Quincy COMPRESSOR

Performance You Demand. Reliability You Trust.

Quincy QGD/QGV

QUINCY QGD SERIES

Rotary Screw Air Compressors 45-355kW

QUINCY QGV SERIES

Variable Speed Rotary Screw Air Compressors 45-250kW

Quincy QGD 45-355kW / QGV 45-250kW

THE SCIENCE OF COMPRESSED AIR

Quincy QGD/QGV – The more competitive technology in the world

- Superior Energy Savings Capability
- High Reliability
- Quiet Operation
- Able To Satisfy Your Air Demand Requirements

QUINCY'S COMMITMENT TO EFFICIENT & COMPETITIVE INDUSTRY

Since 1920, Quincy Compressor has continuously strived to provide the industry with a competitive advantage. The new range of gear-driven Quincy QGD/QGV 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 have led Quincy Compressor to become the partner of choice of various industries adding value to their business.

QUIET OPERATION

The QGD/QGV series 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 lowers operating sound levels to the lowest.

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

HIGHER BENEFIT-COST RATIO

The QGD/QGV has been engineered to provide the higher possible return on your investment. The more effective components were selected, and then carefully matched to ensure each component is operating at its optimum and in harmony with one another. The result is a cost effective and efficient system with low ownership cost and longer design life possible. The performance you require - without the price tag - is easy when you know how.

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

$AVE ENERGY, $AVE COST

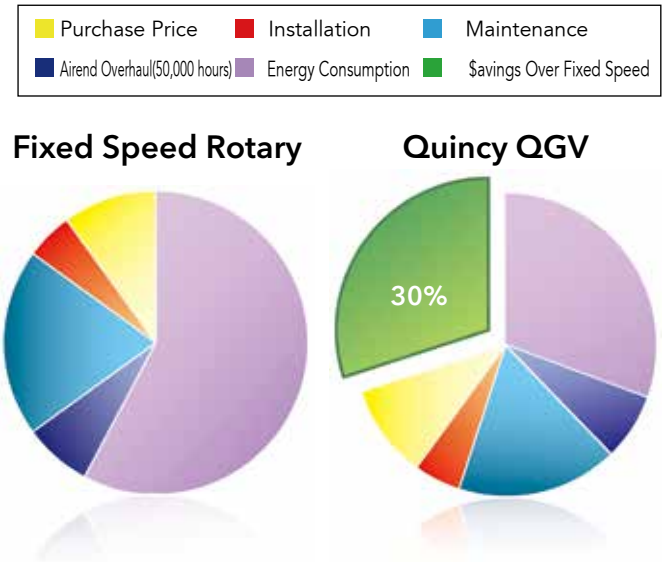
The Quincy QGV compressor family is engineered to deliver the lower Total Cost of Ownership (TCO) among compressors in their class. Variable Speed Drive operation, along with Quincy's efficient airend design, ensures that overall energy consumption is minimized.

Turndown capability as much as 80% ensures optimum efficiency, letting the QGV act as the trim compressor in all production conditions. Compressors can run with auto-dual control model or network model to provide the stable air demand.

DOWNSTREAM PRESSURE SIGNAL PROVIDES STABLE PRESSURE

System pressure has a major impact on energy consumption, and the QGV is designed to provide the more stable pressure available from a compressor. Quincy's downstream signal option allows the compressor to react immediately to pressure changes close to the point of use, eliminating the lag often created by air treatment equipment pressure drop.

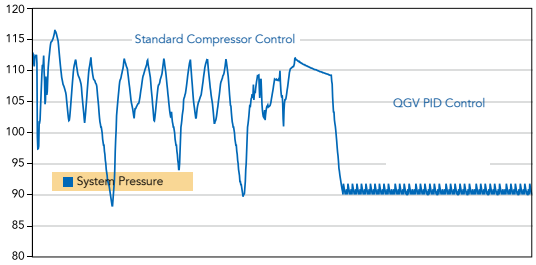
Typical Ten Year Life Cycle Cost



SOFT-START MODE ELIMINATES CURRENT PEAKS PENALTIES

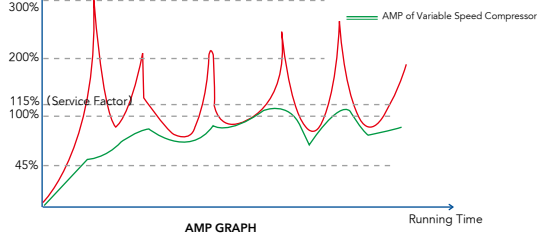
QGV's soft-start mode eliminates current peak penalties during starting and allows unlimited startstops. You also save on electrical installations-smaller breakers, fuses, transformers and cables.

PRESSURE GRAPH



LOW DEMAND MODE ELIMINATES UNLOADED POWER

The Quincy QGV Low Demand Mode allows the system pressure to rise above the setpoint prior to stopping the compressor when demand drops below its turndown capability. This prevents system pressure from dropping below acceptable levels, and the QGV never runs unloaded. Allowing the pressure to rise also allows other compressors in the network to be turned off when demand is low.



