded operation, the pump works with the positive closure inlet valve allowing reservoir pressure to be relieved – reducing unloaded brake horsepower to as low as 13.5% of full load.



Quincy’s Triplex bearings are over 56% larger than most competitors, delivering over 130,000 hours of operation.



QUINCY QSI 125-350 HP



Q-CONTROL ADVANCED MONITORING, CONTROLS AND NETWORKING CAPABILITY

The Q-Control combines the latest controller technology with Quincy's cutting edge and market leading compressor controller software. The resulting package provides a broad range of customer benefits, including improvements on user interface; overall reliability and uptime as well as energy reductions through



improved control algorithms. Optimizing and staying connected to the compressed air system has never been easier due to the new onboard tools which include networking, basic remote monitoring and cellular connectivity services.

Built-In Intelligence

- Full-color 5.7" display
- Networking up to 6 compressors*
- Online visualization via ethernet connection
- Real-time trending on controller screen
- Day/Week Organizer
- Dual Pressure Band
- Graphic Service Plan Indicator

Protection

- Predictive graphic service plan
- Pre-warnings

Optional

- Remote pressure sensor

*Consult manual for configuration constraints

Q-Control Online Visualization

Monitor your compressors with the new Q-Control over your local area network (LAN). Monitoring features include warning indications, compressor shutdown and maintenance scheduling, all possible with the free online compressor status visualization.



Q-Connect Cellular Connectivity Hardware

Q-Connect is a monitoring service that provides an online service performance dashboard, service logging, machine service status and monthly service emails at no charge to the customer (RightTime). The cellular hardware device (ICONS) ships standard with every Q-Control. Additional paid features including text message, email and maintenance pre-alerts are available through the connectivity program (UpTime).



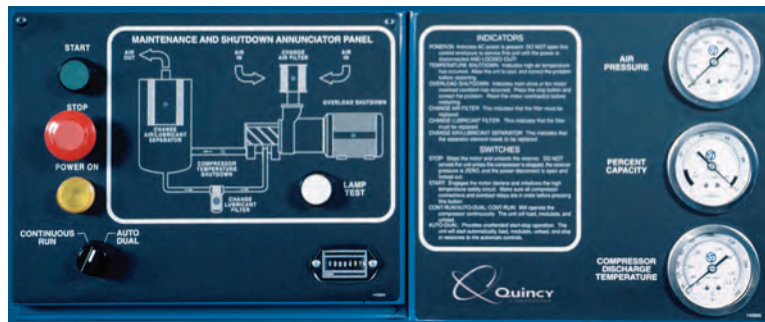
OPTIONAL GAUGE CONTROL PANEL

The Quincy QSI is both reliable and functional. A selector switch on the control panel allows the user to select auto-dual control or continuous run control. In the auto-dual mode, the compressor will load, unload, and modulate in response to system demand. If there is no system demand during the pre-set time delay, the compressor will shut down the main drive motor and, on air-cooled units, the fan motor. The compressor then goes into a “stand-by” mode and continues to monitor system pressure.

As soon as the system pressure drops, the controls will react by restarting the compressor.

Continuous run operation can be selected if typical plant operations include frequent, brief periods of no air usage. In continuous run, the control circuitry bypasses the timer and the compressor does not shut down. This control method prevents excessive restarting and extends the motor life in certain applications.

The gauge control panel has a maintenance and shutdown annunciator panel to indicate various service and shutdown conditions. A graphic display showing the compressor schematic has amber lights to indicate the need to service the air filter, fluid filter, and separator element. Red lights indicate shutdown conditions for high air or fluid temperature, and drive or fan motor overload. These indicators are designed to allow easy remote sensing of all service and shutdown conditions.



Quincy's exclusive percent capacity gauge details the compressor load level. When load levels are low, the Quincy QSI can be shut down with confidence, unlike competitive machines that may be left on-line because load levels are unknown.

All gauges are 2-1/2", stainless steel backed and beveled, with silicon-dampened dashpot movements. They provide the reliability and service life of liquid-filled gauges, without the possibility of liquid leaks. Temperature and pressure gauges have both English and metric scales.

ADDITIONAL GAUGE CONTROL PANEL FEATURES

- Start button
- Red mushroom stop button with twist lock
- Power-on light
- Lamp test button for annunciator panel
- Discharge air pressure gauge
- Percent capacity gauge
- Hour meter
- Compressor discharge temperature gauge

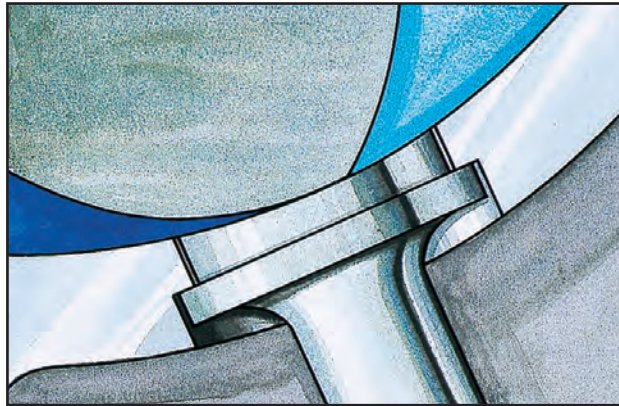
QUINCY QSI 125-350 HP

VARIABLE CAPACITY CONTROL

The Quincy Power\$ync® with patented lift valves is a unique design that gives the compressor the ability to function as a base-load machine *and* a part-load machine.

