

Introduction

Thank you for purchasing our compressor. This enables you to connect and operate compressed air guns, paint spray guns, pneumatic screwdrivers and much more via the pre-assembled quick-release coupling. These operating instructions are intended to help you use the device safely and efficiently. Please read the instructions carefully before using the compressor. It contains important information on the installation, operation, maintenance and safety of the appliance.

Our compressor has been designed to provide you with reliable performance and durability. With the right care and maintenance, it will give you many years of good service. If you have any questions or problems, please contact our customer service team.

We wish you every success and satisfaction with your new compressor.

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Original operating instructions



Attention!

When using the compressor, the basic safety precautions for reducing fire damage, electric shock and injury must be observed. Please read the operating instructions and notes carefully before using the appliance.

1. Symbols

	Follow operating instructions		Warning of automatic start-up
	Warning of hazardous voltage		Do not dispose in household waste
	Hot surface warning		Ear protection is required for noise levels above 80 dB

2. Operational Safety



The following is not permitted:

1. Avoid consuming food, drinks and tobacco products during operation.
2. Do not touch the cooling fins of the cylinders, as these can be very hot during and after operation.
3. Do not store any highly flammable liquids, gases or objects in the vicinity.
4. Keep children and pets away from the appliance, the high-pressure lines and the power supply.
5. Do not use the appliance in continuous operation. Only use it for its intended purpose and observe the maintenance instructions.
6. Keep cables and hoses away from heat and sharp edges. Do not pull the appliance by the cables or hoses and do not touch the contacts of the plug.
7. Do not operate the device in humid environments
8. Do not change any technical settings on the appliance, as this may invalidate the warranty.



The following is essential:

1. Disconnect the device from the power supply before carrying out maintenance work and ensure that it is pressure-free.
2. Repairs to electrical components may only be carried out by qualified specialists.
3. Make sure that the device is switched off when not in use to prevent it from starting unexpectedly.
4. Only use recommended high-pressure hoses and couplings. If in doubt, contact the manufacturer.
5. For safety reasons, close the ball valve before removing the hose.
6. To increase safety against electric shock, use a wall socket with a residual current device.
7. The appliance must be pressure-free before transport.
8. Always keep the work area clean.
9. If you switch off the device, wait at least 10 seconds before switching it on again. Switching back on too quickly can damage the motor!
10. Only operate the appliance if it is safely placed on a level surface, in a dry environment, without flammable or corrosive gases.

3. Commissioning



Important!

Only use the compressor for its intended purpose. Do not overload the compressor. Always switch off the appliance after use. The manufacturer is not liable for damage caused by improper use and non-compliance with the instructions described in this manual.

Before switching on:

- Check all attachments and the tank for possible damage.
- Ensure that all hoses and lines are firmly connected. Tighten nuts if necessary, as these can become loose during transport or prolonged operation.
- Ensure that there is a sufficient electrical supply. The electrical data can be found on the rating plate and in the data sheet.
- Check the power cable for damage. If it is damaged, the appliance must not be put into operation.
- When using extension cables longer than 10 metres, the minimum cross-section must be 1.5 mm². The required minimum cross-section varies depending on the cable length and must be adjusted accordingly and may also exceed 1.5 mm².
- Position the device so that good air circulation is guaranteed. There should be at least 50 cm of free space around.
- Place the device on a flat surface to avoid internal damage.
- Never operate the device without the built-in air filter.

Tips:

Regulating the switch-off pressure

- Remove the cover from the switching device and adjust the screw or nut underneath until the desired switch-off pressure is reached.

Adjust the pressure relief valve

- If the pressure relief valve opens too early, unscrew the ring, remove the protective cap and readjust the adjusting nut until the pressure relief valve no longer opens too early.

4. Design of the Compressor


1	Air intake filter / silencer	12	Quick coupling
2	Compressor motor	13	Elbow fitting
3	Main switch / emergency stop	14	Intake manifold
4	Pressure gauge	15	Handle
5	Safety valve	16	Drain valve
6	Pressurised air tank	17	Solenoid valve and check valve
7	Starting capacitor	18	Rubber feet
8	Riser pipe	19	Type plate
9	Pressure regulator	20	Rubber shock absorption
10	Pressure gauge for outlet pressure	21	Braided compressed air hose
11	Ball valve	22	Power cord

All components are located on a cylindrical compressed air tank. The compressor motor is the centrepiece of the device. It drives the coupled pistons directly via an eccentric shaft. Both pistons are made of temperature-stable, wear-resistant, non-metallic material, which means that no lubrication is required in the long term. The compressed air is charged in the compressed air tank, which can be monitored on the pressure gauge. When the pressure rises to 8 bar, the compression is automatically switched off via the pressure switch. If the pressure in the compressed air tank drops below 6 bar due to use or leakage, compression is restarted by the pressure switch. This cycle continues until the appliance is switched off.

