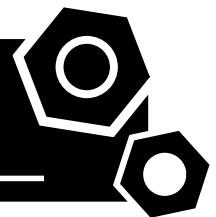


**DIESEL ENGINE DRIVEN
STATIONARY AIR COMPRESSOR
DR165-8**

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- JB/T6430-2002
- JB/T3771-1992
- JB/T4223-2007
- GB/T15487
- ISO 1217
- ISO 2151
- ASME B 19.1-1990

Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25°C to 45°C. The coolant heater is needed when the temperature is below 5°C
- Humidity: Less than 80%.
- Altitude: Below one thousand (1000) meters.

Factory Inspection

- Inspection items.
- Protection devices working test.
- Starting ability in normal temperature.
- 2 hours performance test of continuous full load.
- Performance test, including flux, pressure, temperature, noise, thermal balance etc.

Painting Process

- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

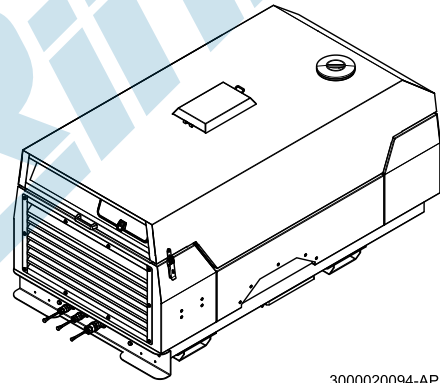
2 General Features

- POWERLINK diesel engine
- Oil-injection double-screw air compressor
- PLC controller with microprocessor technique
- Suction valve
- Solenoid valve
- Pressure regular valve
- Safety valve
- Minimum pressure valve
- Vent valve
- Shuttle valve

- Oil thermostatic valve
- 50°C radiator
- Lubricating oil radiator
- Double layer air filter
- Lubricating oil filter
- Vertical air/oil tank (ASME approval)
- Air/oil separator
- Lockable battery isolator switch
- 1x12V/70AH sealed for life maintenance free battery
- Fuel tank for 8 hours running
- Powder coated canopy

3 Equipment Specification

Air Compressor

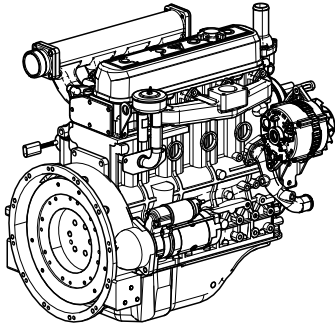


3000020094-AP1-C3

Model.....	DR165-8
Drive type	Diesel engine driven
Speed under full load.....	2650rpm
Rated flux	170cfm(4.8m³/min)
Rated discharge pressure	8.0bar
Max. unloading pressure	8.0bar
Min. working pressure	5.0bar
Discharge port	2xG3/4"+1xG1"
Total capacity of oil system.....	20L
Lubricating oil type.....	Synthetic oil
Total capacity of coolant system.....	10L
Fuel tank capacity.....	75L
Dry weight.....	1096kg
Dimensions L×W×H.....	2178x1126x1046mm

Note: all pressures in the manual are relative values (compared with atmospheric pressure)

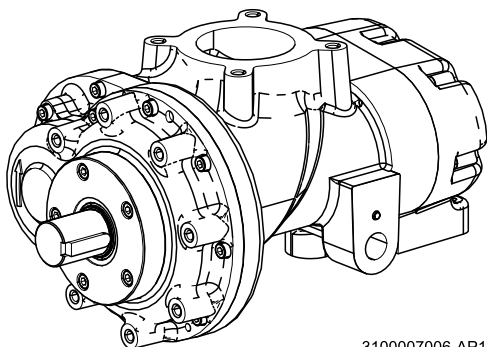
Diesel Engine



310000143-AP1-A10

Engine Manufacturer/Brand.....	Powerlink
Engine Model.....	4D2.7A-C54
Dimensions L×W×H.....	696×541×690mm
Dry Weigh (approx.).....	250kg
Number of Cylinders.....	4
Bore.....	90mm
Stroke.....	105mm
Displacement.....	2.67L
Compression Ratio.....	18.4
Type of injection.....	Direct injection
Intake System.....	Turbocharged
Intake Resistance.....	N/A
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	12V
Type of Fuel.....	No.2-ASTM D975
Type of Oil.....	Better than API CF class
Oil Capacity.....	6.0L
Type of Coolant.....	Glycol mixture
Coolant Capacity.....	9.9L
Back Pressure.....	≤10.1kPa
Standby Power.....	N/A
Prime Power.....	40kW
Fuel Consumption(100%load).....	228g/kW.h