When you don't need the entire (full load) capacity of the compressor, the QSI Power\$ync®

quickly decreases the air flow output so you're not wasting energy making compressed air that you don't need. The QSI does this by using specially designed lift valves, operated by Q-Control with Power\$ync®. These lift valves adjust automatically to match the demand of your application!



Only QSI's Power\$ync lift valves are contoured to prevent blow-by and increase efficiency.

Optional Power\$ync® Variable Capacity Control*

- Quincy features patented Power\$ync® lift valves on the airend
- Programmable logic controller with full-color 5.7" display
- Network 6 machines outfitted with compatible controls
- Provides superior energy savings at part load requirements
- Allows your base load machine to function as a trim machine!

* For more information, please see our QSI Power\$ync brochure.

VARIABLE DISPLACEMENT LIFT VALVES

- Machined directly into the airend housing to prevent air leaks (blow-by)
- Contoured to sit directly against rotor
- Double-acting for rapid response and control
- Actuated with internal air pressure, no additional power required
- Superior to VSD machine above 80% load



QUINCY QSI 125-350 PERFORMANCE DATA

110 psig Full Load

@ 110 psig (7.58 BAR) – Full load pressure, 125 psig (8.62 BAR), Maximum pressure

Model	Full Load	M3/min @7.58 BAR	Motor hp/rpm	Rotor Diameter in/mm	Unit Length in/mm	Unit Width in/mm	Unit Height in/mm	Weight lbs/kg
QSI-600	630	17.84	125/1800	10.04/255	102/2591	56/1422	60.25/1530	4500/2045
QSI-750	745	21.10	150/1800	10.04/255	116/2946	68/1727	76.25/1937	7500/3409
QSI-1000	1014	28.71	200/1800	12.64/321	120/3048	76/1930	73.25/1861	9000/4091
QSI-1250	1269	35.93	250/1800	12.64/321	132/3353	80/2032	89.25/2267	10300/4682
QSI-1500	1521	43.07	300/1800	12.64/321	132/3353	80/2032	89.25/2267	10500/4773

@ 125 psig (8.62 BAR) – Full load pressure, 140 psig (9.65 BAR), Maximum pressure

QSI-600	615	17.40	150/1800
QSI-750	740	20.95	200/1800
QSI-1000	1003	28.40	250/1800
QSI-1250	1255	35.54	300/1800
QSI-1500	1504	42.59	350/1800

125 psig Full Load – Low Horsepower*

@ 125 psig (8.62 BAR) – Full load pressure, 140 psig (9.65 BAR) Maximum pressure

Model	Full Load	M3/min @7.58 BAR	Motor hp/rpm	Rotor Diameter in/mm	Unit Length in/mm	Unit Width in/mm	Unit Height in/mm	Weight lbs/kg
QSI-540	540	15.29	125/1800	10.04/255	102/2591	56/1422	60.25/1530	4500/2045
QSI-675	675	19.11	150/1800	10.04/255	116/2946	68/1727	76.25/1937	7500/3409
QSI-925	925	26.19	200/1800	12.64/321	120/3048	76/1930	73.25/1861	9000/4091
QSI-1175	1175	33.27	250/1800	12.64/321	132/3353	80/2032	89.25/2267	10300/4682
QSI-1400	1400	39.64	300/1800	12.64/321	132/3353	80/2032	89.25/2267	10500/4773

High Pressure*

@ 175 psig (12.07 BAR) – Full load pressure, 190 psig (13.10 BAR) Maximum pressure

