



# Condensate Management



CONDENSATE PURIFIERS  
CONDENSATE DRAINS



# QUINCY CONDENSATE PURIFIERS

## ENVIRONMENTALLY RESPONSIBLE PRODUCTS

Compressed air is one of the most common and versatile utilities in use today. Raw compressed air, however, contains high concentrations of contaminated gasses, dirty water and various lubricants. If allowed to enter a compressed air distribution system, these pollutants will slow down production, ruin processes, and damage air operated equipment. To prevent these occurrences from causing unscheduled business interruptions, commonly referred to as “down time”, most facilities employ such downstream air purification devices as aftercoolers, filters, and air dryers. The unavoidable by-product of such devices is a nasty brew of contaminate laced condensate. Oily, contaminated condensate is considered a hazardous material and should be handled and disposed of as such.

Over the years, commercial and industrial sites have struggled with how to properly dispose of this hazardous waste. Many have found that dumping condensate down the sewer, on to the ground, or into a lake, river or stream violates several environmental regulations and eventually results in significant penalties.

Section 309 of the Federal Water Pollution Control Act provides for fines of not less than \$2,500 per day to \$25,000 per day, or jail time, or both for first time violators. Such penalties can be assessed against the delinquent company and/or the person or persons responsible for plant operations and maintenance.

Quincy Condensate Purifiers use an environmentally responsible filtration process to remove contaminants from condensate. Contaminates are trapped in a special filter cartridge. The lightweight filter cartridge can be easily disposed of in accordance with local regulations.

Quincy Condensate Purifiers protect commercial and industrial sites and personnel from costly fines and penalties while helping to protect our waterways for future generations.

### THE RESPONSIBILITY IS YOURS!



# QCS CONDENSATE PURIFIERS



## THE GREEN SOLUTION IN A BLACK AND WHITE INDUSTRY

- Light weight
- Easy change cartridge
- Carbon free media
- Easy connect drain ports
- Versatility for multiple unit configuration
- Carbon Free Media
- Contains less than 40 PPM
- Capacities up to 500 hp
- Works with all compressor lubricants, including polyglycol
- Site glass on most models
- EPA safe disposal



### Available Accessories



1 to 4 Flow Splitter



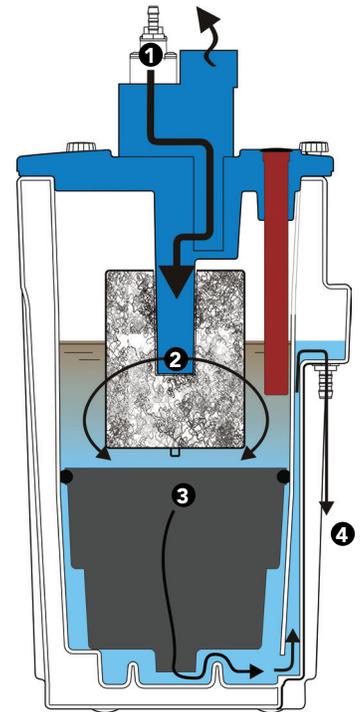
- Four Port Multiple Inlet Adaptors are standard on QCS 900 and QCS 1,600 and optional on QCS 100 and QCS 450
- Additional Multiple Inlet Adaptors are available for applications where more than four inlets are required. Two Adaptors can be installed in series to accommodate up to seven drain lines

# QUINCY CONDENSATE PURIFIERS



## QCS OPERATION

- 1 Untreated condensate flows into the integrated pressure relief chamber
- 2 Condensate then flows into the 1st stage prefilter where bulk contaminants and oil are trapped in the oleophilic filter material
- 3 The prefiltered condensate is then directed into the polishing filter cartridge where the remaining contaminants are removed
- 4 Clean water exits the disposable cartridge, rises to the outlet port and is discharged from the QCS purifier



QCS 900-1600

## LIGHTWEIGHT FILTER CARTRIDGE FACILITATES EASY REMOVAL



The QCS 100 and QCS 450 employ a lightweight, disposable, single cartridge while the QCS 900 and QCS 1600 use a lightweight, disposable, two-piece cartridge assembly. This design makes cartridge replacement clean and simple.

