



# 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

- Designed for up to 500 HP
- Removes all compressor lubricants, including polyglycol emulsions
- Light weight, easy change, disposable filter cartridge
- Clean, carbon-free filter media
- Versatile size range allows for single or multiple-unit configurations

Quincy offers a green solution for a black and white industry. The Quincy QCS provides the ultimate solution for treating condensate in a compressed air system. The purified condensate contains less than 40 ppm compressor lubricant making it EPA safe for standard disposal. The specifically engineered cartridges trap and emulsify all types of compressor lubricant, providing a cleaner safer solution over gravity type and black bottle pac type separators.

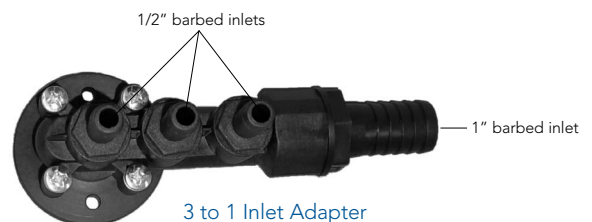


The QCS removes all compressor fluids including polyglycols. Several sizes are available to allow for single or multiple-unit configurations. QCS capacity can be extended for increased demand by installing additional units and operating them in parallel with the originals. Some maintenance programs will find the smaller cartridges used in multiple-unit installation easier to change than a single large unit.

### Available Accessories



1 to 4 Flow Splitter



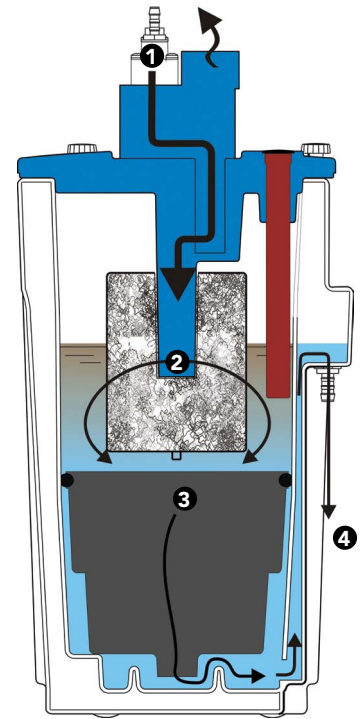
- Four Port Multiple Inlet Adaptors are standard on QCS 900 and QCS 1,600 and optional on QCS 100 and QCS 450
- Additional Multiple Inlet Adaptors are available for applications where more than four inlets are required. Two Adaptors can be installed in series to accommodate up to seven drain lines

# QUINCY CONDENSATE PURIFIERS



## QCS OPERATION

- 1 Untreated condensate flows into the integral pressure relief chamber where line pressure is released
- 2 The depressurized condensate then flows into the 1st stage prefilter where bulk contaminants and oil are trapped in the oliophilic 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. Both configurations are very easy to change.

QCS 450 shown

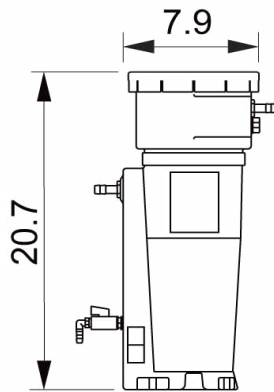


## QCS ENGINEERING DATA

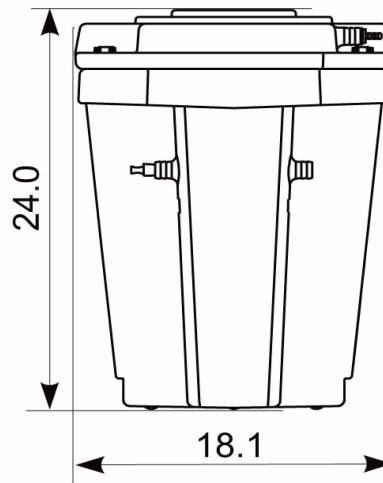
|           | Tank Capacity | Filling Capacity | Condensate Inlet  | Water Outlet | Weight Empty | Min/Max Temp | Max Operating Pressure at Inlet |
|-----------|---------------|------------------|-------------------|--------------|--------------|--------------|---------------------------------|
| QCS 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.

