



QUINCY QGS | QGDV | QGD | QGDP SERIES
Rotary Screw Air Compressors 4-355kW

QUINCY Air Treatment
Refrigerated Dryers | Filters



Quality Comes in All Shapes and Sizes— But Just One Color



THE SCIENCE OF COMPRESSED AIR

Quincy air compressors - The more competitive technology in the world

- Superior Energy Savings Capability
- Reliability
- Quiet Operation
- Able To Satisfy Customer's Most Demanding Air Requirements

QUINCY'S COMMITMENT TO COST EFFICIENCY

Since 1920, Quincy Compressor has continuously strived to provide customers with a cost efficient advantage. The new range of Quincy compressors is representative of our promise to deliver a product that enhances efficiency and productivity. Advanced research, refined production technology and cutting edge design philosophies led Quincy Compressor to become the partner of choice in various industries while adding value to customers business.

HIGHER COST-BENEFIT RATIO

The Quincy product line has been engineered to provide the highest possible return on your investment. The most effective components were selected, and then carefully matched to ensure each component is harmoniously operating at its optimum performance. The result is a cost-effective and efficient air compressor system with low cost of ownership and longer service life. The performance you require - without the high price tag.

QUIET OPERATION

Quincy product is aesthetically designed for the global market. With an integrated one-piece baseplate, installation is simple and convenient. The fan cooling system is quiet and efficient. A totally enclosed design using purpose-suited sound absorption material decreases operating sound levels to the lowest level.

Optimized system design fully considers air circulation within the enclosure and the temperature distribution, hence, effectively controlling the temperature rise within the enclosure.



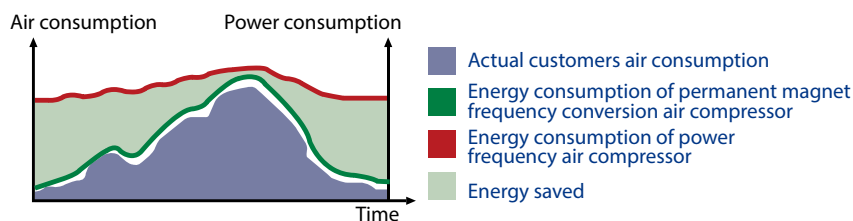
NASA Partner

"...we are very satisfied with the performance and reliability of Quincy air compressors. These units are highly efficient and deliver the clean, dry air essential for Space Shuttle launch support."

Ronald L. Dorff
Supervisor, Pneumatic System
Lockheed Space Operation Company
Quincy Compressor—compressed air supplier of NASA

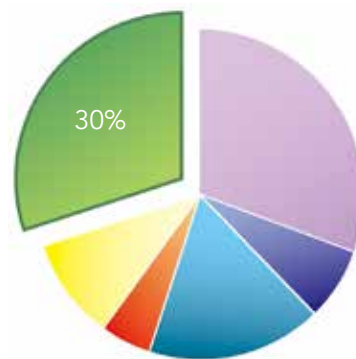
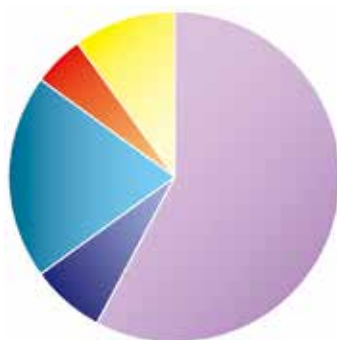
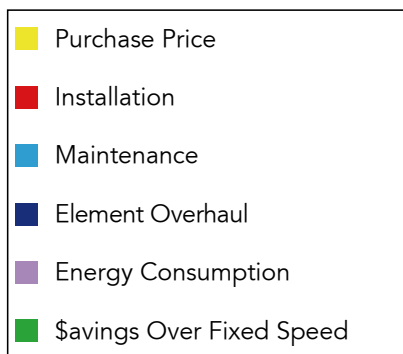
PERMANENT MAGNET FREQUENCY CONVERSION, ENERGY SAVING AND ENVIRONMENTAL PROTECTION

Quincy QGDV series permanent magnet frequency conversion air compressor provides customers with lower total investment cost. A brand new element is more efficient and stable, ensuring lower energy consumption during operation of compressor. The maximum design capacity adjustment of efficient permanent magnet synchronous motor is up to 80%. The motor is also able to accurately control air flow with the help of efficient frequency converter for meeting system load requirements in different environments. It also provides stable pressure and air supply, remarkably reducing energy consumption of the air compressor, with energy savings of 30% or more on average and reducing operating costs.



Fixed Speed Air Compressor

QGDV Permanent Magnet Frequency Conversion Air Compressor



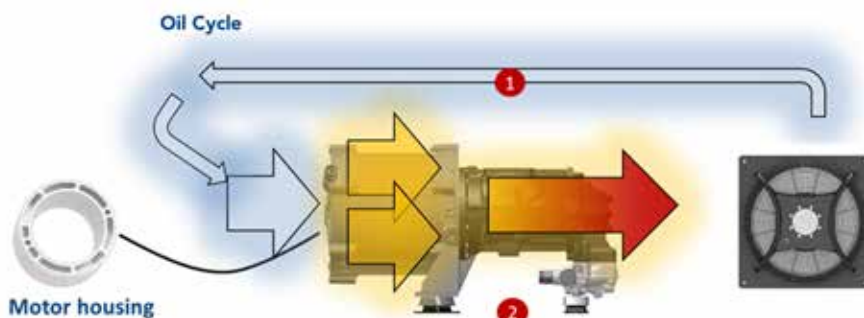
Analysis of 10-Year Investment, Operation and Compressor Maintenance Cost

EFFICIENT AND RELIABLE PERMANENT MAGNET MOTOR

Efficient rare earth, permanent magnet synchronous motor; excellent efficiency; unique split design of main engine and motor; more stable, more mature and more convenient full variable-speed system.