QCS 450 shown

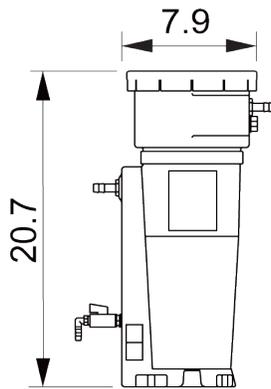


## QCS ENGINEERING DATA

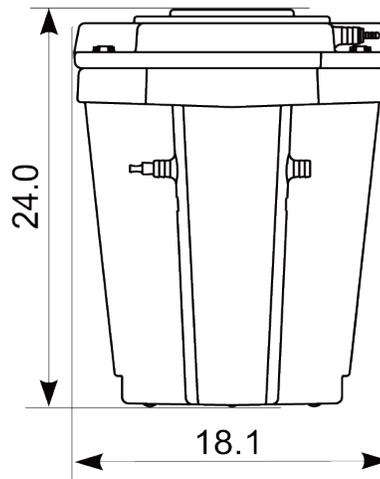
	Tank Capacity	Filling Capacity	Condensate Inlet	Water Outlet	Weight Empty	Min/Max Temp	Max Operating Pressure at Inlet
QCS 100	2.64 gal	1.14 gal	(2) 1/2"	1/2"	7.7 lbs.	41 to 140 °F	232 psi
QCS 450*	17.73 gal	12.46 gal	(1) 1/2" & (1) 1"	1"	19.5 lbs.	41 to 140 °F	232 psi
QCS 900*	30.51 gal	19.15 gal	(3) 1/2" & (1) 1"	1"	70.6 lbs.	41 to 140 °F	232 psi
QCS 1600*	60.34 gal	36.24 gal	(3) 1/2" & (1) 1"	1"	92.6 lbs.	41 to 140 °F	232 psi

\* 1/2" inlet can be modified for 1" inlet  
 Capacity can be expanded by operating multiple units in parallel using flow splitter.  
 Oversize for polyglycol fluids.