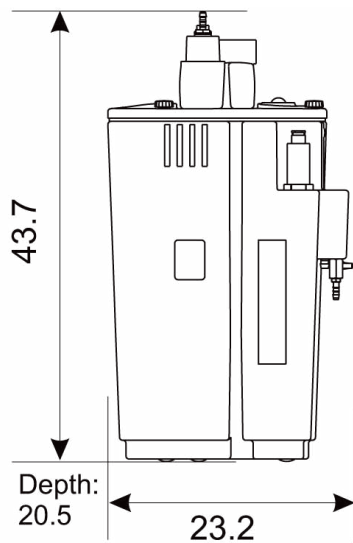
QCS 100



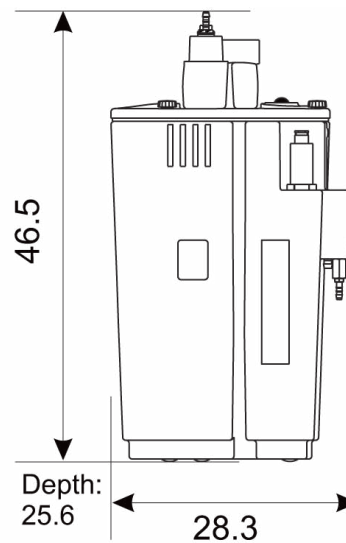
QCS 450



QCS 900



QCS 1600



# QUINCY CONDENSATE PURIFIERS

## QCS SIZING GUIDE BASED ON COMPRESSOR HP

| Compressor Performance<br>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

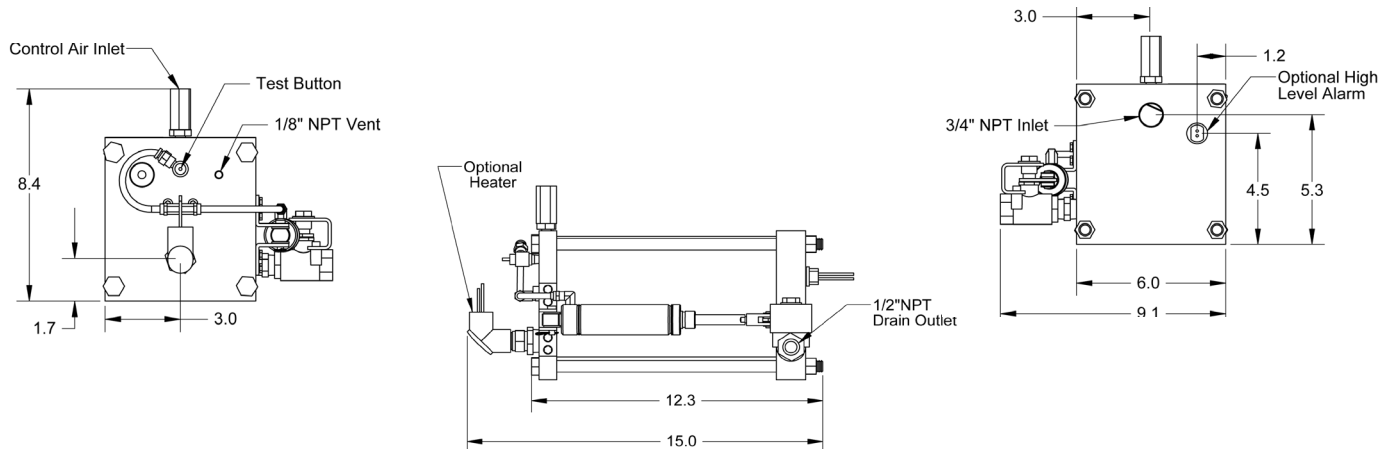
### FEATURES/BENEFITS

- 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           |  |

\*NOTE: QDD 26 120 consists of two QDD 13 120 units connected together.