5. Technical Specification

	<p>Model SC-550-9L</p> <p>Rated Voltage (V) 230 Frequency (Hz) 50 Power (W) 550 Noise level (dbA) 65 - 72 Flow rate (L/min) 95 Tank capacity (L) 9 Rated pressure (bar) 8 Outside dimensions (LxBxH mm) 490x200x530 Weight (kg) 16</p>
	<p>Model SC-750-25L</p> <p>Rated Voltage (V) 230 Frequency (Hz) 50 Power (W) 750 Noise level (dbA) 65 - 72 Flow rate (L/min) 130 Tank capacity (L) 25 Rated pressure (bar) 8 Outside dimensions (LxBxH mm) 550x260x580 Weight (kg) 22</p>
	<p>Model SC-750-40L</p> <p>Rated Voltage (V) 230 Frequency (Hz) 50 Power (W) 750 Noise level (dbA) 65 - 72 Flow rate (L/min) 130 Tank capacity (L) 40 Rated pressure (bar) 8 Outside dimensions (LxBxH mm) 455x455x745 Weight (kg) 29</p>
	<p>Model SC-1100-50L</p> <p>Rated Voltage (V) 230 Frequency (Hz) 50 Power (W) 1100 Noise level (dbA) 70 - 80 Flow rate (L/min) 200 Tank capacity (L) 50 Rated pressure (bar) 8 Outside dimensions (LxBxH mm) 425x425x825 Weight (kg) 42</p>
	<p>Model SC-1500-50L</p> <p>Rated Voltage (V) 230 Frequency (Hz) 50 Power (W) 1500 Noise level (dbA) 70 - 80 Flow rate (L/min) 200 Tank capacity (L) 50 Rated pressure (bar) 8 Outside dimensions (LxBxH mm) 425x425x825 Weight (kg) 43</p>

6. Transport and Storage

The device may only be transported and stored under the following conditions:

Ambient temperature:	-25°C - +55°C
Relative humidity:	< 95%
Atmospheric pressure:	500hPa - 1060hPa

7. Installation, Testing and Operation

7.1 Installation:

- The environment must be clean, dry, free from corrosive gases and well ventilated. The room temperature must be 5°C-40°C.
- After unpacking, the appliance should be checked for completeness and functionality.
- First fit the pressure gauge, compressed air coupling and air filter (if necessary).
- Connect the compressed air hose to the quick coupling.
- Check that the condensation drain valve is closed and the operating switch is in the 'Off' position.
- Connect the device to the power grid.

7.2 Test run:

- Close the condensation drain valve and the ball valve.
- Check whether the pressure gauge reads below 6 bar.
- Switch the device on using the main switch in the 'On' position (pull the emergency stop switch). The device starts up immediately.
- The pressure gauge rises slowly and the compressor pumps air into the tank.
- As soon as the pressure exceeds 8 bar, the pressure switch switches off the compressor.
- The pressure gauge remains stable at 8 bar if there are no leaks in the system. Minimal pressure losses are possible via the ball valves due to the design.
- Slowly open the ball valve or the safety valve to allow the pressure to escape. If the compressor starts up again at less than 6 bar vessel pressure, the appliance is working properly.
- Switch the device off again using the main switch (press the emergency stop button).

8. Scope of Delivery and Accessories

8.1 Scope of Delivery

- Compressor mounted on pressure vessel
- Feet and / or wheels
- Pressure regulator
- Ball stopcock
- DN7.2 quick coupling socket
- A roll of Teflon sealing tape
- these instructions

8.2 Recommended accessories

Compressed air gun, paint spray gun and various compressed air-driven tools such as power wrenches.

9. Maintenance and Cleaning

Clean the individual parts of the compressor with a soft brush or with a damp cloth and light biodegradable solvent. To avoid damage and the risk of fire, do not use flammable cleaning agents such as white spirit, alcohol or nitro thinner. Ensure that the cooling fins on the appliance are free of dirt and dust, as this reduces the cooling effect and can cause damage to the appliance.

Repairs may only be carried out by trained specialists. Only use original spare parts. Do not use modified or aftermarket parts. Do not operate the appliance with defective parts.