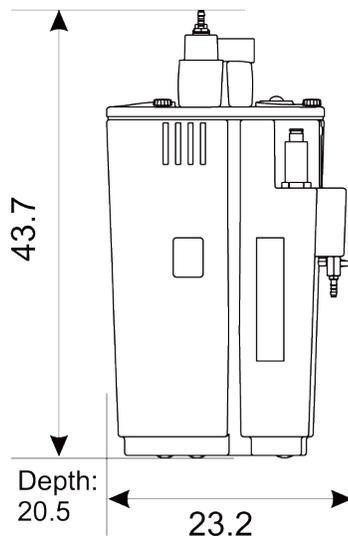
QCS 100



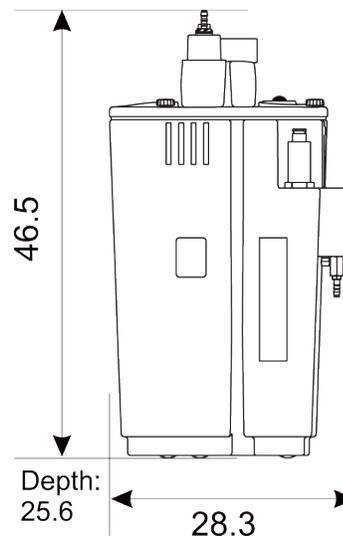
QCS 450



QCS 900



QCS 1600



# QUINCY CONDENSATE PURIFIERS

## QCS SIZING GUIDE BASED ON COMPRESSOR HP

Compressor Performance HP	Flow/SCFM	Piston Compressors		Rotary Screw Compressors		
		Mineral Oils	Synthetic Oils	Mineral Oils	PAO/Diester Oils	Polyglycol/Synthetic
10	45	QCS100	QCS100	QCS100	QCS100	QCS100
15	60	QCS100	QCS100	QCS100	QCS100	QCS100
20	90	QCS100	QCS100 x 2	QCS100	QCS100	QCS100 x 2
25	115	QCS100 x 2	QCS100 x 2	QCS100	QCS100 x 2	QCS100 x 2
35	158	QCS100 x 2	QCS450	QCS100 x 2	QCS100 x 2	QCS450
40	180	QCS100 x 2	QCS450	QCS100 x 2	QCS100 x 2	QCS450
50	220	QCS450	QCS450	QCS100 x 2	QCS450	QCS450
60	290	QCS450	QCS900	QCS450	QCS450	QCS900
75	372	QCS450	QCS900	QCS450	QCS450	QCS900
100	500	QCS900	QCS1600	QCS450	QCS900	QCS900
125	630	QCS900	QCS1600	QCS900	QCS900	QCS1600
150	760	QCS900		QCS900	QCS900	QCS1600
200	1014	QCS1600		QCS900	QCS1600	QCS900 x 2
250	1269	QCS1600		QCS1600	QCS1600	QCS1600 x 2
300	1521			QCS1600	QCS1600 x 2	QCS1600 x 2
350	1575			QCS1600	QCS1600 x 2	QCS1600 x 2
400	1800			QCS900 x 2	QCS1600 x 2	QCS1600 x 3
500	2250			QCS1600 x 2	QCS1600 x 2	QCS1600 x 3

## FLUID REFERENCE CHART

Quincy Fluids	Fluid Types	
	PAO/Diesters	Polyglycol/Synthetic
QuinSyn F	X	
QuinSyn Plus	X	
QuinSyn PG		X
QuinSyn XP		X
QuinSyn Flex	X	
QuinSyn Flush		X
QuinSyn FG46	X	
QuinSyn	X	
QuinSyn Edge	X	
QuinSyn Prime		X
QuinSyn Endura		X

# QUINCY CONDENSATE DRAINS



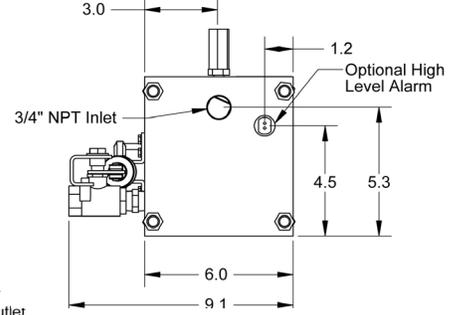
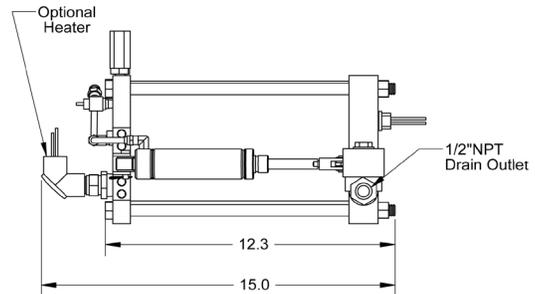
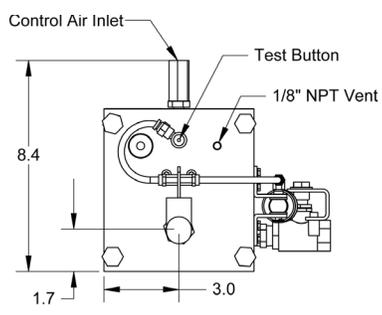
## PNEUMATIC NO AIR LOSS DRAINS

### FEATURES/BENEFITS

- Saves Energy
- Operates on Demand
- No Wasted Air
- Versatile
- Low Profile
- See-Through Vessel
- 1/2" full port ball valve
- Ideal for use with Condensate Purifiers



Pneumatic No Loss Drains												
Model	psig	Max. Temp. °F	Pilot cfm @ psig	Aftercooler cfm	Capacity Dryer cfm	Filter cfm	Dimensions			Approx. Wt. lbs.	Air Inlet Connection	
							L in.	W in.	H in.			
QDD 11T 120	250	180	80-120	2,000	4,000	13,000	13.6	9.09	8.44	16	2x3/4" NPT	
QDD 13 120	250	180	80-120	6,500	13,000	39,000	30.5	9.09	8.44	16	2x3/4" NPT	
<b>High Pressure</b>												
QDD 750 120 HP	750	180	80-120	2,000	4,000	13,000	14.5	9.0	10.5	23	2x3/4" NPT	