Principle of oil cooling.

- Cooled oil flows inside the passage of motor housing, take away the heat from the motor
- The oil from the motor flows to air end to take away the compression heat and then flows to oil cooling, dissipates the heat to ambient



Quincy QGS4-37KW TECHNICAL DATA

| Model | Motor Power | FAD (m³/min) | | | Noise | Dimension (L×W×H) | Weight | Tank |
|--------------|-------------|--------------|------|-------|-------|----------------------|--------|------|
| | kW | 7bar | 8bar | 10bar | dB(A) | (mm) | (kg) | (L) |
| QGS4 | 4 | - | 0.58 | 0.51 | 63±2 | 650×650×890 | 152 | - |
| QGS4TM | 4 | - | 0.58 | 0.51 | 63±2 | 1547×772×1473 | 296 | 270 |
| QGS4TM DD | 4 | - | 0.58 | 0.51 | 63±2 | 1547×772×1473 | 316 | 270 |
| QGS5.5 | 5.5 | - | 0.82 | 0.68 | 63±2 | 650×650×890 | 166 | - |
| QGS5.5TM | 5.5 | - | 0.82 | 0.68 | 63±2 | 1547×772×1473 | 304 | 270 |
| QGS5.5TM DD | 5.5 | - | 0.82 | 0.68 | 63±2 | 1547×772×1473 | 330 | 270 |
| QGS7.5TM | 7.5 | - | 1.13 | 0.90 | 63±2 | 1547×772×1473 | 319 | 270 |
| QGS7.5TM DD | 7.5 | - | 1.13 | 0.90 | 63±2 | 1547×772×1473 | 368 | 270 |
| QGS11 | 11 | 1.79 | 1.78 | 1.36 | 65±2 | 850×790×1260 | 293 | - |
| QGS11TM | 11 | 1.79 | 1.78 | 1.36 | 65±2 | 1520×790×1775 | 380 | 270 |
| QGS11TM DD | 11 | 1.79 | 1.78 | 1.36 | 65±2 | 1537×790×1784 | 430 | 270 |
| QGS15 | 15 | 2.25 | 2.24 | 2.00 | 67±2 | 850×790×1260 | 341 | - |
| QGS15TM | 15 | 2.25 | 2.24 | 2.00 | 67±2 | 1520×790×1775 | 428 | 270 |
| QGS15TM DD | 15 | 2.25 | 2.24 | 2.00 | 67±2 | 1565×790×1784 | 541 | 270 |
| QGS18.5 | 18.5 | 3.04 | 3.01 | 2.57 | 68±2 | 850×790×1260 | 364 | - |
| QGS18.5TM | 18.5 | 3.04 | 3.01 | 2.57 | 68±2 | 1520×790×1775 | 451 | 270 |
| QGS18.5TM DD | 18.5 | 3.04 | 3.01 | 2.57 | 68±2 | 1565×790×1784 | 564 | 270 |
| QGS22 | 22 | 3.65 | 3.48 | 2.99 | 68±2 | 1150×850×1000 | 436 | - |
| QGS30 | 30 | 5.36 | 5.00 | 4.45 | 69±2 | 1430×950×1200 | 559 | - |
| QGS37 | 37 | 6.20 | 6.10 | 5.10 | 69±2 | 1430×950×1200 | 614 | - |

Note: 1. FAD test in accordance with ISO 1217 (Annex C)

2. TM unit integrated tank, TMDD unit integrated tank, dryer and filters

QUINCY QGS - PRODUCT FEATURES

- Compact design, small footprint, ease of installation
- QGS11-18.5 with belt drive, QGS22-37 with gear drive
- Quiet operation, better working environment
- Wye-delta starter reduces Peak Demand Charges (QGS11-37kW)
- IP 55 TEFC nitirm, Class F insulation, 380/50HZ
- Ease of maintenance, minimized downtime to reduce service cost
- Oversized coolers, High efficiency heat exchangers ensure reliable operation in ambient temperatures up to 46°C
- Total system protection for peace of mind with remote monitoring



INTELLIGENT CONTROL

EASY OPERATION

- Industrial intelligent control provides reliable operation under the harshest conditions
- LCD display, user-friendly interface and ease of operation

ENERGY SAVING

- In the auto-dual mode, the compressor automatically changes control mode according to system demand
- Wye-delta starter reduces current peak

INTELLIGENT CONTROL

- A standardized system component that is simple to connect to the plant's existing network

POWERFUL CONTROL CAPABILITY

Each unit has an excellent compressor controller and energy management system. It continuously monitors the QGF's operation and provides the following information:

- Operating temperature & pressure
- Motor current display
- Operating mode
- Maintenance information
 - Continuous operation mode
 - Service time reminders
 - Auto-dual
 - Total running hours & loaded hours
 - Network

INDUSTRIAL INTELLIGENT CONTROLLER

- Industrial PLC offers reliable control platform
- Multiple control modes for greater efficiency and reliability
- Networking multiple units is simple and system can be easily expanded

ROTAIR LUBRICATING OIL

ROTAIR series is high quality lubricating oil specifically manufactured for screw compressors. ROTAIR PLUS high quality mineral oil has a 4000-hour oil change period.