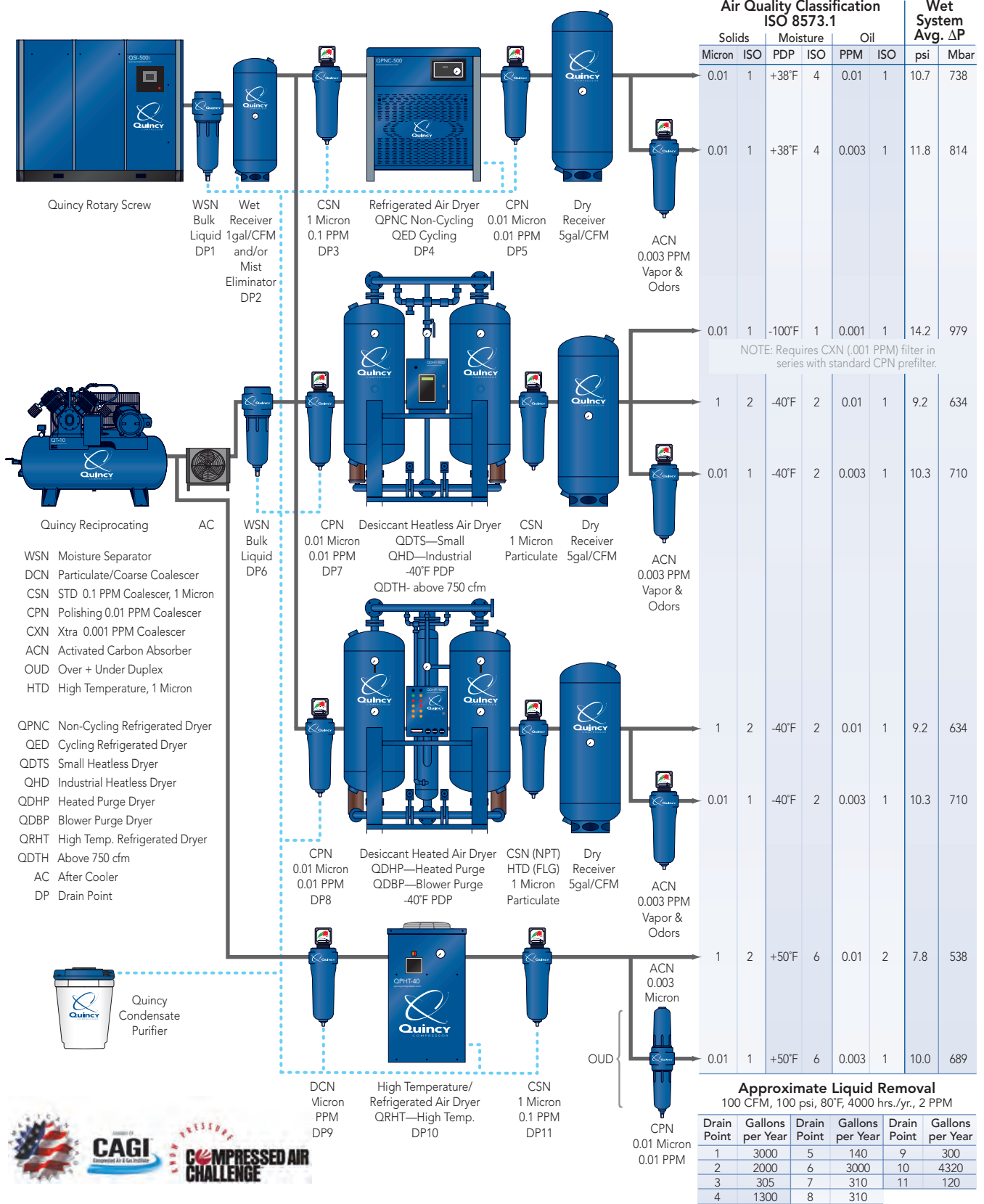
Model	QSI-245 HP	QSI-370 HP	QSI-500 HP	QSI-750 HP	QSI-1000 HP	QSI-1250 HP
acfm @ 175 psig	259	351	468	712	951	1216
M3/min @ 12.07 BAR	7.33	9.94	13.25	20.16	26.93	34.43
hp	100	100	150	200	300	350

@ 210 psig (14.48 BAR) – Full load pressure, 225 psig (15.52 BAR) Maximum pressure

acfm @ 210 psig	254	346	461	702	933	–
M3/min @ 14.48 BAR	7.20	9.80	13.05	19.88	26.42	–
hp	100	125	150	250	300	–

* PowerSync not available on these models.
Performance rated in accordance with CAGI/PNEUROP PN2CPTC2 test code.
See Quincy QSI technical data sheets for exact dimensions.

QUINCY QSI 125-350 HP



Air Quality Classification ISO 8573.1						Wet System Avg. ΔP	
Solids		Moisture		Oil		psi	Mbar
Micron	ISO	PDP	ISO	PPM	ISO		
0.01	1	+38°F	4	0.01	1	10.7	738
0.01	1	+38°F	4	0.003	1	11.8	814
0.01	1	-100°F	1	0.001	1	14.2	979
NOTE: Requires CXN (.001 PPM) filter in series with standard CPN prefilter.							
1	2	-40°F	2	0.01	1	9.2	634
0.01	1	-40°F	2	0.003	1	10.3	710
1	2	-40°F	2	0.01	1	9.2	634
0.01	1	-40°F	2	0.003	1	10.3	710
1	2	+50°F	6	0.01	2	7.8	538
0.01	1	+50°F	6	0.003	1	10.0	689

Approximate Liquid Removal
 100 CFM, 100 psi, 80°F, 4000 hrs./yr., 2 PPM

Drain Point	Gallons per Year	Drain Point	Gallons per Year	Drain Point	Gallons per Year
1	3000	5	140	9	300
2	2000	6	3000	10	4320
3	305	7	310	11	120
4	1300	8	310		