## ELECTRONIC TIMER DRAINS

### FEATURES/BENEFITS

- Simple
- Adjustable
- Reliable
- Adjustable Cycle time
- Affordable
- Adjustable Open Time



Electronic Timer Drains							
Model	psig	°F	Max. Temp. cfm	Aftercooler cfm	Capacity Dryer cfm	Filter Orifice	Air Inlet Connection
ETD 25	250	140	200	400	2,000	7/16"	1/4" NPT
ETD 50	250	140	3,500	7,000	35,000	7/16"	1/2" NPT

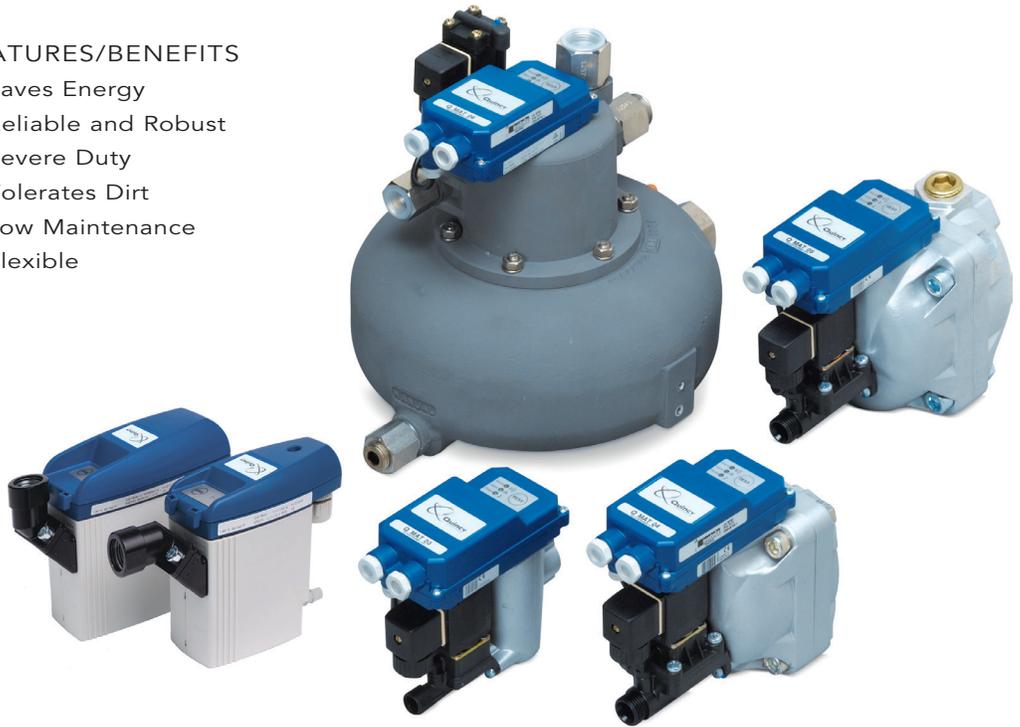
## QUINCY CONDENSATE DRAINS



### QMAT — ELECTRONIC, NO AIR LOSS DRAINS

#### FEATURES/BENEFITS

- Saves Energy
- Reliable and Robust
- Severe Duty
- Tolerates Dirt
- Low Maintenance
- Flexible



#### ENGINEERED COMPONENT

- Control Board
- Power On Light
- Discharge Open Light
- High Level Alarm
- Push-To-Test Button
- QMAT 1 & 2 use replaceable cartridge. No seals or O rings are required



