

# INDUSTRIAL SCREW AIR COMPRESSOR



**TUNCINDSPMVS-30.0**  
**TUNCINDSPMVS-50.0**

## User Manual

v.1.0



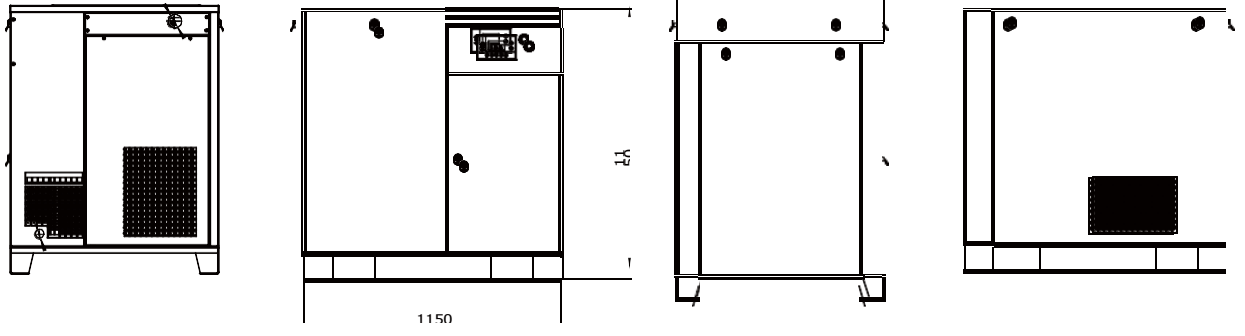
## INTRODUCTION

- Direct-driven rotary screw compressor designed for high-capacity continuous, industrial use
- Fitted with an efficient heavy duty three-phase electric motor (IE4)
- Variable speed running modes
- High capacity screw air end
- Quiet running performance, ideal for environments requiring low noise emissions
- Powder-coated solid steel cabinet housing with foam noise insulation barriers
- 100% duty cycle application
- Advanced controller system
- Welded tank fully-compliant with the latest European manufacturing & safety standards

## SPECIFICATIONS

Compressor	TUNCINDSPMVS-30.0	TUNCINDSPMVS-50.0
Working Pressure	10bar (145psi)	10bar (145psi)
Motor Power	30HP (22kW)	50HP (37kW)
Free Air Delivery (FAD)	99 cfm (2.8 <sub>m<sup>3</sup></sub> /Min)	209 cfm (5.9 <sub>m<sup>3</sup></sub> /Min)
Motor Speed	3000 rpm	3000 rpm
Oil Capacity	8.0L	11.0L
Voltage	415~50Hz/3	415~50Hz/3
Input Current	50A	90A
Efficiency	96% IE4	96% IE4
Sound Pressure	70 dB(A)	70 dB(A)
Weight	370kg	505kg

30 HP



50 HP

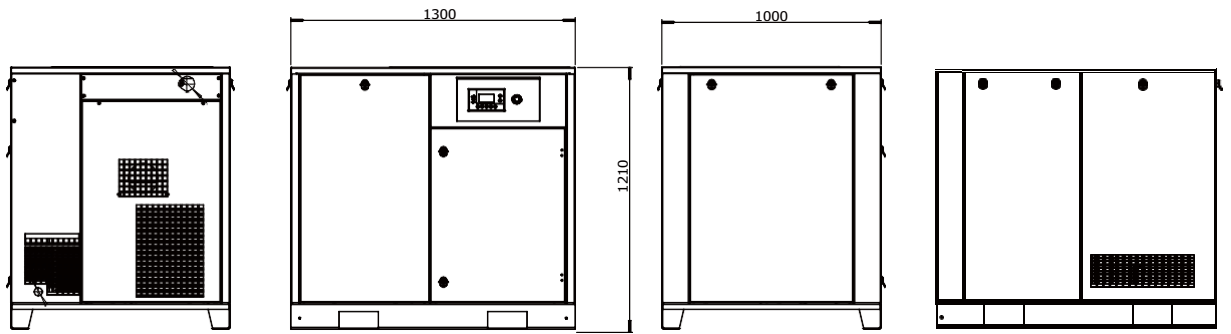


Fig.1

## UNPACKING & POSITIONING

PLEASE NOTE THE FOLLOWING PHOTOGRAPHS & INSTRUCTIONS ARE FOR REFERENCE ONLY AND MAY DIFFER FOR YOUR COMPRESSOR MODEL. PLEASE CONTACT YOUR JAVAC DEALER IF YOU NEED ANY ADVICE ON THE ASSEMBLY PROCEDURE.