Through rigorous test and certification, the optimized performance of ROTAIR PLUS lubricating oil can be used in various working environments and is able to improve efficiency of the unit, reduce maintenance cost, prolong service life and provide all-around value-added service to customers.



Quincy QGDV7.5-160kW TECHNICAL DATA

| Model | Motor Power | FAD (m³/min) | | | | Noise | Dimension(mm) L×W×H | Weight Air/Water cooling |
|-----------|-------------|--------------|-------------|-------------|-------------|-------|------------------------|-----------------------------|
| | kW | 7bar | 8bar | 10bar | 13bar | dB(A) | Air/Water cooling | kg |
| QGDV 7.5 | 7.5 | 0.30 ~ 1.20 | 0.30 ~ 1.13 | 0.30 ~ 0.98 | 0.30 ~ 0.78 | 66±2 | 1100×850×1080 | 230 |
| QGDV 11 | 11 | 0.45 ~ 1.81 | 0.42 ~ 1.68 | 0.45 ~ 1.49 | 0.52 ~ 1.26 | 66±2 | 1100×850×1080 | 231 |
| QGDV 15 | 15 | 0.46 ~ 2.18 | 0.46 ~ 2.05 | 0.46 ~ 1.86 | 0.55 ~ 1.59 | 66±2 | 1100×850×1080 | 241 |
| QGDV 18.5 | 18.5 | 0.70 ~ 3.41 | 0.70 ~ 3.28 | 0.70 ~ 2.86 | 1.09 ~ 2.50 | 71±2 | 1250×950×1180 | 313 |
| QGDV 22 | 22 | 0.93 ~ 3.84 | 0.91 ~ 3.7 | 0.85 ~ 3.45 | 0.72 ~ 2.87 | 71±2 | 1250×950×1180 | 321 |
| QGDV 30 | 30 | 1.42 ~ 5.65 | 1.39 ~ 5.3 | 1.39 ~ 4.83 | 1.35 ~ 4.01 | 72±2 | 1330×950×1220 | 412 |
| QGDV 37 | 37 | 1.90 ~ 6.44 | 1.91 ~ 6.2 | 1.92 ~ 5.69 | 1.92 ~ 4.9 | 72±2 | 1330×950×1220 | 413 |
| QGDV 45 | 45 | 1.6 ~ 8.6 | 1.6 ~ 8.1 | 1.6 ~ 7.5 | 2.3 ~ 6.1 | 73±2 | 1723×980×1600 | 733 |
| QGDV 55 | 55 | 2.7 ~ 11.4 | 2.7 ~ 10.9 | 2.4 ~ 9.8 | 2.4 ~ 8.3 | 73 | 1925×1267×2000 | 890 |
| QGDV 75 | 75 | 3.2 ~ 13.1 | 3.2 ~ 12.9 | 2.6 ~ 11.2 | 2.6 ~ 9.9 | 75 | 1925×1267×2000 | 910 |
| QGDV 75+ | 75 | 3.5 ~ 15.3 | 3.5 ~ 14.3 | 2.9 ~ 13.0 | 2.9 ~ 11.2 | 75 | 1925×1267×2000 | 1120 |
| QGDV 90 | 90 | 4.2 ~ 18.0 | 4.2 ~ 17.2 | 3.3 ~ 15.4 | 3.3 ~ 13.4 | 75 | 1925×1267×2000 | 1135 |
| QGDV 110 | 110 | 6.0 ~ 23.3 | 6.0 ~ 21.8 | 5.9 ~ 19.2 | - | 76±2 | 2880×1754×1930 | 2370/2270 |
| QGDV 132 | 132 | 6.0 ~ 27.3 | 6.0 ~ 25.7 | 5.9 ~ 22.8 | - | 76±2 | 2880×1754×1930 | 2420/2310 |
| QGDV 160 | 160 | 5.8 ~ 33.0 | 5.9 ~ 31.2 | 5.8 ~ 28.2 | - | 78±2 | 3602×2104×2020 | 3260/3050 |

Note: FAD test in accordance with ISO 1217 (Annex C)

STANDARD QUALITY FEATURES DELIVER VALUABLE BENEFITS

- Heavy-duty steel-based frame, totally enclosed, low sound acoustical enclosure
- Standard permanent magnet motor .IP54 & IE4 (7.5-22KW), IP66 & IE4 (30-75KW), IP66 & IE5 (75+~160KW)
- Newly designed oil cooling system;
- High efficiency converter
- Positive closure inlet valve
- Siemens / Schneider electric components
- Full flow spin-on oil filter
- Q-Controller intelligent control system
- High efficiency water separator(110-160kW)

PROTECTIVE DEVICES

- Emergency stop button
- Fault alarm shutdown
- High pressure relief valve

OPTIONS

- ECO network system
- Remote monitor system





1



Brand new, efficient airend comes with standard two-year warranty.

2



Positive closure inlet valve eliminates current peak penalties during stand up.

3



IE4 & IE5 super high-efficiency oil cooled permanent magnet motor use, less influence from the ambient temperature for motor cooling

4



The specially designed converter for compressor constant torque. Self-adjustment control according to the pressure fluctuation.

