

SIP Industrial  
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Loughborough  
Leicestershire  
LE12 9NH  
United Kingdom

# SIP QT 6Ltr Oil Free Low Noise Air Compressor



*SIP Code 05398*

For help or advice please  
contact your distributor, or SIP  
directly on:  
Tel.: 01509 500400  
Email:  
sales@sip-group.com  
or customerservice@sip-group.com  
www.sip-group.com

**sip**  
SIP INDUSTRIAL

Please read and fully understand the instructions in this manual  
before operation. Keep this manual safe for future reference.

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## **SAVE THESE INSTRUCTIONS**

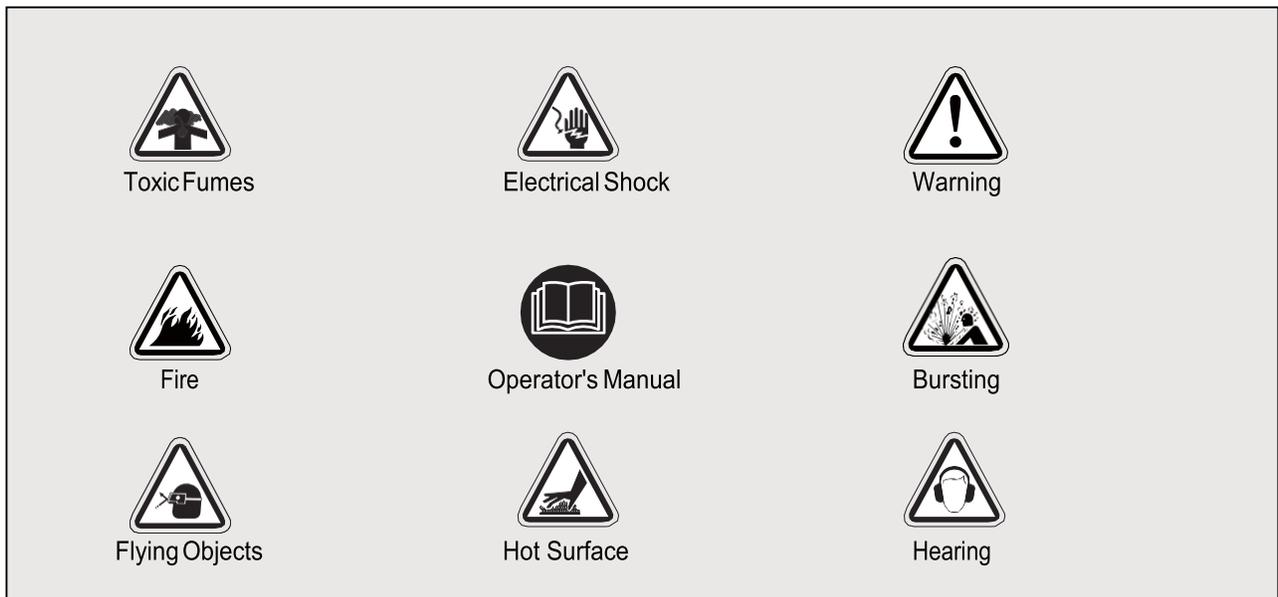
This manual contains important safety and operating instructions.  
Read all instructions and follow them with use of this product.

# Safety Guidelines

## Important Safety Information

The manufacturer cannot possibly anticipate every possible circumstance that might involve a hazard. The warnings in this manual, and the tags and decals affixed to the unit are, therefore, not all-inclusive. If you use a procedure, work method, or operating technique that the manufacturer does not specifically recommend, you must satisfy yourself that it is safe for you and others. You must also make sure that the procedure, work method, or operating technique that you choose does not render the compressor unsafe.

## Safety Symbols and Meanings



⚠ The safety alert symbol indicates a potential hazard to personal injury. A signal word (DANGER, WARNING, or CAUTION) is used with the alert symbol to designate a degree or level of hazard seriousness. A safety symbol may be used to represent the type of hazard. The signal word *NOTICE* is used to address practices not related to personal injury.

⚠ **DANGER** indicates a hazard which, if not avoided, *will* result in death or serious injury.

⚠ **WARNING** indicates a hazard which, if not avoided, *could* result in death or serious injury.

⚠ **CAUTION** indicates a hazard which, if not avoided, *could* result in minor or moderate injury.