1. Check the outer packing for any signs of damage that may have occurred in transit
2. Unpack the compressor (paying attention to any instruction on the packaging itself).
3. Check the equipment for damage. Do not use the equipment if damage is detected. If in doubt, contact your dealer for advice.
4. Open the hatches and visually check the internal parts.
5. Store the packing (at least for the warranty period).

### Lifting And Moving The Machine

Lift the equipment using a forklift truck ( Fig.2). After removing the packing materials, check to ensure the product is in perfect condition and that there are no damaged parts from transit. If your compressor is supplied with anti-vibration mounts ensure that they are fitted correctly as required.

### Positioning

Position the compressor on a flat surface in a well aired place, protected against atmospheric agents and not in a place subject to explosion hazard.

The compressor should be installed in a dust free and well-ventilated working environment that adheres to your local Health and Safety and workplace standards. The ideal environmental temperature should be between 5 °C & 45 °C.

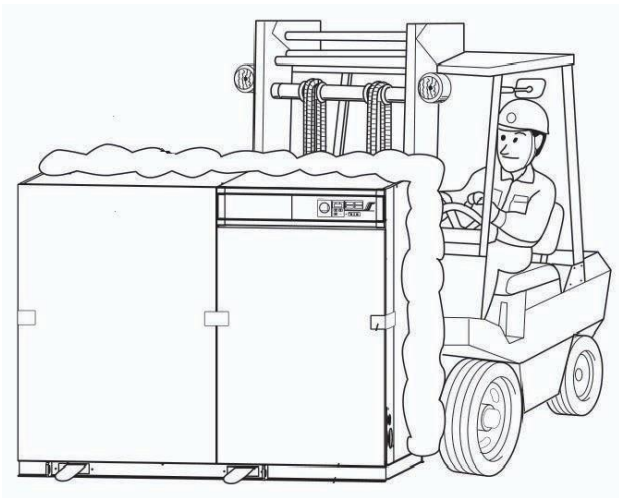
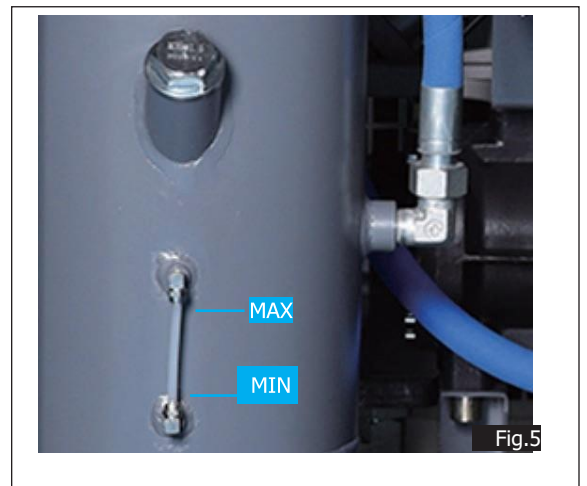
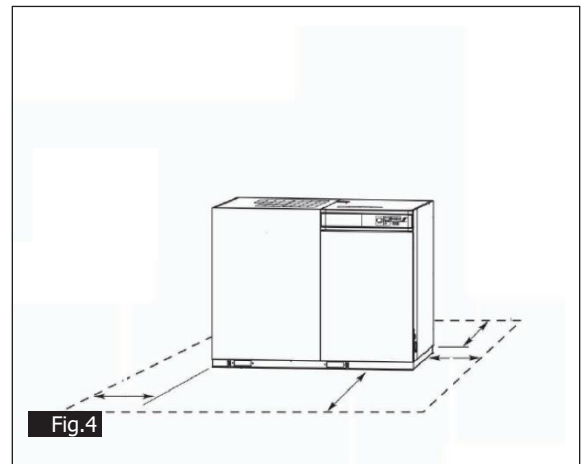
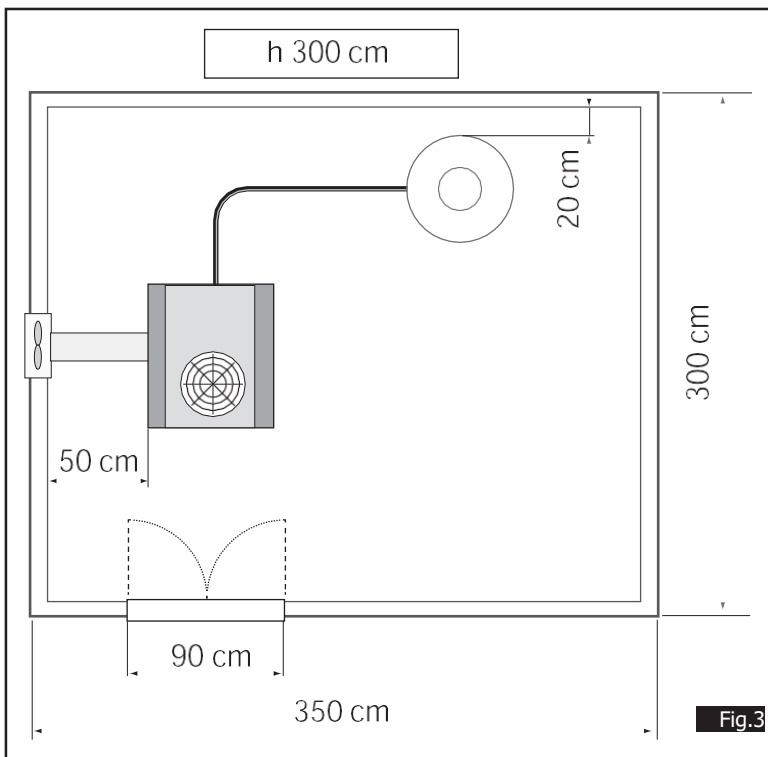