5



Q-Controller intelligent control provides a rugged and reliable platform.

6



The finned efficient cooler with a separated fan ensures reliable operation in ambient temperatures as high as 46°C



Quincy QGS/QGD45-355kW TECHNICAL DATA

| Model | Motor Power | FAD (m³/min) | | | | Noise | Dimension(mm) L×W×H | Weight(kg) |
|---------|-------------|--------------|------|-------|-------|-------|--|---|
| | kW | 7bar | 8bar | 10bar | 13bar | dB(A) | Air/Water cooling | Air/Water cooling |
| QGS45 | 45 | 8.4 | 8.0 | 7.4 | -- | 69 | 1720×980×1600 | 870 |
| QGS55 | 55 | 10.5 | 10.0 | 8.8 | -- | 73 | 1925×1267×2000 | 1165 |
| QGS75 | 75 | 13.6 | 13.0 | 11.5 | -- | 75 | 1925×1267×2000 | 1355 |
| QGS90 | 90 | 17.0 | 16.0 | 14.3 | -- | 75 | 1925×1267×2000 | 1490 |
| QGD 110 | 110 | 21.2 | 20.0 | 17.1 | 14.3 | 74±2 | 2260/2365×1230×1600 | 1870 / 2400 |
| QGD 132 | 132 | 25.0 | 24.3 | 21.0 | 17.0 | 75±2 | 2260/2365×1230×1600 | 1920 / 2550 |
| QGD 160 | 160 | 30.5 | 29.2 | 26.9 | 22.5 | 76±2 | 2880×1754×1930 | 2970/2870 |
| QGD 180 | 180 | 32.9 | 31.2 | 29.1 | 25.5 | 76±2 | 2880×1754×1930 | 3150/3050 |
| QGD 200 | 200 | 36.8 | 34.4 | 31.3 | 28.7 | 79±2 | 380V: 3502/2902×1754×1980 6-10KV:3602×2104×2020 | 380V:3450/3240 6KV:3560/3350 10KV:4060/3850 |
| QGD 250 | 250 | 45.8 | 43.3 | 39.0 | 35.5 | 79±2 | 380V:3502/2902×1754×1980 6-10KV:3602×2104×2020 | 380V:3620/3410 6KV:3730/3520 10KV:4180/3970 |
| QGD 280 | 280 | 52.4 | 50 | 43.7 | 39.0 | 79±2 | 4800/3600×2150×2250 | 380V:5925/5490 6KV:6065/5630 10KV:6565/6130 |
| QGD 315 | 315 | 55.0 | 54.8 | 50.7 | 41.4 | 80±2 | 5100/3600×2150×2250 | 380V:6350/5730 6KV:6410/5790 10KV:7520/6900 |
| QGD 355 | 355 | 63.5 | 63.3 | 56.1 | 46.2 | 80±2 | 5100/3600×2150×2250 | 380V:6380/5760 6KV:6800/6180 10KV:7520/6900 |

Note: Capacity rated in accordance with GB3853 (Annex C to ISO 1217)

STANDARD QUALITY FEATURES DELIVER VALUABLE BENEFITS

- Heavy-duty steel-based frame, totally enclosed, low sound acoustical enclosure
- Positive closure inlet valve
- Siemens/Schneider electric components
- Full flow spin-on oil filter
- Direct driven, permanent shaft alignment
- Q-Controller intelligent control system
- 380V/3P/50Hz IP55/IE3 motor (QGD45-280)
- QuinSyn-Plus® long life synthetic compressor fluid
- water separator (≥160kW)

PROTECTIVE DEVICES

- Emergency stop button
- Fault alarm shutdown
- High pressure relief valve

OPTIONS

- ECO network system
- Remote monitor system
- Heavy-duty air inlet filter
- PLC Controller

Quincy QGD/QGDP30-250KW TECHNICAL DATA

| Model | Motor Power | FAD (m³/min) | | | | Noise | Dimension(mm) L×W×H | Weight(kg) |
|---------|-------------|--------------|------|-------|-------|-------|------------------------|--|
| | kW | 7bar | 8bar | 10bar | 13bar | dB(A) | Air/Water cooling | Air/Water cooling |
| QGD30P | 30 | 5.9 | 5.5 | 5.0 | 4.2 | 65±2 | 1720×980×1600 | 820 |
| QGD37P | 37 | 7.2 | 6.7 | 6.1 | 5.1 | 66±2 | 1720×980×1600 | 850 |
| QGD45P | 45 | 8.4 | 8.4 | 7.8 | 6.2 | 66±2 | 1720×980×1600 | 910 |
| QGD55 | 55 | 11.2 | 10.6 | 9.2 | 8.2 | 73 | 1925×1267×2000 | 1175 |
| QGD75 | 75 | 14.9 | 14.1 | 12.3 | 10.6 | 75 | 1925×1267×2000 | 1365 |
| QGD110P | 110 | 22.4 | 20.4 | 18.9 | 15.5 | 76±2 | 2880×1754×1930 | 3140/3040 |
| QGD132P | 132 | 26.3 | 25.0 | 22.9 | 19.0 | 76±2 | 2880×1754×1930 | 3230/3130 |
| QGD160P | 160 | 31.2 | 29.3 | 27.0 | 22.5 | 78±2 | 3502/2902×1754×1980 | 3640/3430 |
| QGD200P | 200 | 40.4 | 38.0 | 34.5 | - | 78±2 | 4800/3600×2150×2250 | 380V: 5325/4890 6KV: 6015/5580 10KV: 6245/5810 |
| QGD250P | 250 | 48.1 | 45 | 40.8 | - | 79±2 | 4800/3600×2150×2250 | 380V: 5925/5490 6KV: 6060/5625 10KV: 6475/6040 |