*Notice* address practices not related to personal injury.

# Safety Information



**DO NOT OPERATE THIS UNIT UNTIL YOU READ AND UNDERSTAND THIS INSTRUCTION MANUAL FOR SAFETY, OPERATION, AND MAINTENANCE INSTRUCTIONS.**



## **WARNING**



Risk of fire caused by sparks from motor and pressure switch could result in death or serious injury. Do not operate compressor near flammable gas or vapor. Never store flammable liquids or gases in vicinity of compressor.



High pressure air could result in death or serious injury. Never operate above maximum operating pressure of the spray gun or tool. Drain water from tank after each use.

- Do not weld or repair tank.
- Do not operate with pressure switch or safety valve set above maximum allowable working pressure.



Hot compressor surfaces could result in serious injury. Allow compressor to cool before touching.



Inhalation hazard. Using compressor to supply breathing air could result in death or serious injury. Do not use compressor to supply breathing air.



**Risk of fire could result in death or serious injury.**

- Do not spray flammable materials in vicinity of any flame or ignition sources including the compressor unit.
- Do not restrict compressor ventilation openings or place objects against or on top of compressor. Operate compressor only in a clean, dry, well ventilated area.
- Do not operate unattended. Always turn off and unplug unit when not in use.



Risk of serious eye injury. Always wear CE approved safety glasses when using air compressor. Do not spray any part of the body.



Always wear hearing protection when using an air compressor. Failure to do so may result in hearing loss.



Shock risk could result in death or serious injury. Only connect compressor to a properly grounded receptacle. **KEEP CHILDREN AWAY FROM THE AIR COMPRESSOR AT ALL TIMES.**