**Environmentally Responsible Product**

## QMAT — OPERATION

### STEP 1

- Condensate enters side inlet port

### STEP 2

- Condensate level begins to rise

### STEP 3

- Condensate level activates sensor

### STEP 4

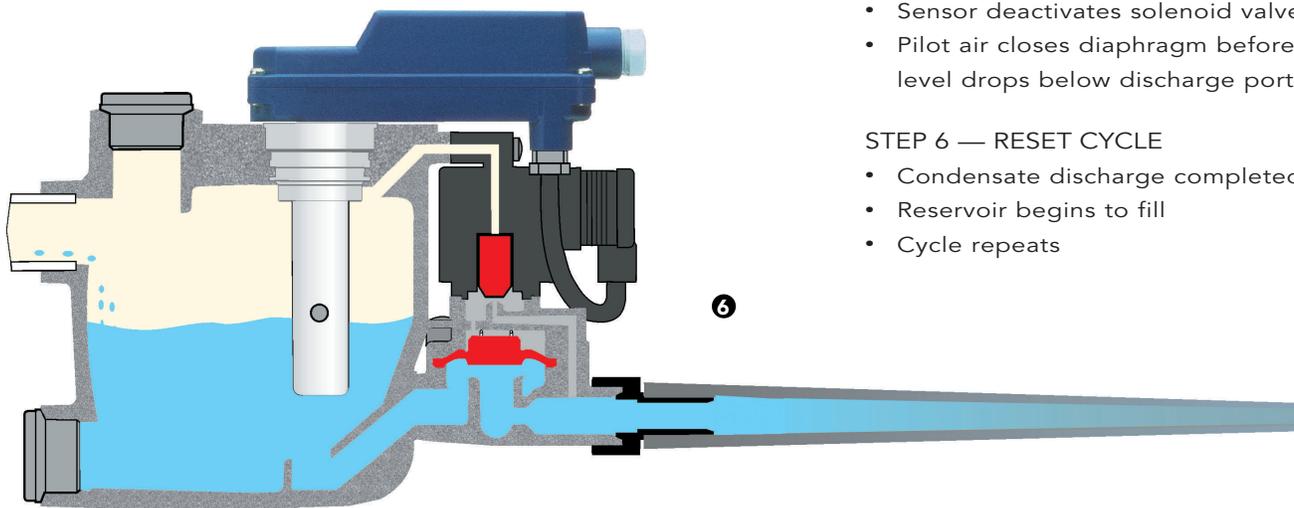
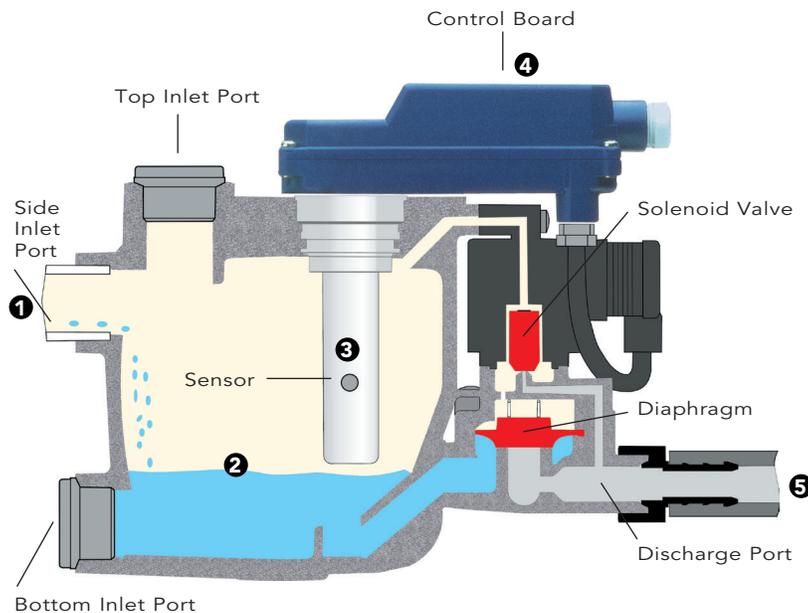
- Sensor signals control board
- Control board activates solenoid valve
- Solenoid valve stops pilot air flow to diaphragm
- Condensate pushes diaphragm open