AMP GRAPH
(STANDARD COMPRESSOR VS VIRABLE SPEED COMPRESSOR)

Quincy QGD 45-355kW / QGV 45-250kW

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

The integrated fan design is efficient and reliable. The controller controls the start and stop of the fan according to the oil temperature, which reduces the energy consumption.

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

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

Air inlet filter with low pressure drop reduces air suction noise level effectively. The filtration efficiency of 3 μ m particles can reach 99.9%.

Quincy high efficiency glass microfiber fluid filter provides absolute airend protection.

Wye-Delta reduced voltage starter uses Schneider/Simens components.

Airlogic® intelligent control provides a rugged and reliable platform.

Efficient and reliable airend comes with standard two-year warranty. Flange connecting the motor and airend keeps permanent shaft alignment. 5-year warranty option for the airend provides a stronger quality guarantee.

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

Frequency convertor (QSV series) can realize vector continuously variable frequency. Wide FAD adjustment range from 20% to 100% is a higher efficiency energy saving design.

Quincy QGD 45-355kW / QGV 45-250kW

Airlogic® INTELLIGENT CONTROL(Standard)

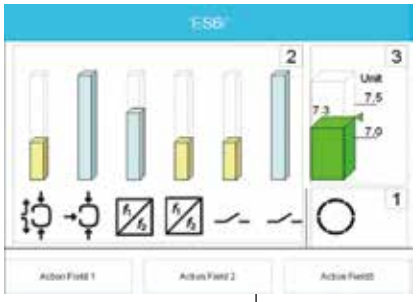
The Quincy QGD/QGV series comes with an Airlogic® intelligent control system. It is a control platform you can trust to provide reliable operation under the harshest of industrial ambient conditions. The Airlogic® intelligent control comes with an LCD display, has a user-friendly interface and is easy to operate.

The Airlogic® 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/QGV 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.

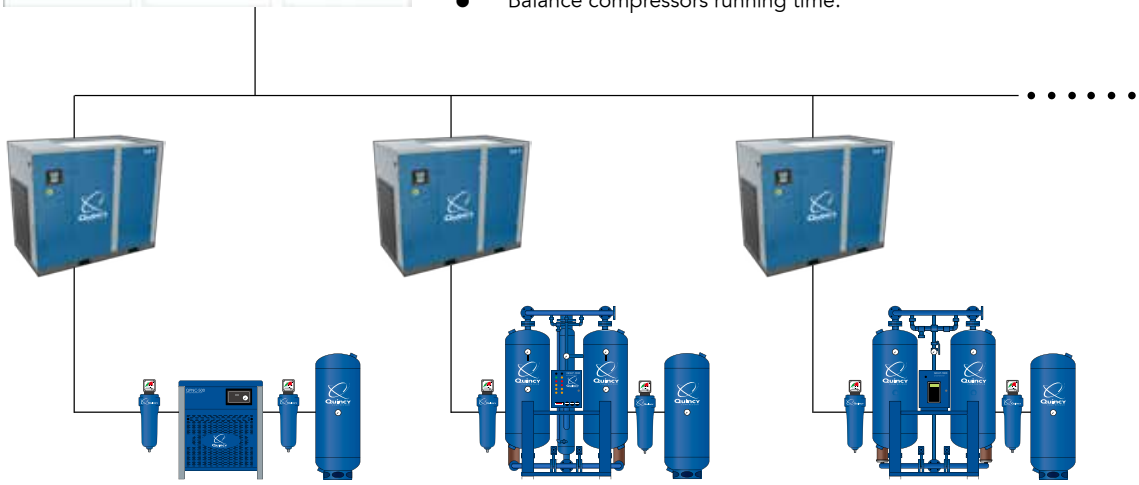
Airlogic® intelligent control provides a powerful and comprehensive control capability and is your full time preventive maintenance, compressed air and energy manager for your production facility:

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



ES NETWORK SYSTEM (OPTION)

- Monitor compressors data and working state.
- Auto restart or shutdown the compressor according to customer system demand. Save more energy.
- Balance compressors running time.



PLC INTELLIGENT CONTROL (OPTION)

The Quincy QGD/QGV series comes with a PLC intelligent control system. Using the SIEMENS S7 series industrial PLC, it is a control platform you can trust to provide reliable operation under the harshest of industrial ambient conditions. The PLC intelligent control comes with a LCD display, has a user-friendly interface and is easy to operate.

The PLC intelligent control provides different capacity control mode options for higher efficiency: auto-dual control, continuous run control and network control.

In the auto-dual mode, when the pressure rises above the full load pressure setting, the compressor starts to modulate in response to system demand. If pressure continues to rise above the unload pressure setting, the compressor unloads 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 air-cooled 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 continuous run mode, the compressor will load, unload and modulate according to system demand, but the compressor does not enter the "stand-by" mode and shut down. This control method prevents excessive restarting and extends the motor life in certain applications.

Network mode can operate up to 6 units of QGD in a single network. Each compressor is working in the standard auto-dual 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.

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

Standard industrial PLC means it is expandable and easy for compressors to communicate with your plant's network. The PLC control supports Profibus protocol and is able to communicate with your DCS system via the Profibus-DP communication module, hence integrating the compressor controls into your DCS system for remote monitoring.

