

## Air Compressor Kit with Solid State Relay



### Features

- High performance, top of the line 12V air compressor
- Solid State Relay with Pressure Sensor
- 2 liter accumulator (bottle)
- Pressure switch (8.5 bar ON, 9.5 bar OFF)
- Low pressure warning switch
- Integrated air filter
- Overload safety valve (pressure relief)
- Pressure regulator (2 - 8 bar)

## Technical specifications

	<b>Air bottle 2L</b>
Dimensions L x W x H	145 x 130 x 270 mm
Weight	2060g
Voltage	12V
Operating temperature	-20 ... 80°C
Max pressure	14 bar

	<b>Compressor</b>
Dimensions L x W x H	210 x 100 x 180 mm
Weight	3900g
Voltage	12V
Operating temperature	-20 ... 80°C
Duty cycle	100% @ 7bar
Max Pressure	14 bar
Max Amp Draw	23 amp (@ 13.8 volts)

<b>Pressure (bar)</b>	<b>Fill Liter / Minute</b>	<b>Amps</b>
0	44.7	12
1	38.1	13
2	33.3	15
3	30.6	16
4	29.1	17
5	27.1	18
6	25.3	19
7	24.0	20
8	22.4	21
9	21.0	23
10	19.5	21
11	18.2	20
12	16.7	19
13	15.2	19
14	13.5	18

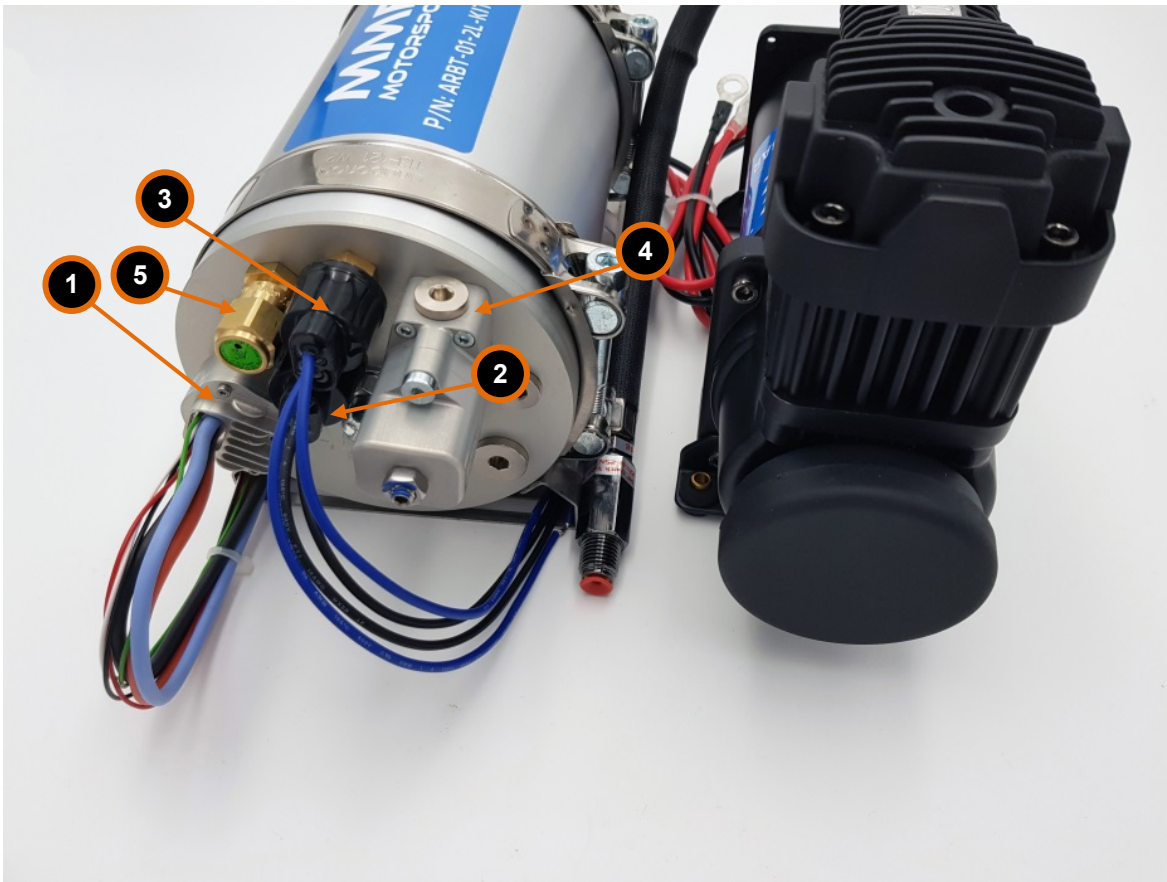
## Safety rules

- Before assembling please read general rules. You received air bottle and compressor which must be assembled and connected together. All parts shall not be exposed to heat and water.
- Never allow children to operate this compressor kit. Close supervision is necessary when this compressor is being used near children.
- This compressor will become very HOT during and immediately after use. Do not touch any part of this compressor with bare hands, during and immediately after use.
- Do not use this product near flames or explosive materials or where aerosol products are being used. - -
- Do not pump anything other than atmospheric air.
- Never use this product while sleepy or drowsy.
- Do not use any tools or attachments without first determining maximum air pressure for that tool or attachment.
- Never point any air nozzle or air sprayer toward another person or any part of the body.
- This air compressor is equipped with an Automatic Reset Thermal Protector, and can automatically restart after the thermal protector resets. Always cut off power source when thermal protector becomes activated.
- Wear safety glasses or goggles when operating this product.
- Use only in well ventilated areas.