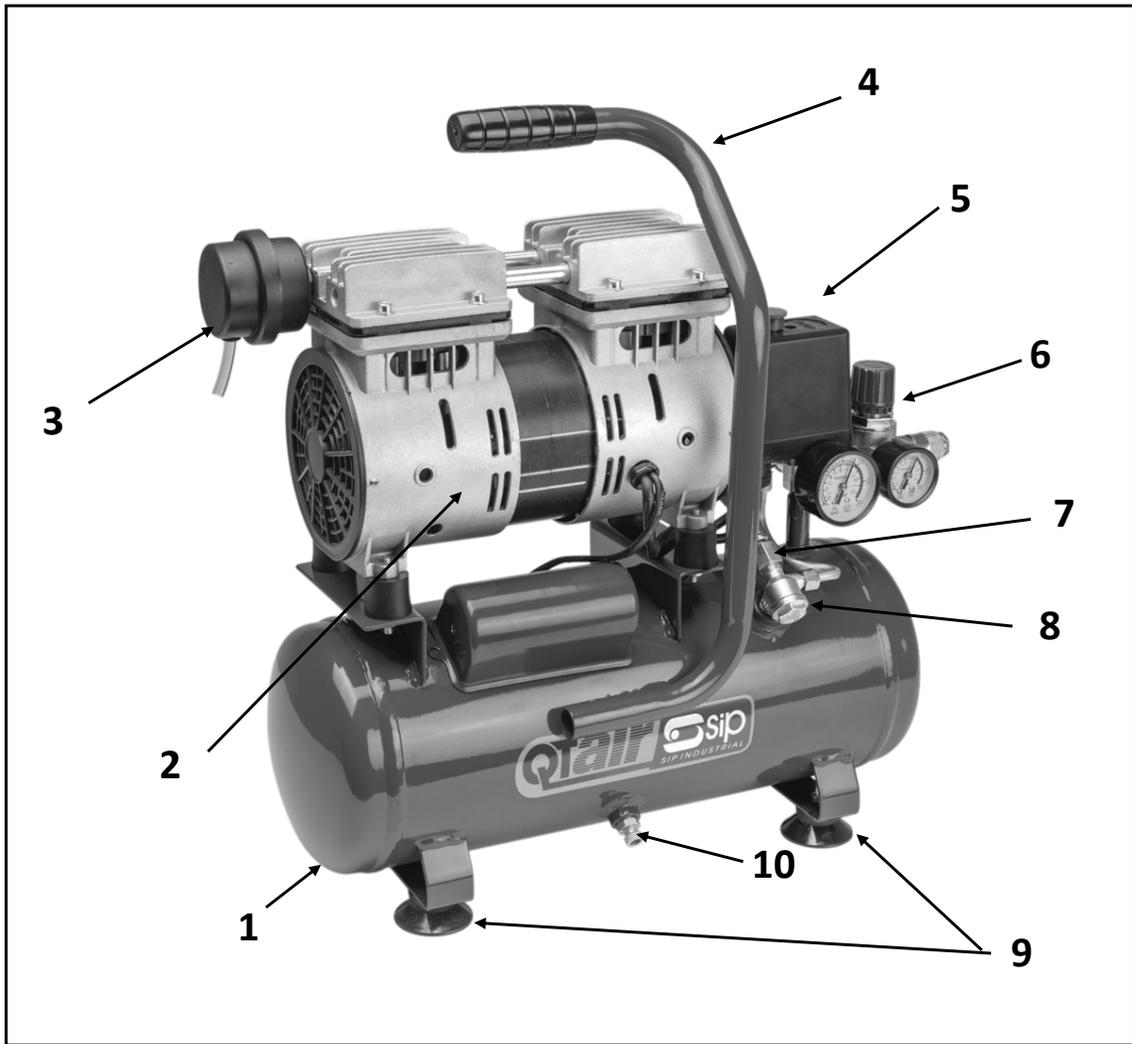


Dust can be created when cutting, sanding, drilling or grinding materials such as wood, paint, metal, concrete, cement, or other masonry. To reduce your exposure to these chemicals, work in a well ventilated area and **ALWAYS** wear approved safety equipment.



This air compressor is supposed to be stored in ambient temperature condition : centigrade temperature from 20 to 30°C.

# Key Parts Diagram



<i>Item</i>	<i>Description</i>	<i>Item</i>	<i>Description</i>
1	6L Air Receiver	6	Air Outlet & Regulator
2	Motor & Pump Assembly	7	Braided Delivery Pipe
3	Air Filter	8	Non Return Valve (NRV)
4	Carry Handle	9	Rubber Feet
5	ON/OFF - Pressure Switch	10	Condensate Drain Valve

## Key Parts Description

**A. ELECTRIC MOTOR:** The motor is used to power the pump. It contains a thermal overload protector. If the motor overheats for any reason, the thermal overload protector will shut it down in order to prevent the motor from being damaged.

**AIR COMPRESSOR PUMP:** The pump is used to compress the air and discharge it into the tank via the piston moving up and down in the cylinder.

**B. AIR RECEIVER:** The Air Tank / Receiver is used to store the compressed air.

**C. TANK PRESSURE GAUGE:** The gauge is used to measure the stored air pressure level inside the tank. It is not adjustable by the operator and does not indicate line / outlet pressure.

**D. AIR PRESSURE REGULATOR:** The regulator is used to adjust line / outlet pressure to the tool you are using. Turn the knob clockwise to increase pressure and counterclockwise to decrease pressure.

### WARNING



Never exceed the maximum working pressure of the tool.

**E. REGULATED PRESSURE GAUGE:** The gauge is used to measure the regulated outlet pressure.

**F. QUICK COUPLER:** The air compressor features a quick coupler for air outlet connecting ease.

**G. AIR TANK BALL VALVE:** The ball valve is used to remove moisture / condensate from the air tank after the unit is shut off.

### WARNING



Never attempt to open the drain valve when the tank pressure is more than 10 PSI.

**H. PRESSURE RELIEF SAFETY VALVE:** The valve is used to prevent the compressor from over pressure. If the pressure reaches the preset level, it will automatically pop open.

**I. ON/OFF-PRESSURE SWITCH:** This switch turns on the compressor and is operated manually. The compressor will produce air and shut off at the “Cut-Off” pressure. When air is drawn by an air tool the compressor will automatically start to pump once the “Cut-In” pressure has been reached. ALWAYS set this switch to OFF when the compressor is not being used and before unplugging the compressor.