Regularly check all attachments, hoses and cables for damage. In the event of leaks, screws and nuts should be tightened or, if necessary, resealed with Teflon tape or sealant.

9.1 Periodic draining of condensation from the compressed air tank

This procedure should be repeated every 2-3 days, depending on the period of use (operating hours) and the environment (humidity, temperature, etc.). Place a container under the drain valve. The tank must be filled with a little compressed air. Slowly open the drain valve to drain the water in the tank. When no more water escapes from the tank, close the drain valve again.

9.2 Checking the air filter

The installed air filter removes dust from the ambient air that is drawn in. To ensure that the device works properly, it must be checked regularly, cleaned and replaced if it is very dirty. The air filter can be cleaned by tapping it out or using a brush.

9.3 Adjusting the pressure switch

The pressure switch regulates the switch-on and switch-off behaviour of the compressor to ensure that the pressure is provided correctly. If the pressure in the pressure tank does not reach the pressure preset by the manufacturer, the pressure switch must be adjusted accordingly.

Factory switch-off point: 8 bar +/- 0.2

Factory switch-on point 6 bar +/- 0.2 (always 2 bar below switch-off point)

Open the housing of the pressure switch. The switch-off point can be set using the adjusting screw for the maximum pressure (turn clockwise to increase the switch-off threshold). If the pressure drops by approx. 2 bar due to withdrawal, the system restarts automatically. The switching differential of 2 bar is fixed and cannot be changed.

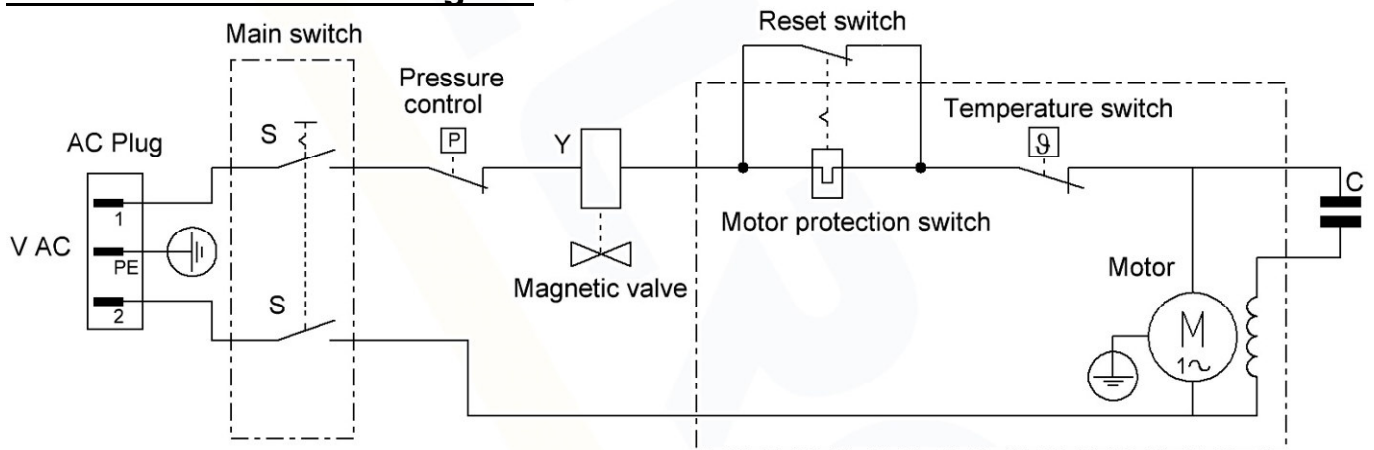
10. Malfunctions: Causes and Troubleshooting

Malfunctions	Possible cause	Workaround
Compressor does not start	Interruption of the electrical supply	Check fuses or supply lines for function
	Grid voltage/frequency do not match the motor data	Check the motor rating plate data, change the supply voltage
	Device did not vent when switched off	Switch off the main switch and switch on again after approx. 10 seconds
	Motor protection switch has been triggered	Switch off the main switch, reset the motor protection switch and switch on again after approx. 10 seconds
Unusual noises	Wear or damage to components	Check components and replace if necessary
Pressure drop	Leakage in the system	Search for leaks and seal them; if the pressure tank is leaking due to corrosion or damage, replace it.