### STEP 5 — DISCHARGE

- Open diaphragm provides condensate discharge path
- Condensate discharge begins
- Reservoir level begins to fall
- Reservoir level drops below sensor
- Sensor deactivates solenoid valve
- Pilot air closes diaphragm before level drops below discharge port

### STEP 6 — RESET CYCLE

- Condensate discharge completed
- Reservoir begins to fill
- Cycle repeats

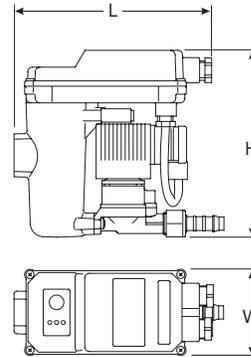
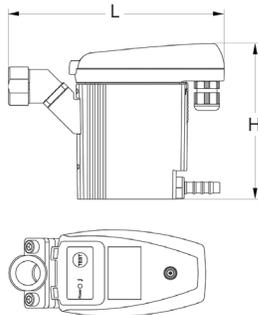


# QUINCY CONDENSATE DRAINS

## QMAT SPECIFICATIONS & ENGINEERING DATA

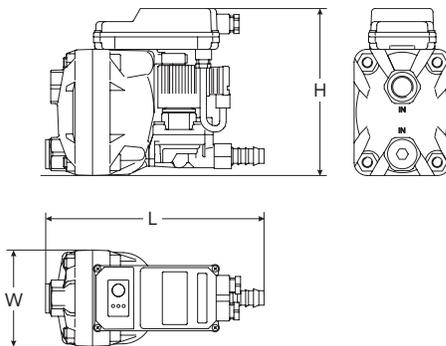
Model	Pressure Rating	Max. Temp. °F	Aftercooler cfm	Capacity Dryer cfm	Filter cfm	Dimensions			Approx. Wt. lbs.	Air Inlet Connection
						L in.	W in.	H in.		
QMAT 01	230	140	100	200	1,000	6.5	2.6	4.6	1.8	1/2" NPT
QMAT 02	230	140	225	450	2,250	6.8	2.9	5.0	2.2	1/2" NPT
QMAT 03	250	140	500	900	5,000	5.9	2.5	5.6	1.8	1/2" NPT
QMAT 04	250	140	1,800	3,600	18,000	8.4	3.7	6.4	4.4	1/2" NPT
QMAT 05	250	140	5,400	10,800	54,000	9.9	4.7	7.1	6.4	3/4" NPT
QMAT 06	250	140	50,000	100,000	500,000	11.0	10.2	11.0	14.0	1" NPT
<b>High Pressure</b>										
QMAT HP 1000	1000	140	270	540	2,700	5.7	2.5	5.6	2.0	1/2" NPT
QMAT HP 725	725	140	1,800	3,600	18,000	8.4	3.4	6.4	4.4	1/2" NPT