Note: Capacity rated in accordance with GB3853 (Annex C to ISO 1217)

STANDARD QUALITY FEATURES DELIVER VALUABLE BENEFITS

Enhanced version of the QGD series, greater airend, lower speed, high efficiency

- Heavy-duty steel-based frame, totally enclosed, low sound acoustical enclosure
- Positive closure inlet valve
- Siemens / Schneider electric components
- Full flow spin-on oil filter
- Direct driven, permanent shaft alignment
- Q-Controller intelligent control system
- MAM6090 Controller (QGD30-37P)
- Standard IE3 motor (30-75kw)
- Standard IE4 motor (110-160kw)
- Centrifugal fan (30-45kW)
- High efficiency water separator(110-250kW)

PROTECTIVE DEVICES

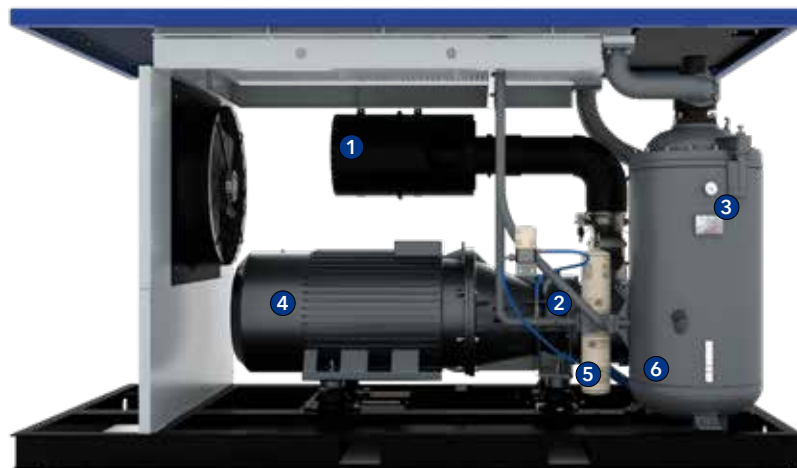
- Emergency stop button
- Fault alarm shutdown
- High pressure relief valve

OPTIONS

- ECO network system
- Remote monitor system
- PLC Controller



Quincy QGD/QGDP Series



1



Air inlet filter with low pressure drop effectively reduces air suction noise level. The filtration efficiency is 99% at $3\mu\text{m}$.

2



Brand new efficient airend comes with standard two-year warranty.

3



QuinSyn complete line of synthetic fluids for effective cooling. QuinSyn fluids have a rated life fo up to 8000 hours.

4



Rugged motor, Standard IP54/IP55, the optimized air circulation and temperature field distribution within the enclosure ensure the motor receives sufficient cooling.

5



Quincy high efficiency microfiber fluid filter provides absolute airend protection. The specially design for easy maintenance.

6



Specially designed fluid/air separator element ensures oil carryover ≤ 3 ppm.



Q-controller INTELLIGENT CONTROL (STANDARD)

The Quincy compressor series comes with an Q-controller intelligent control system. It is a control platform you can trust to provide reliable operation under the harshest of industrial ambient conditions. The Q-controller intelligent control comes with an touch screen, has a user-friendly interface and is easy to operate.

The Q-controller intelligent control provides different capacity control mode options for higher efficiency: local control, remote control and network control.

In the local control mode, when the pressure rises above the full load pressure setting, the compressor starts to modulate in response to unload and a shutdown timer will start. If there is no system demand for a preset waiting period, the compressor will shut down the main drive motor and, on aircooled units, the fan motor. The compressor goes into a "stand-by" mode to conserve energy and continues to monitor system pressure. As soon as the system pressure drops, the controls will react by restarting the compressor. In the remote control mode, the compressor will be allowed to start and/or stop by remote monitor. Network mode can operate up to 6 units of QGD in a single network. Each compressor is working in the standard local control mode and coordinating with one another to satisfy system demand according to load requirements. Each compressor starts/ stops, hence entering or leaving the network sequentially according to its preset network ID.

Q-controller intelligent control provides a powerful and comprehensive control capability and is your full time preventive maintenance, compressed air and energy manager for your production facility:

- Logic control of dryer is possible
- Multiple machine network control ID assigned
- Wye-Delta reduced voltage starter
- Total running and loaded hours of operation display
- Compressor capacity control options
- Operating pressure and temperature display
- System date and time display
- Auto restart with programmed time delay
- Fault alarm displays
- Fault alarm log registers timings and errors
- Time to service programmed and display
- Local control with shutdown timer and programmed shutdown
- Operating and alarm parameters specified and password protected

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. Reliability is about confidence, performance, and trust – every day.

QuinSyn® FLUIDS

Quincy's complete line of synthetic fluids are blended specifically for Quincy's rotary screw compressors. Quincy offers the following fluids as factory fill.