Quincy QGD/QGV 45-90kW Technical Data

Model	Motor Power	Capacity(m^3/min)				Dimension(mm)			Noise	Weight
	kW	7bar	8bar	10bar	13bar	Length	Width	Height	dB(A)	kg
QGD 45	45	8.35	8.00	7.40	6.35	1720	980	1600	69±2	870
QGD 55	55	10.45	9.95	9.05	7.80	1950	1060	1600	72±2	1220
QGD 75	75	13.60	13.00	11.75	10.30	1950	1060	1600	73±2	1285
QGD 90	90	17.10	17.00	15.20	12.50	2260	1060	1600	73±2	1570
QGV 45	45	1.67-8.35	1.60-8.00	1.48-7.40	1.27-6.35	1720	980	1600	69±2	910
QGV 55	55	2.09-10.45	1.99-9.95	1.81-9.05	1.56-7.80	1950	1060	1600	72±2	1300
QGV 75	75	2.72-13.60	2.60-13.00	2.35-11.75	2.06-10.30	1950	1060	1600	73±2	1360
QGV 90	90	3.42-17.10	3.40-17.00	3.04-15.20	2.50-12.50	2260	1060	1600	73±2	1650

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
- AirLogic® intelligent control system
- 380V/3P/50Hz IP54 motor
- QuinSyn-Plus® long life synthetic compressor fluid
- Schneider high-efficiency converter

PROTECTIVE DEVICES

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

OPTIONS

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

Quincy QGD 45-355kW / QGV 45-250kW

Quincy QGD 110-355kW / QGV110-250kW Technical Data

Model	Motor Power	Capacity(m^3/min)				Dimension(mm) Air cooling / Water cooling			Noise	Weight (kg)
	kW	7bar	8bar	10bar	13bar	Length	Width	Height	dB(A)	Air / Water cooling
QGD 110	110	21.2	20.0	17.1	14.3	2260 / 2250	1230	1600	74±2	1870/--
QGD 132	132	25.0	24.3	21.0	17.0	2260 / 2250	1230	1600	75±2	1920/--
QGD 160	160	29.8	28.4	26.4	23.0	2845	1750	2100 / 1930	76±2	3350 / 3250
QGD 180	180	32.7	31.8	28.5	25.7	2845	1750	2100 / 1930	76±2	3410 / 3310
QGD 200	200	36.0	34.4	31.7	28.3	3500 / 2900	1750	1985	79±2	3850 / 3640
QGD 250	250	42.4	40.8	38.6	34.4	3500 / 2900	1750	1985	79±2	4050 / 3840
QGD 280	280	52.9	50.0	44.4	--	4800 / 3600	2150	2250	79±2	5925 / 5490
QGD 315	315	--	54.8	50.7	41.4	5100 / 3600	2150	2250	80±2	6350 / 5730
QGD 355	355	--	63.3	56.1	46.2	5100 / 3600	2150	2250	80±2	6380 / 5760
QGV 110	110	6.4-21.2	6.0-20.0	5.1-17.1	4.3-14.3	2260	1230	1600	76±2	2070 / --
QGV 132	132	7.5-25.0	7.3-24.3	6.3-21.0	5.1-17.0	2260	1230	1600	76±2	2120 / --
QGV 160	160	8.9-29.8	8.5-28.4	7.9-26.4	6.9-23.0	2845	1750	2100 / 1930	76±2	3630 / 3530
QGV 180	180	9.8-32.7	9.5-31.8	8.6-28.5	7.7-25.7	2845	1750	2100 / 1930	76±2	3710 / 3610
QGV 200	200	10.8-36.0	10.3-34.4	9.5-31.7	8.5-28.3	3600	2100	2030	79±2	4160 / 3950
QGV 250	250	12.7-42.4	12.2-40.8	11.6-38.6	10.3-34.4	3600	2100	2030	79±2	4390 / 4180

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 electric components
- Full flow spin-on oil filter
- Direct driven, permanent shaft alignment
- AirLogic® intelligent control system
- 380V/3P/50Hz IP54 variable speed motor(QSV series)
- High efficiency convertor
- QuinSyn-Plus® long life synthetic compressor fluid
- water separator (≥160kW)

PROTECTIVE DEVICES

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

OPTIONS

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

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.

ROYAL BLUE WARRANTY

Quincy COMPRESSOR

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 demulsible 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:

1. Varnish-free operation
2. High viscosity index
3. Excellent corrosion protection
4. Water holding capability
5. Efficient cooling

See how Quincy Compressor can work for you:

Quincy Compressor SEA Site Office
Address: 26, Jalan Anggerik Mokara
31/47 Kota Kemuning
Seksyen 31, 40460,
Shah Alam, Selangor, Malaysia
Tel : + 60 3 5123 8888
Fax : + 60 3 5123 8939

Distributed by:

Member of CAGI COMPRESSED AIR AND GAS INSTITUTE www.cagi.org

KNOW PRESSURE COMPRESSED AIR CHALLENGE

ISO 9001 CERTIFIED QUALITY SYSTEM