







QUINCY QOF SERIES
OIL-FREE
AIR COMPRESSORS
QOF 2-30 HP

# QOF 2-30 OIL-FREE SERIES



#### **OIL-FREE COMPRESSORS**

Industries such as pharmaceuticals, biotech, lab/research, food and beverage, electronics and textiles cannot risk any chance of oil contamination in their processes. Therefore, it is essential that the compressed air is 100% oil-free. The standard is ISO 8573-1 (2010) certification, in which Class Zero represents the highest air purity. It is the only way to ensure oil-free air for critical processes and your peace of mind.

Outstanding reliability, low maintenance and operating costs make oil-free compressors a sound investment.



Quincy QOF-7.5 shown

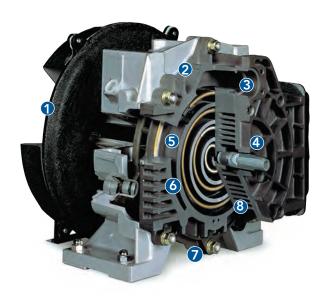
#### SCROLL TECHNOLOGY: HOW DOES IT WORK?

Air compression is achieved through the orbital motion of two spirals. One stationary, the second mobile, their interaction pulls the air into the compression chamber. In a regular and continuous way, the mobile spiral compresses the air through a reduction of the volume.

The air flow is directed to the center of the spiral after which it is cooled. As the spirals never make any contact, this compression process does not require any lubrication. Consequently, the QOF series compressors guarantee 100% oil-free compressed air.

- 1 Cooling fan
- Suction chamber
- 3 Suction opening
- 4 Delivery opening

- 5 Fixed scroll
- 6 Orbiting scroll
- **7** Fail-safe temperature sensor
- 8 Compression chamber





## THE POWER OF THE OIL-FREE RANGE

The QOF 2-30 oil free scroll compressors provide high-quality air for critical applications in a wide range of industries. The QOF 2-30 range also provides top class performance, premium efficiency and quality. Oil-free compressors also reduce your total cost of owner-

ship in three ways: (1) allows you to avoid purchasing expensive filter replacements, (2) cutting maintenance costs for by treating oil condensate and (3) extra energy costs are eliminated to combat pressure drop across filters.

#### PERFORMANCE

- Pressure rating 116 to 145 PSI
- Output from 4 to 86.5 cfm
- Sound levels as low as 53 dBA

#### **EFFICIENCY**

- Built-in dryer to reduce downstream pressure drop (optional)
- Latest compression technology
- High-efficiency IE3 motor standard

### QUALITY

- ISO 8573-1 Class Zero certified quality air
- Corrosion resistant materials
- Identification & logging of shutdowns
- Service schedule adjustment
- Extremely low vibration



#### CLASS ZERO: ELIMINATING ANY RISK

Class Zero represents the best air quality possible. In critical environments, it is essential that the compressed air is 100% oil-free. Contamination by even the smallest quantities of oil can cause costly production down time and product spoilage, resulting in product recalls and loss of reputation.

CLASS*	Concentration total oil (aerosol, liquid, vapor) mg/m³					
0	As specified by the equipment user or supplier and more stringent than class 1					
1	≤ 0.01					
2	≤ 0.1					
3	≤1					
4	≤5					



# QOF 2-30 OIL-FREE SERIES



## ONE PACKAGE - MULTIPLE BENEFITS

The innovative features of the QOF 2-30 range provide you with maximized efficiency, excellent air quality and low noise levels.

## STATE-OF-THE-ART ELEMENT

- Highly efficient profile
- Robust, reliable design and easy access for service

#### HIGH EFFICIENCY MOTOR

- High efficiency IE3/NEMA Premium motors standard
- Totally enclosed air-cooled IP55 class F motor for heavy duty operation

#### COOL CANOPY

- Increased ventilation due to vertical design
- Lower outlet temperatures
- Oversized cooler improving performance
- Improved canopy design: better dryer performance and easy access

## OPTIONAL INTEGRATED DRYER

- Integrated package reduces foot print, maintenance and installation cost
- Designed to guarantee a constant pressure dew point of +37°F
- Ensures delivery of dry high-quality air





Vertical design increases ventilation



Integrated dryer reduces footprint



## **OPTIONS TO MAXIMIZE OPERATIONS**

A wide range of options enables you to get the most out of your QOF compressor.