QuinSyn-Plus® is a blended PAO/Ester fluid that is highly varnish resistant and is completely demulsified with water. QuinSyn-Plus has excellent natural lubricity and has a low carry-over rate. QuinSynplus is a standard factory fill fluid and offers the following benefits:

- Varnish-free operation
- High viscosity index
- Excellent corrosion protection
- Water holding capability
- Efficient cooling



QUINCY AIR TREATMENT

TOP AIR QUALITY FOR HIGH-END EQUIPMENT AND PROCESSES

Dry quality air prolongs the life of process equipment and provides superior production quality, a compact high efficient device to meet continuous air demand.

THE HIDDEN DANGER OF UNTREATED AIR

When the air that surrounds us is compressed, its vapour and particle concentration increases dramatically. The compression process causes the oil and water vapors to condense into droplets, and then mixes with a high concentration of particles. The resulting mixture is an abrasive oily sludge that in many cases is also acidic.

Without air treatment equipment, much of this corrosive sludge will enter the compressed air system, corroding the pipe work, damaging pneumatic tools and equipment as well as potentially compromising final product quality.

POOR AIR QUALITY COSTS YOU MONEY

If the corrosive sludge is allowed to enter the compressed air system, it will not be long before problems start to appear. These are some of the most common and most expensive problems:

- Tools and equipment break down more regularly, experience a shorter lifetime and reduced power
- The end product, or other materials that come into contact with the contaminated air, can suffer spoilage and quality degradation
- The compressed air pipe work will corrode, leading to leaks and a loss of valuable compressed air

As an example, a small leak of just 3 mm is roughly equivalent to wasting 3.7 kW of electricity in a year.

NO INSTALLATION IS COMPLETE WITHOUT FILTRATION

Adding filtration to the installation will further increase the quality of the air, resulting in even less chance that tools and machines will be damaged and final product quality compromised.

The prefilter will protect the dryer, and also remove free water, particles to 1 micron and oil to 0.1 mg/m³.

The final filter removes particles to 0.01 micron and oil to 0.01mg/m³.



REFRIGERATED DRYER

QPN 15~225 REFRIGERATED DRYERS FEATURE

Drier Compressed Air

- High efficiency plate-fin exchanger, the temperature between air inlet and outlet keeps down to 5°C
- High efficiency water separation
- Relative humidity of compressed air outlet remains down to 10%

Energy-Saving

- In comparison with same capacity dryer using shell-pipe exchanger, energy consumption can be reduced to 50%
- Optimized refrigeration system
- High efficiency R134a and R410A environment-friendly, fluorine-free refrigerant

More Reliable

- Industrial import Mitsubishi/Danfoss refrigerating compressor
- Digital monitor, which integrates dew point display and failure alarm
- Optimized pipe design, only 4 artificial welding spots
- All dryers pass a 3 step leakage test for compressed air, helium gas and refrigerant
- Electrical drain valve
- Heat bypass valve insures the performance during low working load

Pressure
Dewpoint
3-7°C



QPN 15~225 REFRIGERATED DRYERS TECHNICAL DATA

| Model | Capacity | Refrigerant | Power | Electrical Supply | Dimensions (L×W×H) | | | Weight | Connections Size |
|---------|---------------------|-------------|-------|-------------------|--------------------|-----|------|--------|------------------|
| | m ³ /min | | W | V/Ph/Hz | mm | | | kg | |
| QPN 15 | 1.5 | R134a | 360 | 230/1/50 | 550 | 370 | 800 | 32 | G1" |
| QPN 21 | 2.1 | R134a | 364 | 230/1/50 | 550 | 370 | 800 | 36 | G1" |
| QPN 35 | 3.5 | R410A | 951 | 230/1/50 | 520 | 500 | 800 | 60 | G1.5" |
| QPN 45 | 4.5 | R410A | 988 | 230/1/50 | 550 | 600 | 980 | 68 | G1.5" |
| QPN 60 | 6.0 | R410A | 1000 | 230/1/50 | 550 | 600 | 980 | 75 | G2" |
| QPN 75 | 7.5 | R410A | 1125 | 230/1/50 | 550 | 600 | 980 | 85 | G2" |
| QPN 90 | 9.0 | R410A | 1674 | 230/1/50 | 900 | 750 | 1000 | 120 | G2" |
| QPN 115 | 11.5 | R410A | 1700 | 230/1/50 | 1025 | 660 | 1120 | 130 | G2.5" |
| QPN 150 | 15.0 | R410A | 1900 | 230/1/50 | 1025 | 660 | 1120 | 135 | G2.5" |
| QPN 175 | 17.5 | R410A | 2220 | 230/1/50 | 1025 | 660 | 1120 | 150 | G2.5" |
| QPN 225 | 22.5 | R410A | 2610 | 230/1/50 | 1025 | 660 | 1120 | 155 | G2.5" |

Reference conditions:

-working pressure: 7bar -inlet temperature: 40°C -ambient temperature: 30°C

| Inlet Air Pressure Correction | | | | | |
|-------------------------------|------|---|------|------|------|
| bar | 6 | 7 | 8 | 10 | 13 |
| K1 | 0.96 | 1 | 1.03 | 1.08 | 1.13 |

| Inlet Air Temperature Correction | | | | | | | |
|----------------------------------|----|----|----|------|------|------|------|
| °C | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| K2 | 1 | 1 | 1 | 0.82 | 0.69 | 0.58 | 0.49 |

| Ambient Temperature Correction | | | | |
|--------------------------------|----|------|------|------|
| °C | 30 | 35 | 40 | 45 |
| K3 | 1 | 0.91 | 0.81 | 0.72 |

| Pressure Dew Point Correction | | | |
|-------------------------------|-----|---|-----|
| °C | 3 | 7 | 10 |
| K4 | 0.8 | 1 | 1.1 |

| Calculations | |
|---------------------------------------|--|
| Dryer required m ³ /min | = $\frac{\text{Actual required m}^3/\text{min}}{(K1) \times (K2) \times (K3) \times (K4)}$ |