**J. MAINS LEAD:** This compressor is for use with a 230 Volt UK domestic socket and should be grounded / Earthed.

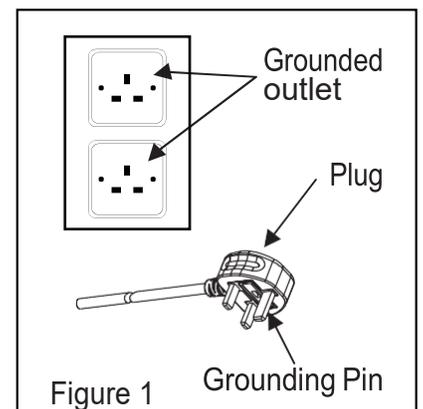
Make sure that the product is connected to an outlet that has the same configuration as the plug (see Figure 1). If an extension lead is used, make sure the cable size is sufficient as to be able to take the current of the compressor

Check with a licensed electrician if the grounding instructions are not understood or there is doubt as to whether the product is properly grounded. Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a licensed electrician.

### DANGER



Improper installation of the grounding plug will result in a risk of electric shock. If repair or replacement of the cord or plug is necessary, consult a qualified electrician.



# Assembly

## PREPARATION

Before beginning assembly of product, make sure all parts are present. Compare parts with package contents list and hardware contents list. If any part is missing or damaged, do not attempt to assemble the product.

## ASSEMBLY INSTRUCTIONS

The compressor is supplied ready assembled.  
All that needs to be fitted is the air filter.

### Air Filter Installation

Screw the air filter assembly into the pump cylinder head.



# Operating Instructions

## BEFORE EACH START UP

1. Press the ON/OFF switch down to the off position.
2. Turn the air pressure regulator knob (D) counterclockwise until it stops.
3. Attach air hose/accessories or air tools (not included) to the airline outlet (F).

**⚠ WARNING! ⚠ Risk of bursting.** Too much air pressure causes a hazardous risk of bursting. Check the manufacturer's maximum pressure rating for air tools and accessories. The regulator outlet pressure must never exceed the maximum pressure rating.

**Note:** Use this compressor in 20~30 degrees Celsius conditions.

## HOW TO START UP

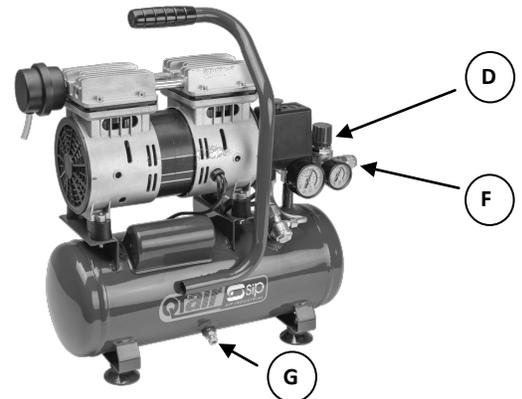
1. Close the air tank ball valve (G) by turning clockwise.
2. Plug in the mains lead.
3. Pull the ON/OFF switch UP to the on position and allow tank pressure to build. Motor will stop when tank pressure reaches "cut-out" pressure.
4. Turn the air pressure regulator (D) clockwise until desired pressure is reached.
5. The compressor is ready for use.

## ⚠ WARNING



High temperatures are generated by the electric motor and the pump. To prevent burns or other injuries,

- DO NOT touch the compressor while it is running. Allow it to cool before handling or servicing.
- Keep children away from the compressor at all times. When adjusting from a higher to a lower pressure, Turn the knob counterclockwise past the desired setting. Then turn clockwise to reach the desired pressure.
- Do not exceed operating pressure of the tool or accessory being used.



## HOW TO SHUT DOWN

1. Press the ON/OFF switch down to the off position.
2. Unplug the mains lead.
3. Reduce the pressure in the tank through the outlet hose. Keep it open to reduce the pressure in the tank until empty.
4. Tip the compressor so the tank drain valve is at the bottom of the tank, then open the tank drain valve (G) to allow moisture to drain from the tank.

## ⚠ CAUTION!



Escaping air and moisture can propel debris that may cause eye injury. Wear safety glasses when opening the drain valve.

## ⚠ WARNING!



To avoid personal injury, always shut off and unplug the unit and relieve all air pressure from the system before performing any service on the air compressor.



Risk of unsafe operation. Unit cycles automatically when power is on. When performing maintenance, you may be exposed to voltage sources, compressed air or moving parts. Personal injuries can occur. Before performing any maintenance or repair, disconnect power source from the compressor and bleed off all air pressure.