Fig.2



## Installation

Ensure that the compressor is installed with a minimum of 50cm from walls and other objects or fixtures (Fig.3, Fig.4).

Check the correct oil level as shown (Fig.5 )

Position the compressor in a stable manner on a level surface, making sure that you leave at least 50cm free between the equipment and any walls or other surfaces to allow sufficient air flow for the ventilation system.

Position the air tank and connect the compressor and tank using the flexible pipe supplied. The flexible pipe helps to prevent the transmission of vibrations produced by the compressor to the air distribution line.

**Important:** Hot (exhaust) air escapes from the top of the compressor at a temperature of about 15-35°C higher than the environmental temperature. It is essential to ensure sufficient ventilation within the working environment to accommodate the exhaust air. If necessary during the summer months you can fit an additional exhaust pipe with section more or less equal to the radiator, together with a fan to extract the hot air outside of the working environment to ensure a safe working temperature.

## CHECKS BEFORE FIRST USE

### Check Oil Level:

Before using the compressor check the oil level using the inspection glass. If the oil is not between the MIN and MAX marks it should be topped up with a suitable screw compressor oil (for example EcoPress 48, RotEnergy Plus) contact your nearest dealer for advice if required before filling (Fig.6).

### Check Power Supply Is Correct For This Compressor:

It is essential that the air compressor has an adequate power supply. The correct voltage and supply ratings are shown on the aluminium foil tank label. Always check with a qualified electrician for advice on how to correctly install and test this equipment.

Always utilize more air hose before choosing to use an extension lead, as low voltage could cause damage to the motor. (Low voltage damage is not covered under warranty)

Read and understand all the electrical safety guidelines laid out in this manual, follow all applicable local authority safety guidelines.