REFRIGERATED DRYERS

QPN 250~1000 REFRIGERATED DRYERS FEATURE

Reliable

- Adjust working load automatically
- High quality parts
- High efficient refrigerated control system

Excellent Performance

- Large redundancy
- Stable and excellent dew point
- 100% of units pass performance test before shipping

Environment-Friendly

- New environment-friendly refrigerant
- High refrigeration efficiency

Easy Installation

- Plug and play
- Single electrical interface
- All parts pass test

Easy Maintenance

- Short maintenance time
- Long maintenance interval
- Seldom change parts

High Efficiency and Energy Saving

- Improve the lifetime and reliability of pneumatic tools and equipment
- Less pipe leakage, less energy consumption
- Reduce the maintenance times on pneumatic tools, equipment and pipes
- Reduce maintenance stop times
- Minimizes the possibility of moisture impact on the end product quality

QPN 250~1000 REFRIGERATED DRYERS TECHNICAL DATA

| Model | Capacity | Refrigerant | Power | Electrical Supply | Dimension (L×W×H) | | | Weight | Connections |
|----------|---------------------|-------------|-------|-------------------|-------------------|------|------|--------|-------------|
| | m ³ /min | | W | V/Ph/Hz | (mm) | | | kg | Size |
| QPN 250 | 25 | R410a | 2.95 | 230/1/50 | 1025 | 660 | 1120 | 180 | G2.5" |
| QPN 350 | 35 | R410a | 4.60 | 380/3/50 | 1133 | 1000 | 1700 | 325 | DN100 |
| QPN 450 | 45 | R410a | 4.20 | 380/3/50 | 1133 | 1000 | 1700 | 350 | DN100 |
| QPN 500 | 50 | R410a | 5.43 | 380/3/50 | 1133 | 1000 | 1700 | 350 | DN100 |
| QPN 600 | 60 | R410a | 7.87 | 380/3/50 | 1644 | 1000 | 1883 | 550 | DN150 |
| QPN 750 | 75 | R410a | 8.77 | 380/3/50 | 1644 | 1000 | 1883 | 600 | DN150 |
| QPN 1000 | 100 | R407c | 14.40 | 380/3/50 | 2100 | 1150 | 1900 | 700 | DN150 |

| Inlet Air Pressure Correction | | | | |
|-------------------------------|------|---|------|------|
| bar | 6 | 7 | 8 | 10 |
| K1 | 0.96 | 1 | 1.03 | 1.08 |

| Inlet Air Temperature Correction | | | | | | |
|----------------------------------|----|----|----|------|------|------|
| °C | 25 | 30 | 35 | 40 | 45 | 50 |
| K2 | 1 | 1 | 1 | 0.82 | 0.69 | 0.58 |

| Ambient Temperature Correction | | | | |
|--------------------------------|----|------|------|------|
| °C | 30 | 35 | 40 | 45 |
| K3 | 1 | 0.91 | 0.81 | 0.72 |

| Pressure Dew Point Correction | | | |
|-------------------------------|-----|---|-----|
| °C | 3 | 7 | 10 |
| K4 | 0.8 | 1 | 1.1 |

Reference conditions:
 - ambient temperature 30°C, inlet temperature 35°C
 - maximum pressure drop: less than 0.16 bar

| Calculations | |
|---|--|
| $\frac{\text{Dryer required}}{\text{m}^3/\text{min}}$ | $= \frac{\text{Actual required m}^3/\text{min}}{(K1) \times (K2) \times (K3) \times (K4)}$ |

Pressure
Dewpoint
3-7°C



FILTERS

COALESCER

In the coalescing process, liquid aerosols come in contact with fine glass micro-fibers and are agglomerated into increasingly larger droplets that are gravitationally drained away. The coalescing process occurs in three distinctly different ways, depending on the aerosol size. Coalescing of a liquid does not clog the filter, solid particles do. Our unique, vacuum formed, fiber matrix used for coalescing also forms a highly efficient and durable particulate filter.

PARTICULATE

Quincy Particulate Filter uses an interceptor element that is absolute rated to 3 micron. The interceptor element is a pleated, large surface area, high capacity, cellulose element with porosity matched to the coalescer for pre-filtering, or as an independent 3µm instrument-quality particulate filter. Quincy Particulate Filters are perfect for eliminating desiccant dust after air passes through a heatless regenerative compressed air dryer.