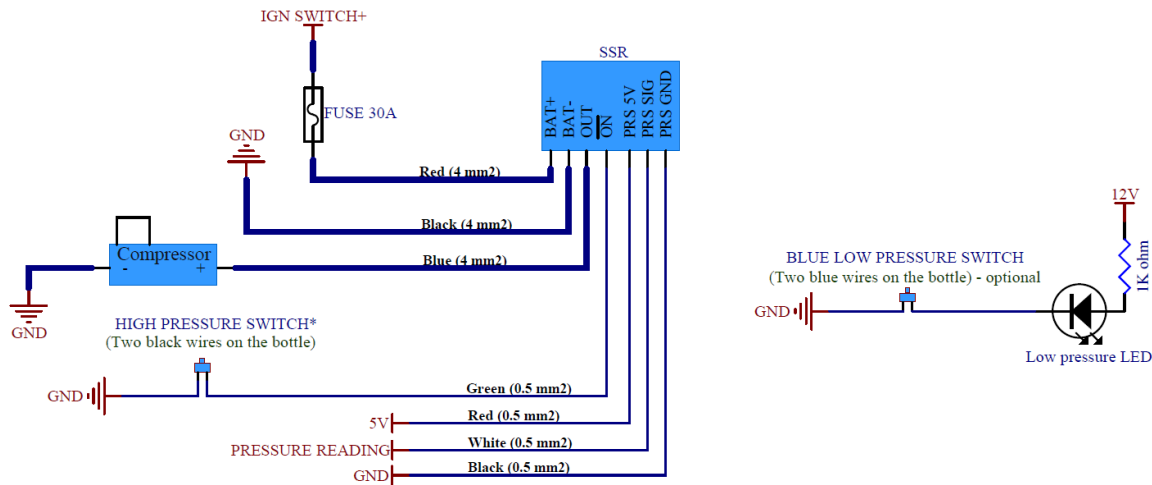
## Included in the kit

- ① Solid State Relay with Pressure Sensor
- ② High pressure switch (8.5 bar ON, 9.5 bar OFF) – black wires
- ③ Low pressure switch (6 bar) – blue wires
- ④ Output pressure with regulator (preset to 8 bar output)
- ⑤ Overload safety valve

Kit comes with pneumatic pipes (not shown on the picture)



## Wire Diagram



\* USING INTEGRATED PRESSURE SWITCH PUTS THIS SETUP IN A AUTO MODE (COMPRESSOR WILL TURN ON BELOW 8.5 BAR and TURN OFF ABOVE 9.5 BAR)  
 IF YOU WANT YOUR ECU TO CNOLR THE COMPRESSOR, WIRE THE GREEN WIRE TO YOUR ECU OUTPUT. SWITCHING TO GND WILL RUN THE COMPRESSOR.

- PRESSURE SENSOR HAS NO REVERSE POLARITY OR OVER VOLTAGE PROTECTION
- PUTTING ANYTHING ABOVE 5V ON RED OR WHITE WIRE
- OR PUTTING ANYTHING THAN GND ON BLACK AND 5V ON RED, WILL DESTROY THE SENSOR!