### Visual Equipment Inspection

Check the equipment, cables, connections, hoses and all equipment parts for any signs of damage or fault prior to use. If you detect any damage contact your nearest Javac Dealer for advice.

Important: Do not run the compressor if any damage or faults are detected before use.

### Transportation Bolts

Remove all transportation bolts (these are fixed in the factory prior to shipping to reduce the risk of vibration damage during transit).

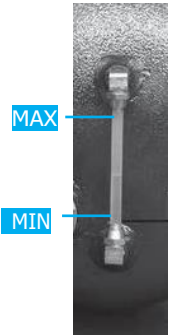
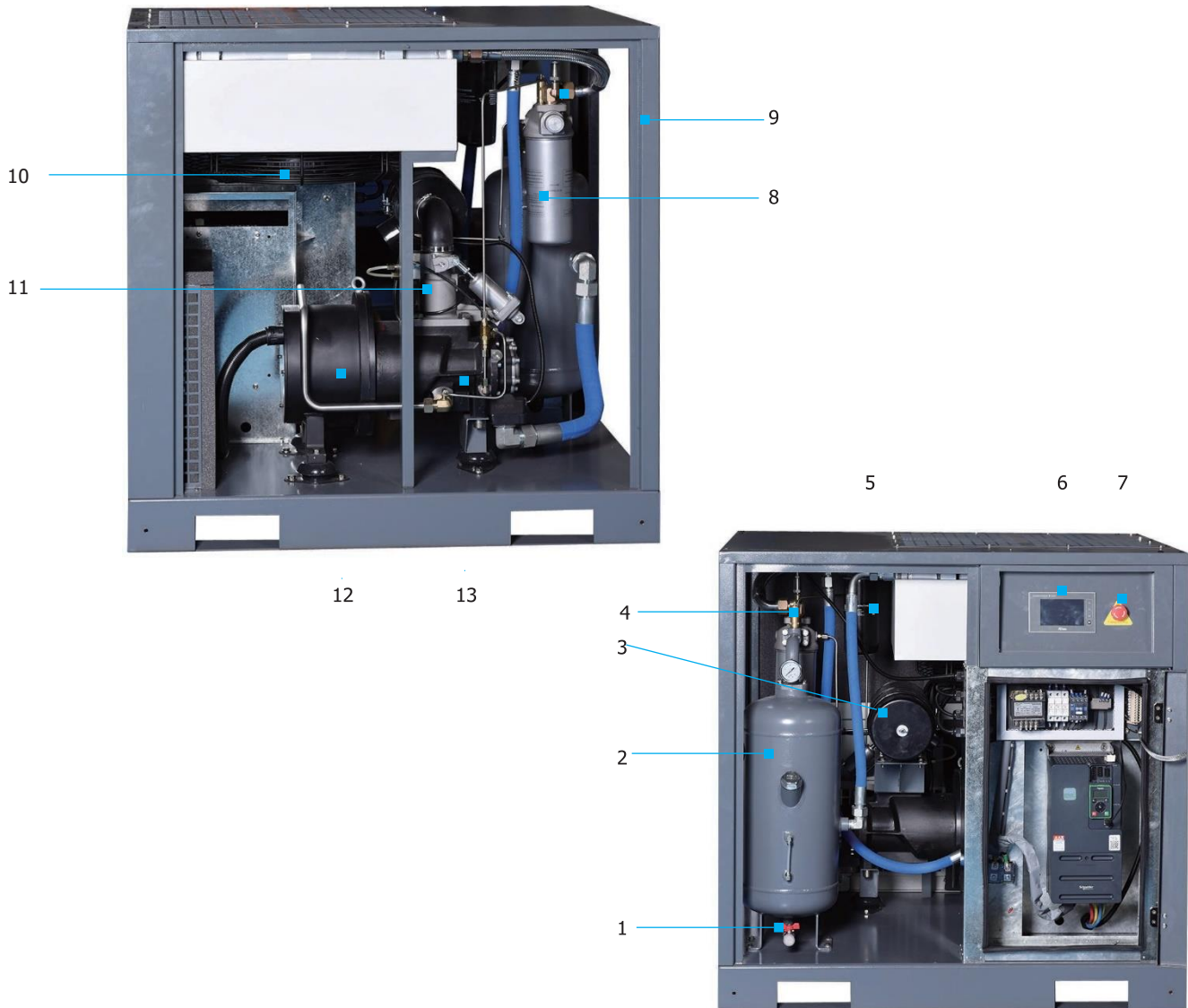