## ELECTRONIC TIMER DRAINS

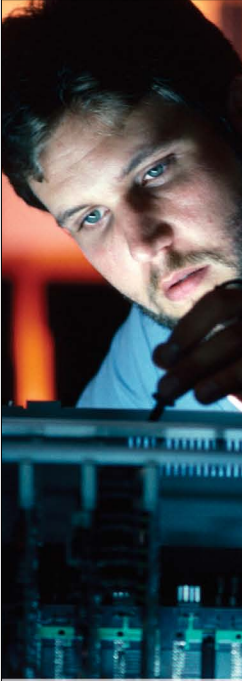
### FEATURES/BENEFITS

- Simple
- Adjustable Cycle time
- Reliable
- Affordable
- Adjustable NPT
- Adjustable Open Time
- 1/4" and 1/2"
- 7/16" Orifice



| Electronic Timer Drains |      |               |                 |                    |            |         |                      |  |
|-------------------------|------|---------------|-----------------|--------------------|------------|---------|----------------------|--|
| Model                   | psig | Max. Temp. °F | Aftercooler cfm | Capacity Dryer cfm | Filter cfm | Orifice | Air Inlet Connection |  |
| ETD 25 (115698-025)     | 250  | 140           | 200             | 400                | 2,000      | 7/8"    | 1/4" NPT             |  |
| ETD 50 (115698-050)     | 250  | 140           | 3,500           | 7,000              | 35,000     | 7/16"   | 1/2" NPT             |  |