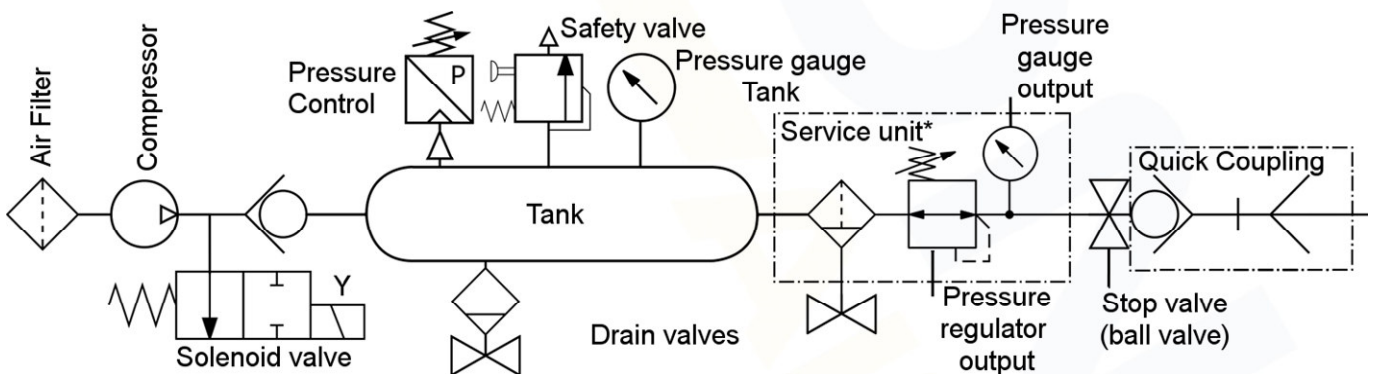
Malfunctions	Possible cause	Workaround
Overheating	Insufficient ventilation or overloading	Improve ventilation and / or reduce load
Inconsistent pressure	Defective pressure regulator	Check pressure regulator and replace if necessary
Excessive vibration	Defective suspension elements	Replace suspension elements
High energy consumption	Dirty filters or inefficient components	Clean filter or replace components
Compressor runs constantly	Leaks or incorrect settings	Seal leaks and check settings

11. Circuit diagrams

11.1 Electrical circuit diagram



11.2 Pneumatic circuit diagram



12. Conformity



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EU-Konformitätserklärung / EC-Declaration of Conformity

Originalausgabe
Original edition

Die Firma / The company
Mecheltron GmbH & Co. KG
Withig 12
D – 77836 Rheinmünster
erklärt, dass das Produkt / declares that the product

Luft-Kompressor, Typ/ Air Compressor, Type:
SC 550-9L, SC 750-25L, SC 750-40L, SC 1100-50L, SC 1500-50L

auf das sich diese Erklärung bezieht, mit den wesentlichen Schutzanforderungen
folgender Richtlinie(n) übereinstimmt:
is in conformity with the following complies with the essential protection requirements
of the following directive(s):

2006/42/EG (L157/24 09.06.2006) **(MRL/MD)**

EN ISO 12100:2010 Sicherheit von Maschinen - Allgemeine Gestaltungsleitsätze - Risikobeurteilung
und Risikominderung

General principles for design - Risk assessment and risk reduction

EN 1012-1:2010 Kompressoren und Vakuumpumpen - Sicherheitsanforderungen - Teil 1:
Kompressoren; Deutsche Fassung

Safety requirements - Part 1: Air compressors

EN 60204-1:2018 Sicherheit von Maschinen - Elektrische Ausrüstung von Maschinen - Teil 1:
Allgemeine Anforderungen (IEC 60204-1:2016, modifiziert)

Electrical equipment of machines - Part 1: General requirements

2009/125/EC (L285/10 31.10.2009) & **2019/1781/EU** (L272/74 25.10.2025)

Ecodesign and Energy labelling - Electric motors

RL 2014/29/EU (L 96/45 29.3.2014) (Einfache Druckbehälter/ simple pressure vessels)

EN 286-1 Einfache unbedeuerte Druckbehälter für Luft oder Stickstoff - Teil 1: Druckbehälter
für allgemeine Zwecke

Simple unfired pressure vessels designed to contain air or nitrogen - Part 1: Pressure vessels for
general purposes

2011/65/EU (Abl. L 174/88 S. 1.7.2011) **(RoHS)** & VO (EU) 2015/863 L 137/10 4.6.2015

EN IEC 63000:2018 Technische Dokumentation zur Beurteilung von Elektro- und Elektronikgeräten
hinsichtlich der Beschränkung gefährlicher Stoffe

Technical documentation for the assessment of electrical and electronic products with respect to the
restriction of hazardous substances

Bevollmächtigte Person zur Zusammenstellung der technischen Unterlagen:

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Rheinmünster, 09.01.2025



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