QMAT 01 & 02

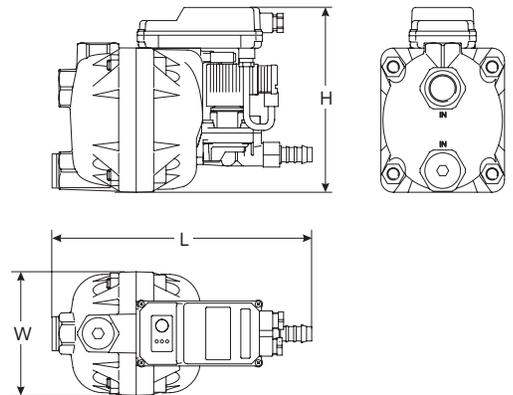


QMAT 03

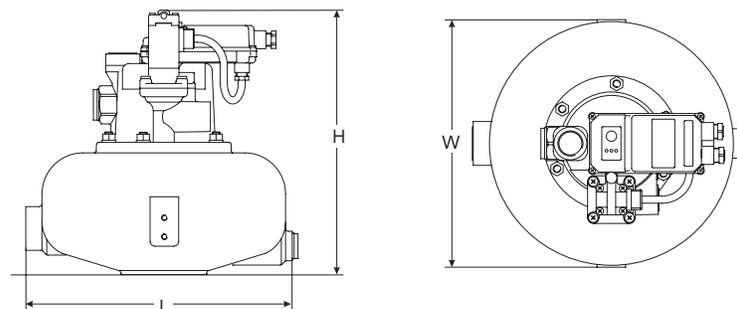
QMAT 04



QMAT 05



QMAT 06



## THE QUINCY PROMISE

---

Quincy Compressor and its partnering distributors promise to provide you with uncompromising reliability in all Quincy equipment. This makes your compressed air system one less thing that you need to worry about, allowing you to focus on your company's productivity and profitability.



## THE QUINCY SOLUTION

---

Operating at peak efficiency and providing quality product is a priority for many of our customers. Quincy Compressor in partnership with our global network of authorized distributors strives to be your provider for all of your compressed air system needs. From the air compressor to filtration to dryers and storage solutions, Quincy Compressor is your single source provider for all of your compressed air system needs.

### Air Compressors

Quincy Compressor is a premier provider of many different types of air compressors designed for a variety of applications using different compression technologies.

The **Quincy QT** is a Reciprocating Splash Lubricated compressor for tough everyday use. The **Quincy QP** is a reciprocating fully pressure lubricated compressor for a competitive advantage. The **Quincy QR** is a reciprocating compressor designed for the most demanding conditions. The **Quincy QGS 5-30 HP** is a heavy-duty belt driven rotary compressor at a competitive price. The **Quincy QSI** provides an industrial grade premium fixed speed rotary screw air compressor. The **Quincy QGV** provides a premium variable speed rotary screw air compressor designed to optimize your energy efficiency.

### Compressed Air Treatment

Quincy Compressor is your single-source provider of compressed air treatment products to complement your air compressor. Quincy provides refrigerated air dryers, desiccant air dryers, compressed air filtration from 5 to .01 micron, condensate drains, condensate management systems, storage solutions, and flow control valves. Quincy Compressor is truly a single-source provider for all of your compressed air needs.