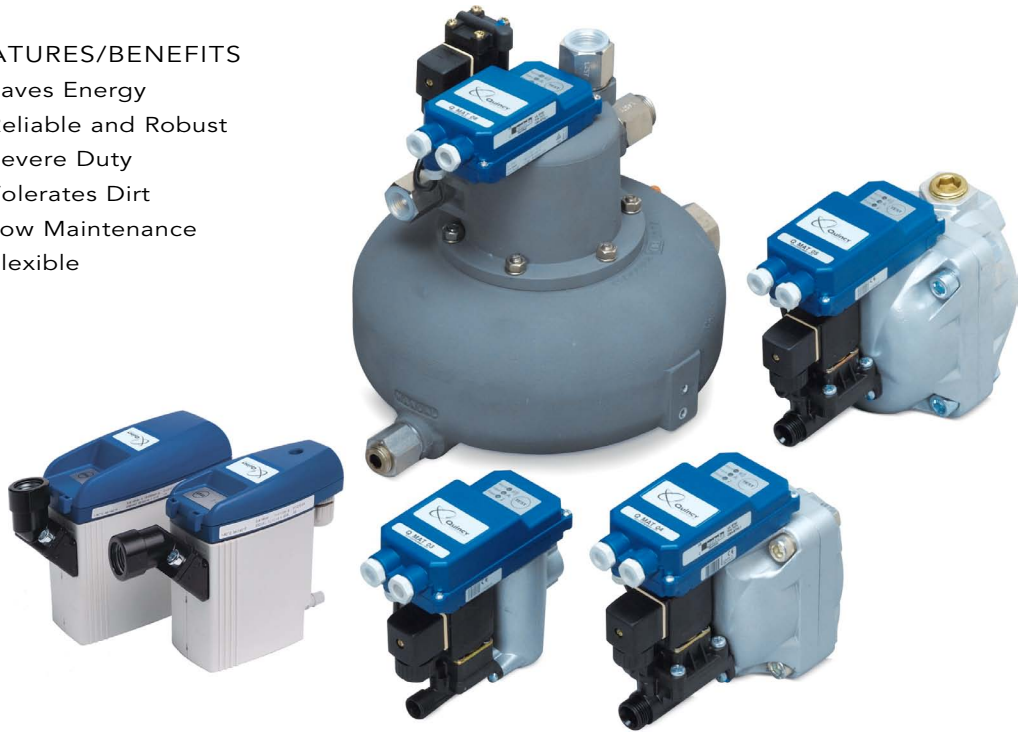
## QUINCY CONDENSATE DRAINS



### 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

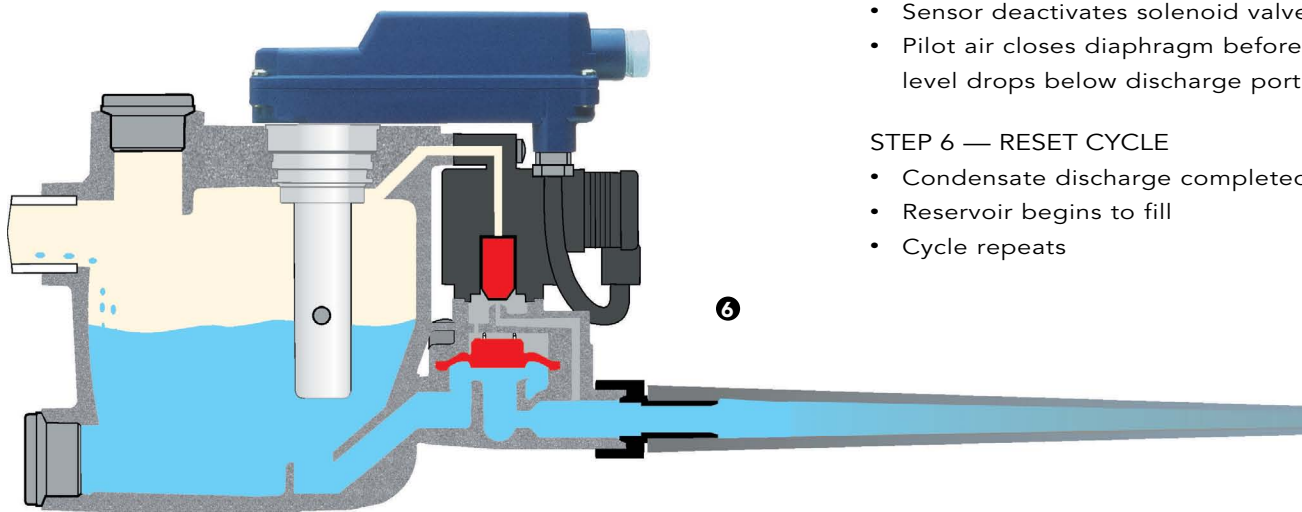
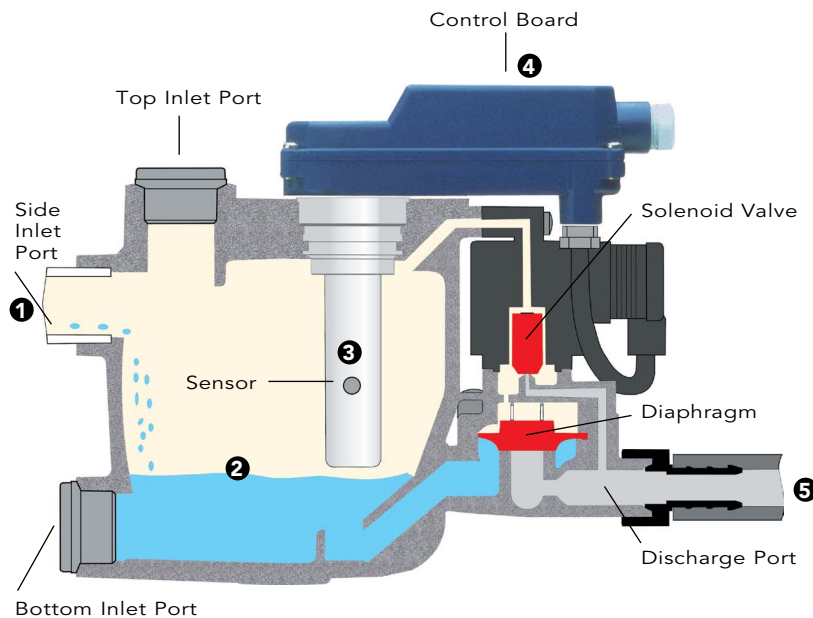
- Sensor signals control board
- Control board activates solenoid valve
- Solenoid valve stops pilot air flow to diaphragm
- Condensate pushes diaphragm open