Fig.6

## EQUIPMENT IDENTIFICATION



1. Drain Valve
2. Air / Oil Separator Tank
3. Air Filter
4. Safety Valve
5. Oil Filter
6. Control Panel
7. Emergency Stop
8. Oil Separator Cartridge
9. Screw Compressor Housing & Assembly
10. Fan
11. Intake valve
12. Motor
13. Air End

## SAFETY GUIDELINES



Read and ensure that you understand all of the operating instructions, safety precautions and warnings in this Instruction Manual before operating or maintaining this compressor. Most accidents that result from compressor operation and maintenance are caused by the failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing a potentially hazardous situation before it occurs, and by observing appropriate safety procedures. Hazards that must be avoided to prevent bodily injury or machine damage are identified by warnings on the compressor and in this Instruction Manual. Never use this compressor or modify it in any way that has not been specifically recommended by the manufacturer. Contact a qualified electrician for advice on any issues relating to electrical safety in your working environment.

### Electrical Safety



Ensure that you check the equipment thoroughly to ensure it is safe and fit for purpose before each use. It is important that you inspect all plugs, sockets, power cables and electrical fittings for wear and damage and repair or replace any defective components. The risk of electric shock can be minimised by the correct use of the appropriate electrical safety devices.

For products that require a connection of a 415V supply you should contact a qualified electrician to ensure that a suitable rated supply is available. We recommend that you discuss the installation of an industrial round pin plug and socket with your electrician based on the compressor specifications.

- We recommend that you fit a Residual Current Circuit Breaker (RCCB) in the main distribution board and that a Residual Current Device (RCD) is used when operating this equipment.
- The Electricity at Work Act 1989 includes legislation that places legal implications on employers to ensure the safety of electrical devices in the workplace. The regulations dictate that all portable equipment must be inspected regularly and tested to ensure that it is safe for use. 'Portable equipment' means any electrical item that can be moved and this is often referred to as Portable Appliance Testing (PAT). PAT testing should be carried out regularly on this equipment by trained, authorised personnel, as required by the legislation.
- The Health and Safety at Work Act 1974 states that it is the responsibility of the owner of electrical appliances to ensure that both the equipment and working environments are maintained to ensure safe operation at all times.
- Check that all equipment cables are secure, correctly insulated, free from damage, and protected against short circuit and overload before connecting to the power supply. Do not use worn or damaged cables, plugs, sockets or other fittings.
- Ensure that the power supply matches voltage requirements specified on the equipment before use. Check with your electrician.
- Ensure the power cables are kept away from heat, oil and sharp edges.
- We recommend that the equipment is connected directly to the power supply without the use of extension leads as the resulting voltage drop can reduce motor performance.
- Always disconnect the compressor from the power source and remove the compressed air from the air tank before servicing, inspecting, maintaining, cleaning, replacing or checking any parts.
- Do not use the compressor in damp / wet conditions.
- **IMPORTANT:** During electrical installation please ensure that the motor is wired to turn in the direction indicated on the air end.