## **GENERAL OPTIONS (QOF 2-7.5)**

- Tank-mounted solution
  - 8 gallon (internal)
  - 70 gallon
  - 130 gallon
- Phase sequence relay shuts down compressor in the event of phase loss, unbalanced voltage or a phase reversal

#### AIR QUALITY OPTIONS (QOF 2-7.5)

- Integrated refrigerant dryer
- Prefiltration kit; protection against dirty environments
- Water Separator Drain (not with integrated refrigerant dryer)
- Standard electronic drain on air receiver (8 gallon only)
- Optional electronic drain on air receiver (70 and 130 gallon only)

## ENERGY EFFICIENCY OPTION (QOF 10-30)

• ES6i integrated multiple compressor control for up to 6 compressors









## **CONTROL & MONITORING**

The QOF range comes with a wide variety of control and monitoring features that allows an increase in the compressor's efficiency and reliability. The QOF 2-7.5 compressors are equipped with gauge controls which

automatically starts/stops the unit when the required working pressure is reached. A Graphic Controller is included in the QOF 10-30 series.

#### INTELLIGENT GRAPHIC CONTROLLER QOF 10-30

The multiple control and monitoring features of the controller on the QOF 10-30 units dramatically increase the compressors's efficiency and reliability. Efficiency is maximized by controlling the main drive motor and regulating the system pressure within a pre-defined and narrow pressure band.

- Warning indications
- Graphical indication service plan
- Integrated sequence for up to 6 compressors limiting the energy consumption and equalizing running hours across your whole system
- Online visualization of running conditions



### **VARIABLE AIR DELIVERY**

The QOF 10-30 units are equipped with multiple scroll modules. The units utilize Variable Air Delivery technology which controls the requested number of modules depending on your air demand. This technology allows the QOF 10-30 to be able to adjust to demand fluctuations.

The intelligent controller prevents simultaneous start of the modules and ensures a very narrow pressure band is maintained. This optimizes the efficiency of the compressor and guarantees a very stable system pressure.

## QOF-20 (4 MODULES) VARIABLE AIR DELIVERY

x	25	37.5	50
X	×		
Х	Х	Х	
Х	Х	Х	Х
	x	x x	x x x



# QOF 2-30 TECHNICAL DATA

Model	Capacity cfm	Pressure psig	Motor Power hp	Sound dBA	Weight Ibs
QOF-2	6.1	116	2	53	265
	4.0	145	2	53	265
QOF-3	8.9	116	3	55	276
	7.2	145	3	55	276
QOF-5	14.2	116	5	57	293
	12.5	145	5	57	293
QOF-7.5	20.8	116	7.5	59	346
	16.1	145	7.5	59	346
QOF-10	28.4	116	2 x 5	63	818
	24.2	145	2 x 5	63	818
QOF-15	43.0	116	2 x 7.5	63	922
	31.8	145	2 x 7.5	63	922
QOF-20	55.9	116	4 × 5	63	1279
	48.7	145	4 × 5	63	1279
QOF-22	65.7	116	3 x 7.5	64	1263
	50.2	145	3 x 7.5	64	1263
QOF-30	86.5	116	4 x 7.5	65	1512
	63.6	145	4 x 7.5	65	1512



# QOF 2-30 DIMENSIONAL TECHNICAL DATA

Model	Length inches (A)	Width inches (B)	Height inches (C)
QOF 2-7.5	30	26	33
Base Mount	40	26	33
Base Mount w/dryer	30	26	57
Tank Mount (71 gal.)	40	26	57
Tank Mount w/dryer	81	26	57
Tank Mount (132 gal.)	81	26	57
Tank Mount w/dryer	81	26	57
QOF 10-15	66	30	48
QOF 20-30	64	30	73



<sup>\*</sup> Weight based on floor mounted units without integrated dryer NOTE: Shipping weights can vary based on unit configuration and packaging.

# OIL-FREE SYSTEMS BEST PRACTICE



Air compression is achieved through the orbital motion of two spirals. One stationary, the second mobile, their interaction pulls the air into the compression chamber. In a regular and continuous way, the mobile spiral compresses the air through a reduction of the volume. The air flow is directed to the center of the spiral after which it is cooled. As the spirals never make contact,

this compression process does not require any lubrication. Consequently, the QOF series compressors guarantee 100% oil-free compressed air. System requirements vary by application The diagram below represents the best practice system installation for optimal clean air delivery to the point of use.