### 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

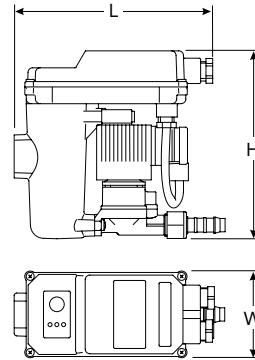
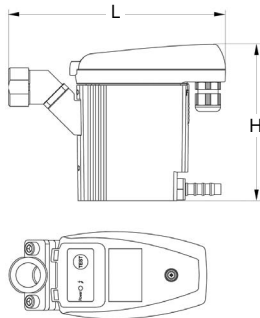


# QUINCY CONDENSATE DRAINS

## QMAT SPECIFICATIONS & ENGINEERING DATA

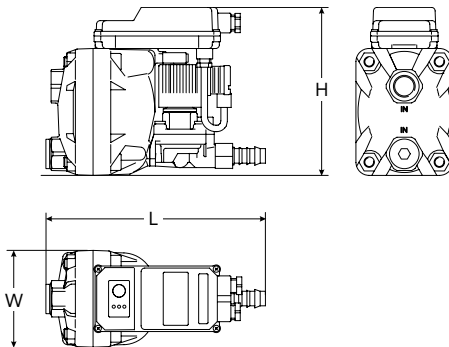
| Model                | Pressure Rating | Max. Temp. °F | Aftercooler cfm | Capacity Dryer cfm | Filter cfm | Dimensions |       |       | Approx. Wt. lbs. | Air Inlet Connection |
|----------------------|-----------------|---------------|-----------------|--------------------|------------|------------|-------|-------|------------------|----------------------|
|                      |                 |               |                 |                    |            | 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           | 270             | 540                | 2,700      | 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

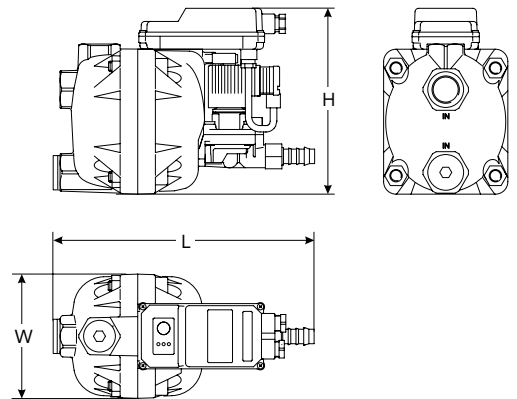


QMAT 03

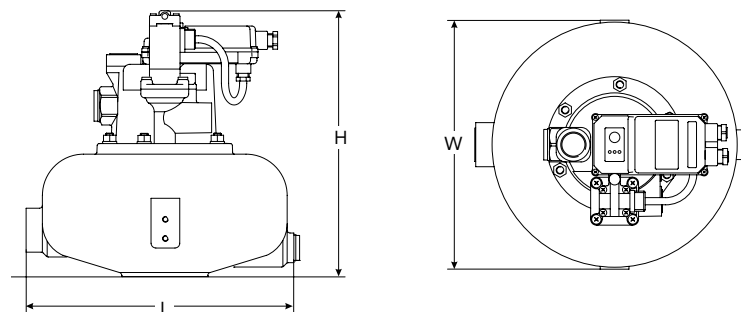
QMAT 04



QMAT 05



QMAT 06



## THE QUINCY PROMISE

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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

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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.