## Equipment Safety

- Never place your hands, fingers or other body parts near the compressor's moving parts during operation. Ensure that the equipment is isolated from the power supply and all switches in the OFF position before carrying out maintenance, repairs or adjustments.
- Never operate this compressor without all guards or safety features in place and in proper working order. If maintenance or servicing requires the removal of a guard or safety features, be sure to replace the guards or safety features before resuming operation of the compressor.
- Always wear safety goggles or equivalent eye protection. Compressed air must never be aimed at anyone or any part of the body.
- When not in use, the compressor should be stored in dry place. Keep out of reach of children. Keep children and animals away from the work area.
- Clear all work areas of unnecessary tools, debris, furniture etc. prior to use. Cluttered work areas can lead to injuries.
- Do not wear loose clothing or jewellery when operating this equipment. They can be caught in moving parts. Wear protective hair covering to contain long hair.
- Follow instructions for lubricating this equipment as required.
- Watch what you are doing and remove any potential distractions before use. Use common sense at all times.
- Do not operate this equipment when you are tired or if you are under the influence of alcohol, drugs or medication that makes you drowsy.
- Check for the correct alignment of moving parts, binding of moving parts, condition of parts, mounting, and air leaks, and any other issues that might affect the safe operation of this equipment. A guard or other part that is damaged should be properly repaired or replaced by an authorized Javac service centre unless otherwise indicated elsewhere in this instruction manual. Have defective pressure switches replaced by an authorized service centre. Do not use compressor if the switch does not turn it on and off.
- Operate the compressor according to the instructions provided in this manual. Never allow the compressor to be operated by children, individuals unfamiliar with its operation or unauthorized personnel.
- Keep all screws, bolts, and plates tightly mounted. Check regularly.
- The motor air vent must be kept clean so that air can freely flow at all times. Check for dust build-up frequently and clean as required.
- If the equipment appears to be operating unusually, making strange noises, or otherwise appears defective, stop using it immediately and arrange for repairs by a authorized service centre.
- Solvents such as petrol, thinner, benzene, carbon tetrachloride, and alcohol may damage and crack plastic parts. Do not wipe them with such solvents. Wipe plastic parts with a soft cloth lightly dampened with soapy water and dry thoroughly.
- Only use Javac approved replacement parts. Non-approved parts will void your warranty and can lead to malfunction and resulting injuries. Genuine parts are available from Javac your dealer.
- Do not modify the compressor for any use other than which it was designed for by the manufacturer. Do not tamper with or attempt to adjust the tank, pressure switch or safety valve. Never strap anything to the tank. Do not subject the tank to impact, vibration, heat, abrasion or corrosive materials.
- Always contact an authorized service centre for advice on any repairs. Unauthorized modification may not only impair the compressor performance but may also result in accident or injury to repair personnel who do not have the required knowledge and technical expertise to perform the repair operations correctly.
- When the compressor is not in use, ensure the pressure switch is turned off, disconnect the equipment from the power source and open the drain cock to discharge the compressed air from the air tank.
- To reduce the risk of burns, do not touch tubes, heads, cylinder and motors. During or immediately after use. Allow equipment to cool down before carrying out maintenance, repairs or adjustments.
- Never direct the output jet of air at persons or animals. Ensure air supply valve is turned OFF before disconnecting the air supply hose.
- Read the all safety instructions for any tool or accessory used with the compressor and ensure the safe working pressure of any appliance used exceeds the output pressure of the compressor. If you are using a spray gun it is important to ensure that the work area has sufficient ventilation in place.
- Do not operate in the vicinity of flammable liquids, gases or solids.
- Do not operate the compressor without an air filter or restrict the air flow around the equipment.
- When the compressor is not in use ensure that it is switched off, disconnected from the power supply and the air and moisture drained from the tank.

## WARNING LABELS

### Warning Symbols:



High temperature hazard



Risk of electric shock



Risk of hot or dangerous gases in the work area



Pressurised container



Moving mechanical parts



Maintenance interventions in progress



Machine with automatic start-up

### Prohibition Symbols:



Do not open the hatches with the machine functioning



If necessary, always use the emergency stop and not the line isolator switch



Do not use water to put out fires on electrical appliances



Read the user instructions carefully

## OPERATION GUIDE

### Digital Control Panel

When the compressor connected to the power supply and in regular operation the main interface on the digital control screen will show the following (Fig.7):

1. Exhaust Temperature
2. Air Pressure
3. Operating State

### Button Operation



——Start button

When the air compressor is in the standby state, long press this button for more than 3S to start the air compressor operation.