# Maintenance

 **WARNING:**



To avoid personal injury, always shut off and unplug the unit and relieve all air pressure from the system before performing.

Regular maintenance will ensure trouble-free operation.

TASK	DESCRIPTION	SERVICE INTERVAL
Drain the tank	To prevent corrosion inside the tank, the condensation must be drained at the end of every workday. Be sure to wear protective goggles. Relieve the air pressure in the system and then open the ball valve on the bottom of the tank.	Daily
Test for leakage	Check all connections to see if tight. A small leak of any of part (the tank, hoses, pipe connections or transfer tubes) will reduce the unit's performance. Spray a small amount of soapy water around the area of the suspected leak with a spray bottle. If bubbles appear, repair or replace the faulty component. Do not overtighten any connections.	Monthly
Nuts & Bolts / stability Check	Check nuts & bolts regularly. Check that the wheels and handle fixings are secure & that the compressor is stable.	Monthly
Storage	Before storing the unit for a long period, use an air blow gun to clean all dust and debris from the compressor. Disconnect and coil the power cord. Pull the drain valve valve to release all pressure from the tank. Drain all moisture from the tank. Cover the entire unit to protect it from moisture and dust.	N/A

# Troubleshooting

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Low pressure, not enough air or compressor does not stop	<ol style="list-style-type: none"> <li>1. Tank drain valve is open.</li> <li>2. Fittings leak.</li> <li>3. Prolonged or excessive use of air.</li> <li>4. Compressor not large enough.</li> <li>5. Hole in air hose.</li> <li>6. Tank leaks.</li> <li>7. Blown seals.</li> <li>8. Valve leaks.</li> <li>9. Leaking or worn piston.</li> </ol>	<ol style="list-style-type: none"> <li>1. Close tank drain valve.</li> <li>2. Check fittings with soapy water. Tighten or reseal leaking fittings. <b>DO NOT OVER TIGHTEN.</b></li> <li>3. Decrease amount of air used.</li> <li>4. Check air requirement of accessory. If it is higher than LPM and pressure supplied by compressor, you need a larger compressor. Most accessories are rated at 25% of actual LPM while running continuously.</li> <li>5. Check and replace if necessary.</li> <li>6. <b>WARNING:</b> Immediately replace tank. <b>DO NOT</b> attempt to repair. </li> <li>7. Contact SIP (Industrial Products) Ltd.</li> <li>8. Contact SIP (Industrial Products) Ltd.</li> <li>9. Contact SIP (Industrial Products) Ltd</li> </ol>
Air leaks from regulator, or regulator does not regulate pressure	<ol style="list-style-type: none"> <li>1. Dirty or damaged regulator internal parts.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace regulator.</li> </ol>
Regulated pressure gauge reading drops when air accessory is being used	<ol style="list-style-type: none"> <li>1. This is normal.</li> <li>2. Compressor not large enough.</li> </ol>	<ol style="list-style-type: none"> <li>1. If pressure drops to low, adjust regulator while accessory is used.</li> <li>2. Check air requirement of accessory. If it is higher than LPM and pressure supplied by compressor, you need a larger compressor. Most accessories are rated at 25% of actual LPM while running continuously.</li> </ol>
Pressure relief valve opens	<ol style="list-style-type: none"> <li>1. Tank pressure exceeded normal rating pressure.</li> <li>2. Pressure switch stuck.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace pressureswitch.</li> <li>2. Replace pressureswitch.</li> </ol>