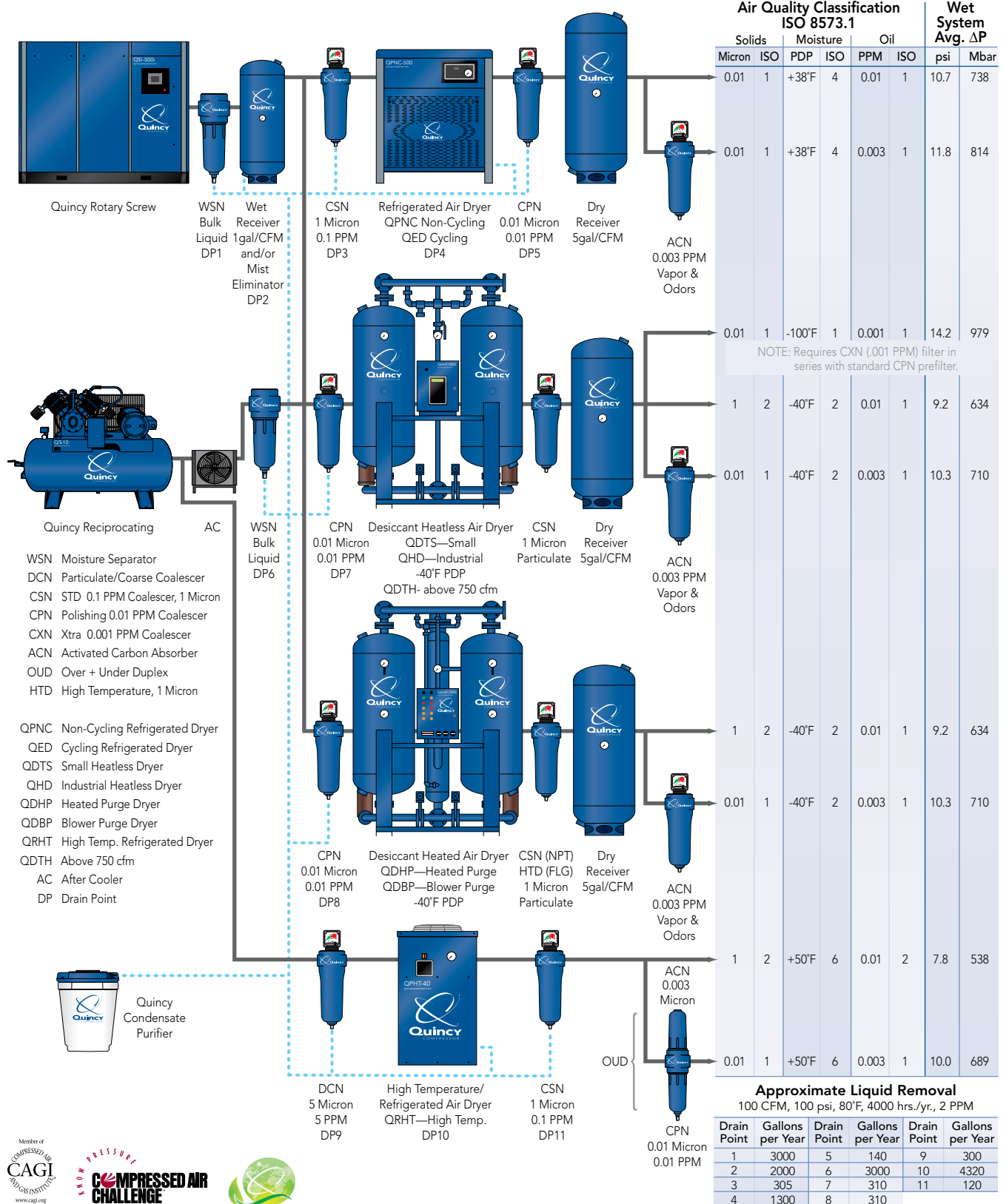
### Genuine Parts

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



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