——Shutdown button

When the air compressor is in the running state, long press this button for more than 3S to stop the air compressor operation.



——Reset button

When the machine is down, press this button to reset the fault.



——Next page

Press this button to enter other viewing and setup pages.



——Return page

Pressing this button will return to the previous page of this page.



Fig.7

### Indicator light



——power:

The indicator lights when the controller is powered.



——Operation:

The indicator lights when the controller is powered.



——Fault:

The fault indicator light is on during the warning and the fault, and is cleared when the alarm or fault is cleared.

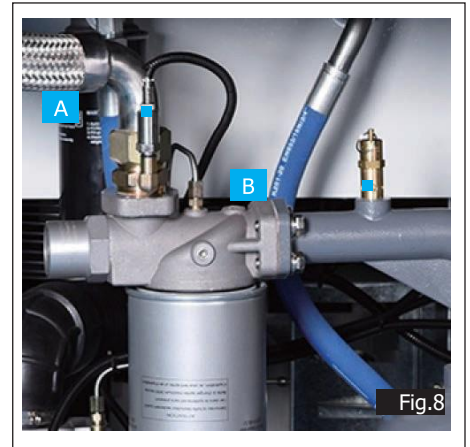
## Breakdown Alarms

There are a number of different alarm settings (varying in severity) which will alert the user to operating issues with the compressor and instructions will be shown on the digital display how to resolve them.

## Safety Devices and Controls

See (Fig.8 & Fig.9)

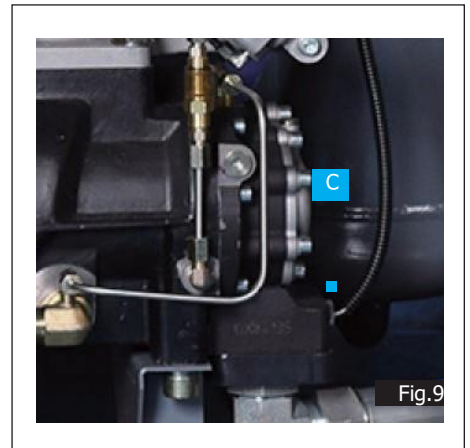
- A: Pressure transducer: adjusts the START and STOP pressure
- B: Safety valve: opens the air discharge at the safety value.
- C: Maximum temperature probe: stops the motor when +110°C is exceeded



## Startup Procedure

When starting the compressor for the first time follow the procedure listed below:

1. Check and confirmed that the compressor has been correctly installed and is free from damage.
2. Check the power supply to the air compressor control panel. If the power supply phase is incorrect, the LCD will show "power supply phase sequence error" information. Check with your electrician or contact Javac Tools for advice.
3. Rotation confirmation: Press the "START" button ,and press the " Emergency Stop Button " immediately to confirm that the rotation direction is correct.
4. START: press the "START" button to run the machine if setup is correct.



## Shutdown Procedure

Stop: please press the "OFF" button, the air compressor will stop automatically.

## Emergency button:

If there is any abnormal sound, vibration and leakage, please press the "emergency stop button" to stop the repair immediately

## MAINTENANCE

Before attempting any maintenance jobs on the compressor, make sure of the following:

1. The master power switch is turned off and equipment is isolated from the mains supply.
2. Pressure switch and the control unit switches are all in the OFF position.
3. All pressure has been removed from the air tank.

Procedure	Hours of Service
Check oil level and top-up if necessary	100
Clean suction filter	500
Check blockage and cleaning of the radiator	1000
Complete oil replacement	4000
Oil filter replacement	1000
Air filter replacement	1000
Oil-separator filter replacement	2500
Discharge condensation	At least once a month
Check minimum pressure valve	12000

Please note: Maintenance intervals are strongly influenced by environmental conditions and working conditions of the compressor. Contact your Javac Dealer for any additional information or advice on the maintenance schedule for this equipment.