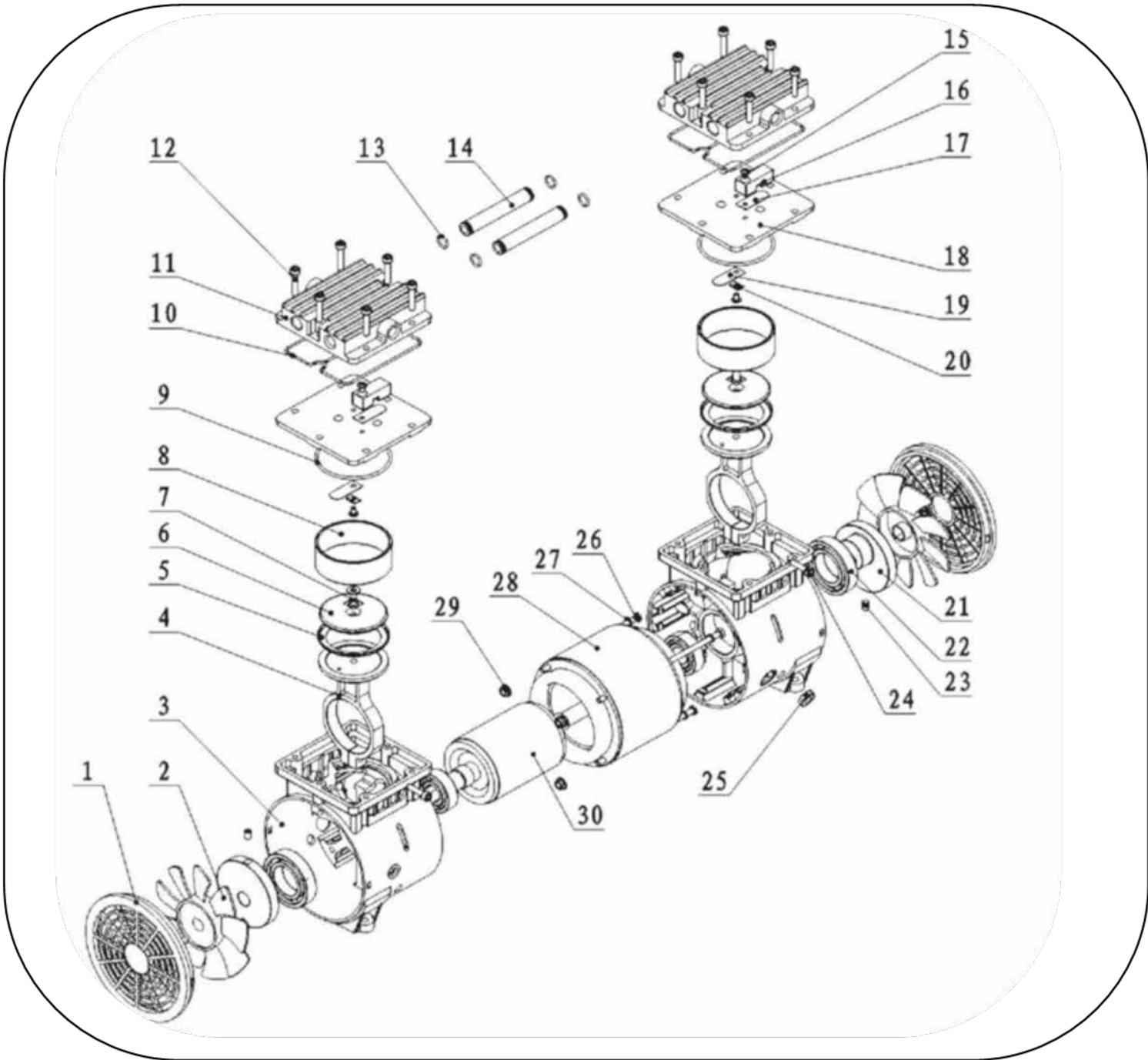
# Troubleshooting

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Motor will not run	<ol style="list-style-type: none"> <li>1. Tank pressure exceeds preset pressure switch limit.</li> <li>2. Fuse blown or circuit breaker tripped.</li> <li>3. Check valve is stuck open.</li> <li>4. Extension lead wire gauge too small or lead is too long.</li> <li>5. Loose electrical connections.</li> <li>6. The motor's thermal overload protection has tripped.</li> <li>7. The motor, capacitor or safety valve is defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Motor will start automatically when tank pressure drops below tank cut-in pressure.</li> <li>2. Replace blown fuse or reset circuit breaker. Do not use fuse or circuit breaker with higher rating than specified for your branch circuit. <ul style="list-style-type: none"> <li>• Check for proper fuse; 13A is required for the plug</li> <li>• Check for low voltage and proper extension cord size.</li> <li>• Disconnect other applications from circuit. Operate compressor on a dedicated circuit.</li> </ul> </li> <li>3. Remove and clean or replace.</li> <li>4. Check for proper gauge and extension cord length.</li> <li>5. Contact authorized service center.</li> <li>6. Turn the air compressor off, unplug the power cord and wait until the motor has cooled down. Plug in the power cord only after the motor has cooled down, waiting at least five minutes to make sure the thermal overload protector has recovered.</li> <li>7. Have the compressor serviced by a qualified technician.</li> </ol>