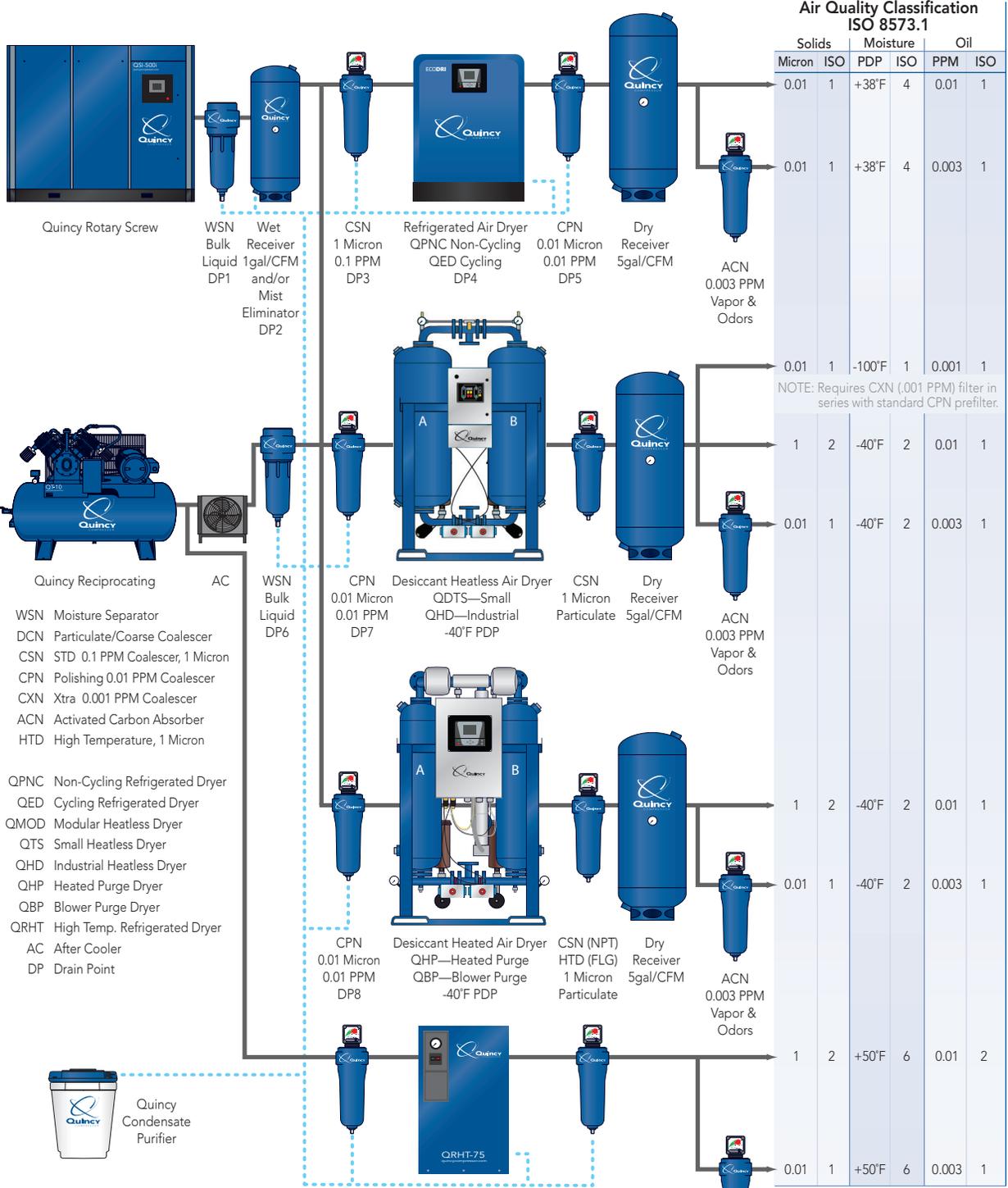
### Genuine Parts

Genuine Parts from Quincy Compressor keep your equipment running like new. When servicing your Quincy compressor, insist on Genuine Quincy parts. Not only will you save time and money, but you will gain the peace-of-mind from using only the highest quality parts worthy of the Quincy name.

### System Controls

Whether you have one air compressor or many air compressors from many different manufacturers, Quincy Compressor provides you with a way to control and monitor all of the components in your compressed air system in a way that maximizes your energy efficiency and decreases your energy costs. Whether you need to control your system on site or from half way around the world, Quincy Compressor is your source for reliable, efficient controls.

# COMPRESSED AIR SYSTEMS BEST PRACTICE



### Air Quality Classification ISO 8573.1

Solids		Moisture		Oil	
Micron	ISO	PDP	ISO	PPM	ISO
0.01	1	+38°F	4	0.01	1
0.01	1	+38°F	4	0.003	1
0.01	1	-100°F	1	0.001	1
1	2	-40°F	2	0.01	1
0.01	1	-40°F	2	0.003	1
1	2	-40°F	2	0.01	1
0.01	1	-40°F	2	0.003	1
1	2	+50°F	6	0.01	2
0.01	1	+50°F	6	0.003	1

NOTE: Requires CXN (.001 PPM) filter in series with standard CPN prefilter.

- WSN Moisture Separator
- DCN Particulate/Coarse Coalescer
- CSN STD 0.1 PPM Coalescer, 1 Micron
- CPN Polishing 0.01 PPM Coalescer
- CXN Xtra 0.001 PPM Coalescer
- ACN Activated Carbon Absorber
- HTD High Temperature, 1 Micron
  
- QPNC Non-Cycling Refrigerated Dryer
- QED Cycling Refrigerated Dryer
- QMOD Modular Heatless Dryer
- QTS Small Heatless Dryer
- QHD Industrial Heatless Dryer
- QHP Heated Purge Dryer
- QBP Blower Purge Dryer
- QRHT High Temp. Refrigerated Dryer
- AC After Cooler
- DP Drain Point

### 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		