## TROUBLESHOOTING

FAULT	CAUSE	REMEDY
Motor stops due to circuit breaker relay intervention.	Supply voltage is incorrect. Motor over-heating.	Check / correct the voltage, press Reset button to restart.  Check motor absorption and check relay calibration. If absorption is normal press Reset and re-start.
High oil consumption.	Faulty drainage. Oil level too high. Oil-separator filter broken. Faulty seal on the oil separator nipple.	Check the oil drainage pipe and the non-return valve. Check the oil level and discharge if necessary. Replace the oil-separator filter. Replace the oil-separator nipple seal.
Oil leak from suction filter.	Suction adjuster does not close properly.	Check the adjuster and the electrovalve
Safety valve opens continually.	Pressure too high. The suction adjuster does not close at cycle end. Oil-separator filter blocked.	Check pressure transducer & calibration Check adjuster and electrovalve Check the difference between the line pressure and the oil separator tank. Replace the oil-separator filter if necessary
Compressor overheating.	Environmental temperature is too high. Radiator is blocked. Oil level is too low. The electrovalve does not start-up.	Increase ventilation. Clean the radiator using solvent. Add oil. Check the command relay and fan motor.
The compressor is running but does not compress air.	The adjuster is closed, it does not open because it is dirty or has no command.	Remove the suction filter and check if the adjuster opens manually. If necessary, disassemble and clean. Check the presence of the signal between the pressure gauge and electrovalve. Replace any damaged parts.
The compressor continues to compress air above the maximum pressure.	The adjuster is open, it does not close because it is dirty or has no command.  Faulty pressure transducer.	Disassemble and replace the adjuster Check the presence of the signal between the pressure gauge and electrovalve. Replace any damaged parts.  Replace the transducer.
Oil located in the cabinet / housing	Leaking pipes / loose connections.  Leak from the screw unit front flange.	Check pipes and tighten connections as required.  Replace the sealing rings.
Tank pressure drops continually.	Air leak, check all connections.	Locate and rectify leak. Run the compressor at maximum pressure then switch off and disconnect. Brush a soapy water solution over the connections and look for bubbles. Tighten any connections showing leaks. If problem persists contact your authorised service agent.
Tank pressure won't build up or performance is reduced.	The drain valve is open.  Air filter dirty or blocked.	Close the tank drain valve.  Clean or replace the filter.
The compressor won't switch off.	Pressure switch fails to stop motor. Faulty pressure switch.	Contact your authorised service agent.
Tank pressure won't build up.	The compressor head gasket or valve plate is faulty.	Contact your authorised service agent.
There is a leak from the base of the pressure switch when the compressor is running.	Failure of the pressure relief valve. (Located in the base of pressure switch).	Contact your authorised service agent.
There is a leak from the base of the pressure switch when the compressor is stopped.	The non-return valve (from the tank) is leaking.	Disassemble and clean, if necessary replace valve insert. Contact your authorised service agent.
The compressor is noisy with metallic clangs / knocks.	Bearing problem.  Low oil level.	Stop the compressor and contact a specialized service technician.  Top up with oil.
The compressor sounds like it is trying to start (motor makes a humming noise).	Faulty capacitor or fault within the electric motor.	Stop the compressor and contact a specialized service technician.
Overload switch activated.	Startup load may have activated overload switch.  Extension lead is too long (if in use)  Head unloader not functioning.	Leave for a few minutes then press the reset button and restart.  Remove the extension lead and test compressor by connecting the compressor as close to the main fuse box as possible.  Stop the compressor and contact a specialized service technician.
Air leaks from the safety valve at pressures less than 10 bar.	The safety valve is faulty.	Replace the safety valve.
Compressor stops and will not restart.	Power failure.  Motor failure.	Check electrical supply and fuse.  Contact your authorised service agent.

## IMPORTANT! SAFETY FIRST!

Before attempting to use this product please read all the safety precautions and operating instructions outlined in this manual to reduce the risk of fire, electric shock or personal injury.