ADSORBER

Quincy Adsorber Filter is an ultra-fine grained, highly concentrated, activated carbon media filter used primarily for vapor and odor elimination. Adsorbers act as a final polishing filter to remove final traces of hydrocarbon contaminants

QPNF FILTER EFFICIENCY GRADE

| Grade | Filter Type | Oil Efficiency (ppm) | Partical Efficiency | Pressure Drop (bar) | Highest Ambient Temperature (°C) |
|-------|-------------|----------------------|---------------------|---------------------|----------------------------------|
| G | Coalescer | 0.1ppm | 99% | 0.12 | 66 |
| C | Coalescer | 0.01ppm | 99.90% | 0.14 | 66 |
| V | Adsorber | 0.003ppm | - | 0.16 | 35 |
| S | Particulate | - | 99.81% | 0.12 | 66 |
| D | Particulate | - | 99.97% | 0.14 | 66 |

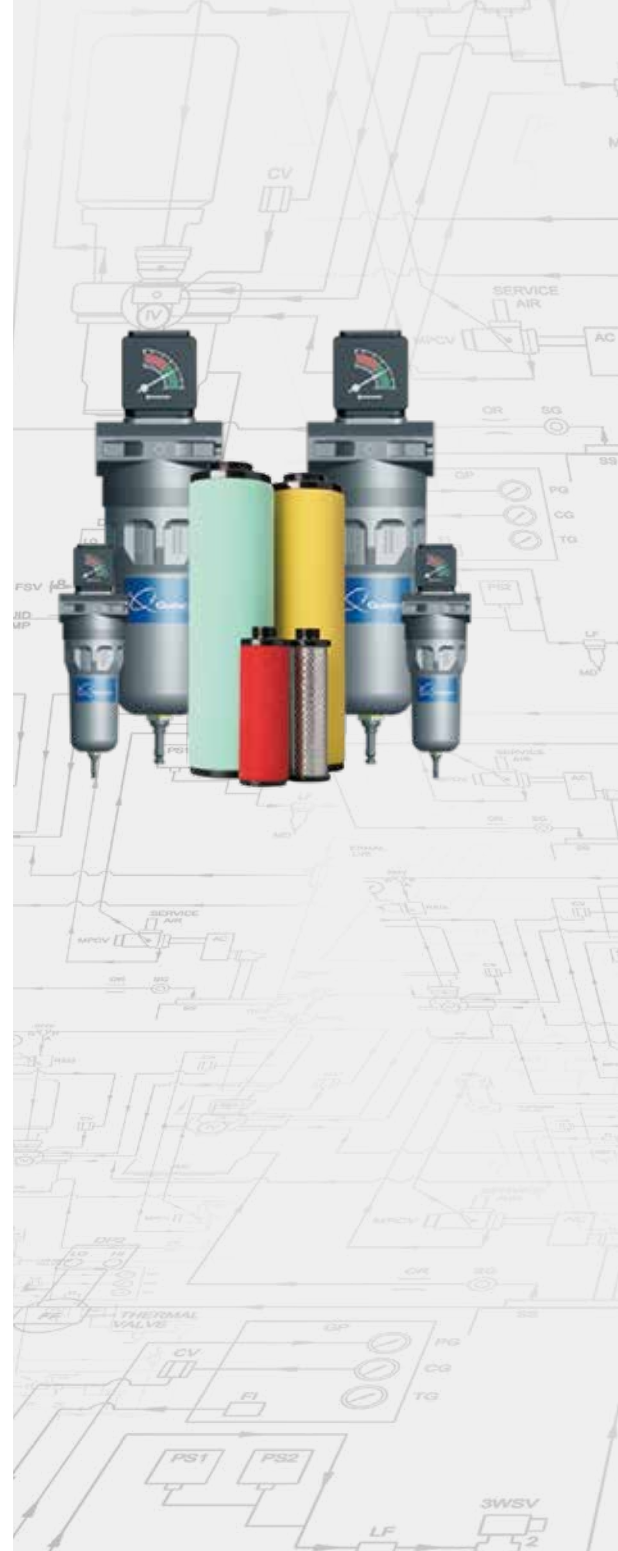
FILTER TECHNICAL DATA

| QPNF | Capacity(m³/min) | Connections | Package Size L x W x H (mm) | Weight(kg) |
|----------|------------------|-------------|-----------------------------|------------|
| QPNF 9 | 0.9 | 3/8" | 417 x 106 x 96 | 1 |
| QPNF 18 | 1.8 | 1/2" | 417 x 106 x 96 | 1.1 |
| QPNF 25 | 2.5 | 1/2" | 417 x 106 x 96 | 1.3 |
| QPNF 35 | 3.5 | 1" | 436 x 148 x 121 | 1.9 |
| QPNF 60 | 6.0 | 1" | 436 x 148 x 121 | 2.1 |
| QPNF 105 | 10.5 | 1 1/2" | 630 x 180 x 152 | 4.2 |
| QPNF 140 | 14.0 | 1 1/2" | 630 x 180 x 152 | 4.5 |
| QPNF 175 | 17.5 | 1 1/2" | 630 x 180 x 152 | 4.6 |
| QPNF 260 | 26.0 | 2" | 720 x 212 x 190 | 6.9 |
| QPNF 380 | 38.0 | 3" | 820 x 240 x 230 | 11 |
| QPNF 490 | 49.0 | 3" | 990 x 240 x 230 | 12.6 |

Note: G/C/S/D Filter equipped with differential pressure meter or indicator and automatic drain valve

Filter Correction at Different Working Pressures

| Pressure (bar) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 14 | 16 |
|----------------|------|------|------|------|------|------|---|------|-----|------|------|-----|
| Correction | 0.38 | 0.53 | 0.65 | 0.75 | 0.83 | 0.92 | 1 | 1.06 | 1.2 | 1.31 | 1.41 | 1.5 |





Performance You Demand. Reliability You Trust.™

See how Quincy Compressor can work for you:

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