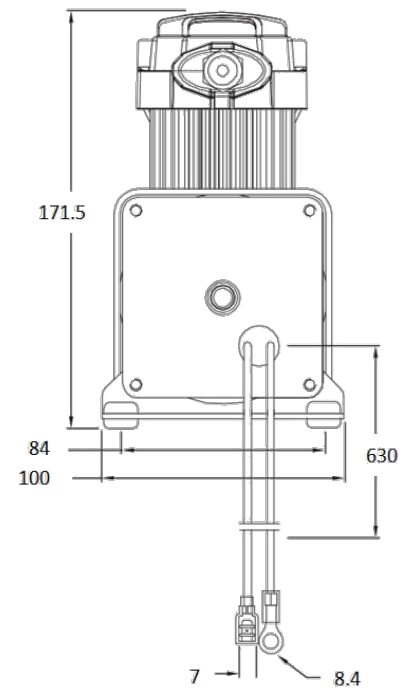
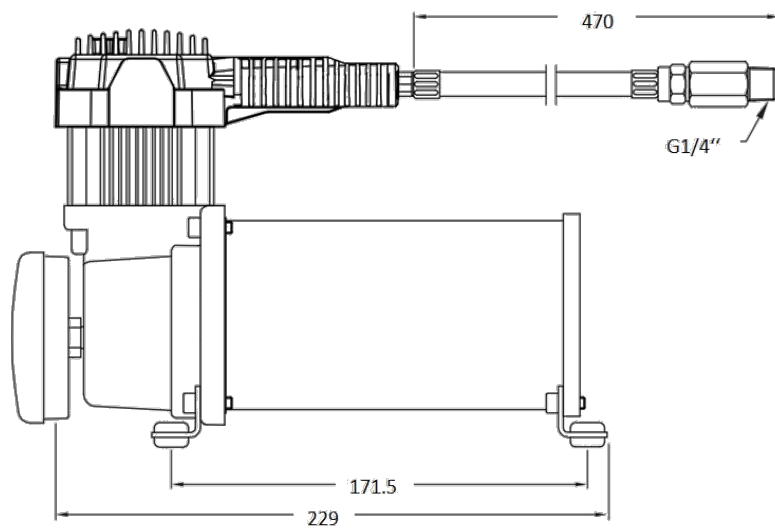
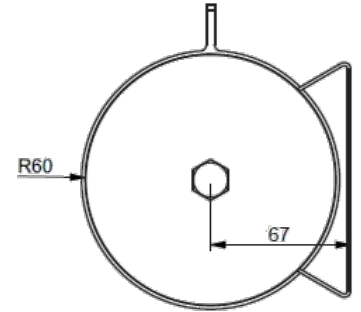
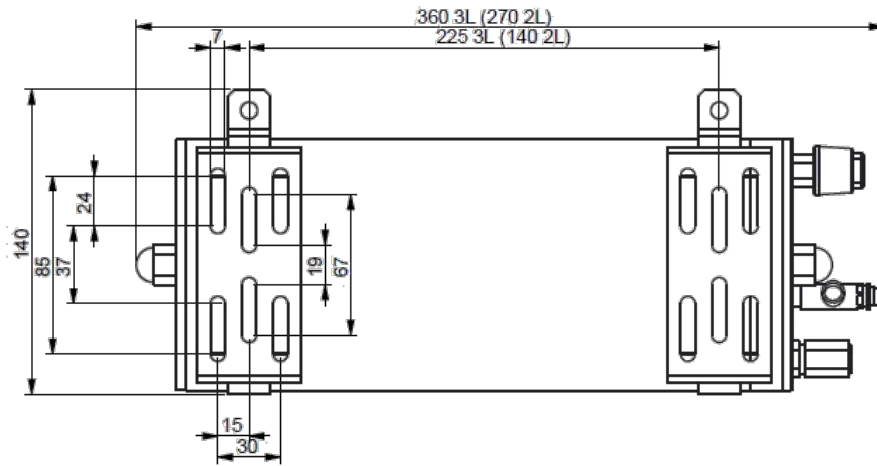
### SSR Wiring:

<b>RED</b> (4 mm <sup>2</sup> )	<b>12V</b>	IGN SWITCH 12V (FUSED) – 4 mm <sup>2</sup> or more
<b>BLACK</b> (4 mm <sup>2</sup> )	<b>GND</b>	CONNECTION TO GROUND – 4 mm <sup>2</sup> or more
<b>BLUE</b> (4 mm <sup>2</sup> )	<b>OUT</b>	CONNECTION TO COMPRESSOR'S POSITIVE – 4 mm <sup>2</sup> or more
<b>GREEN</b> (0.5 mm <sup>2</sup> )	<b>ON</b>	RUNS COMPRESSOR IF SWITCHED TO GND
<b>RED</b>	<b>SENS 5V</b>	PRESSURE SENSOR 5V
<b>BLACK</b>	<b>SENS GND</b>	PRESSURE SENSOR GND
<b>WHITE</b>	<b>SENS SIG</b>	PRESSURE SENSOR OUTPUT

Sensor outputs 0.5V at 0 BAR and 4.5V at 10 BAR. Anything below 0.45V or above 4.55V means either incorrect wiring or damaged sensor.

When powered SSR green led is on. When ON signal is active (ground), red light turns on and there's 12V on OUT wire.

## Technical drawing



## Servicing

1. Periodically check all electrical, fittings connections. Clean and tighten as needed.
2. Periodically check all mounting screws. Tighten as needed.
3. Replace Air Filter Element periodically. Replacement frequency depends on operating frequency and operating environment. For frequent use in dusty environment, we recommend that you replace air filter element at least once a month.
4. Regularly clean dust and dirt from compressor cooling fins and motor housing.
5. Your air compressor is equipped with a permanently lubricated, maintenance-free motor. Never try to lubricate the compressor.
6. All repairs should be performed by Manufacturer.
7. Once per year air bottle should be opened and drained of excess water.

## Ordering

Compressor: **COMP-01-12V-14BAR**

Air Bottle 2L: **ARBT-01-2L-KIT-8MM**