## Technical Specification

<b>Model</b>	<b>SIP QT 6L Oil Free Compressor 05398</b>
Power Supply	230V 50Hz 13A
Motor Power	0.75HP/550Watts
Motor Speed	1450 RPM
Piston Displacement	2CFM - 57L/Min
Free Air Delivered (FAD)	1.5CFM - 42L/Min
Max Pressure	8 Bar / 115psi
Receiver Size	6Litres
Protection	IP20 Class I
Noise	<59dB(A)
Weight	15kg GW / 14kg NW
Packaged Dimensions	480 x 210 x 510mm

# Exploded View



# Parts List

<i>Item</i>	<i>Description</i>	<i>Item</i>	<i>Description</i>	<i>Item</i>	<i>Description</i>
1	Fan Cowl	12	Cylinder Head Screw	20	Clip
2	Fan	13	O Ring	21	Crank
3	Case	14	Connecting Tube	22	Bearing
4	Connecting Rod	12	Cylinder Head Screw	23	Screw
5	Piston Seal / Ring	13	O Ring	24	Screw
6	Piston Top	14	Connecting Tube	25	Grommet
7	Piston Screw	15	Screw	26	Bolt
8	Cylinder	16	Retainer	27	Washer
9	Sealing Ring	17	Valve Shim	28	Stator
10	Valve Plate Gasket	18	Bottom Retainer	29	Lock-nut
11	Cylinder Head	19	Valve Shim	30	Rotor







## Declaration of Conformity

We

SIP (Industrial Products) Ltd  
Gelders Hall Road  
Shepshed  
Loughborough  
Leicestershire  
LE12 9NH  
England

As the manufacturer within the UK, England, Scotland & Wales,  
declare that the

SIP QT 6L Oil Free Air Compressor 230V - SIP Part No. 05398

**Conforms to the requirements of the following regulation(s), as indicated.**

Supply of Machinery (Safety) Regulations 2008  
Electromagnetic Compatibility - Directive 2014/30/EU  
The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic  
Equipment Regulations 2012  
Noise Emissions in the Environment for Equipment for use Outdoors Regulations 2001

Noise measurements have been made in accordance with the internal control  
of production (Schedule 45/Annex V). The declared noise values are as follows:

Measured sound power level - 59dB(A)

**And the relevant harmonised standard(s), including**

EN 1012-1:2010  
EN60294-1:2018

Signed:



Mr P. Ippaso - Managing Director - SIP (Industrial  
Products) Ltd Date: 23/08/2023

# EU Declaration of Conformity

We

SIP (Industrial Products) Ltd  
Gelders Hall Road  
Shepshed  
Loughborough  
Leicestershire  
LE12 9NH  
England

As The Manufacturer's Authorised Representative  
Declare that the

SIP QT 6L Oil Free Air Compressor - SIP Part No. 05398

**Conforms to the requirements of the following Directive/s, as indicated.**

2014/30/EU	The Electromagnetic Compatibility Directive
2006/42/EC	The Machinery Directive
2000/14/EC	Noise Emission Directive
2014/68/EU 2011/65/EU	RoHS Directive

Noise measurements have been made in accordance with the internal control of production (Schedule 45/Annex V).  
The declared noise values are as follows:

Measured Sound Power Level      59dB(A)

And the relevant harmonised standard/s, including:

EN 1012-1:2010  
EN60294-1:2018



Name: Mr Paul Ippaso  
Position: Director Date:  
23/08/2023





Please dispose of packaging for the product in a responsible manner.

It is suitable for recycling.

Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.



Never dispose of electrical equipment or batteries in with your domestic waste.

If your supplier offers a disposal facility please use it or alternatively use a recognised recycling agent.

This will allow the recycling of raw materials and help protect the environment.

**FOR HELP OR ADVICE ON THIS PRODUCT PLEASE CONTACT YOUR DISTRIBUTOR, OR SIP DIRECTLY ON:**

**TEL: 01509500400**

**EMAIL: [sales@sip-group.com](mailto:sales@sip-group.com) or [technical@sip-group.com](mailto:technical@sip-group.com)**

**[www.sip-group.com](http://www.sip-group.com)**