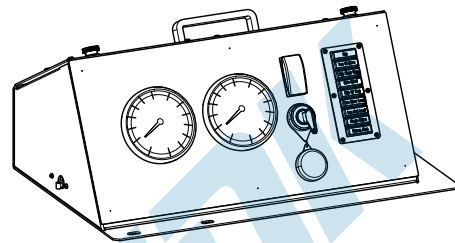
Compressor



3100007006-AP1-A6

Structure.....	Oil-injection double-screw
Shaft power.....	30.5kW
Suction temperature.....	0-40°C
Working pressure.....	≤8.0bar
Rated speed.....	6104rpm
Speed ratio.....	2.34
Weight.....	148kg

Control Cabinet



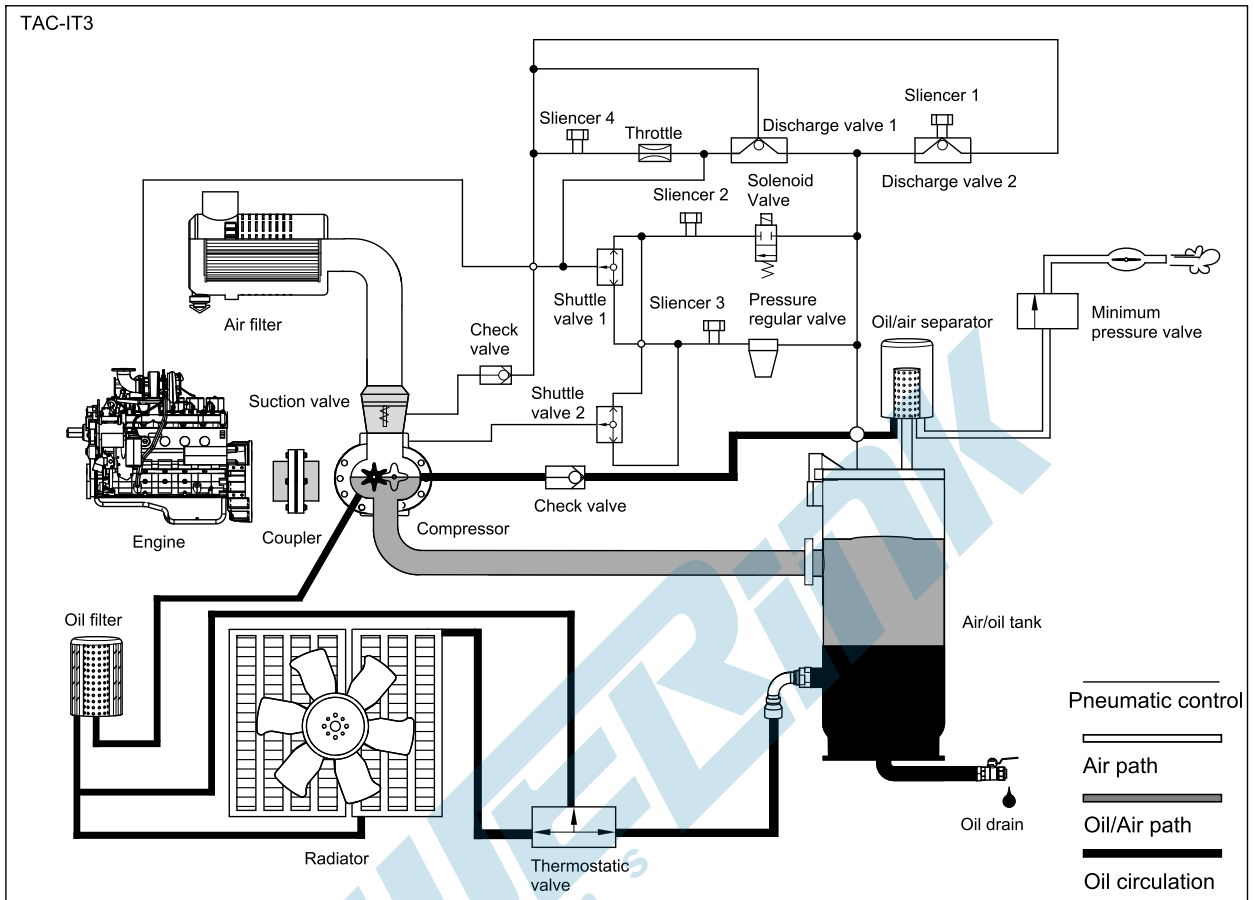
1000142274-AP1-B2

An advanced microprocessor is used in the control system for the running and monitor system of the air compressor. During running the system can accurately measure engine oil pressure, coolant temperature, lubricating oil temperature, engine speed, discharge pressure and fuel level. When there is any fault, the corresponding alarm indicator would flash and the engine stop automatically.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the air compressor
- Parameters display, like engine speed, running time and discharge pressure etc.
- Multiple protections and alarm indicators
- Automatic shutdown protection feature for safe running

Shutdown Item
low engine oil pressure
high coolant temperature
over engine speed
high compressor lubricating oil temperature
low coolant level
low fuel level
charge failure

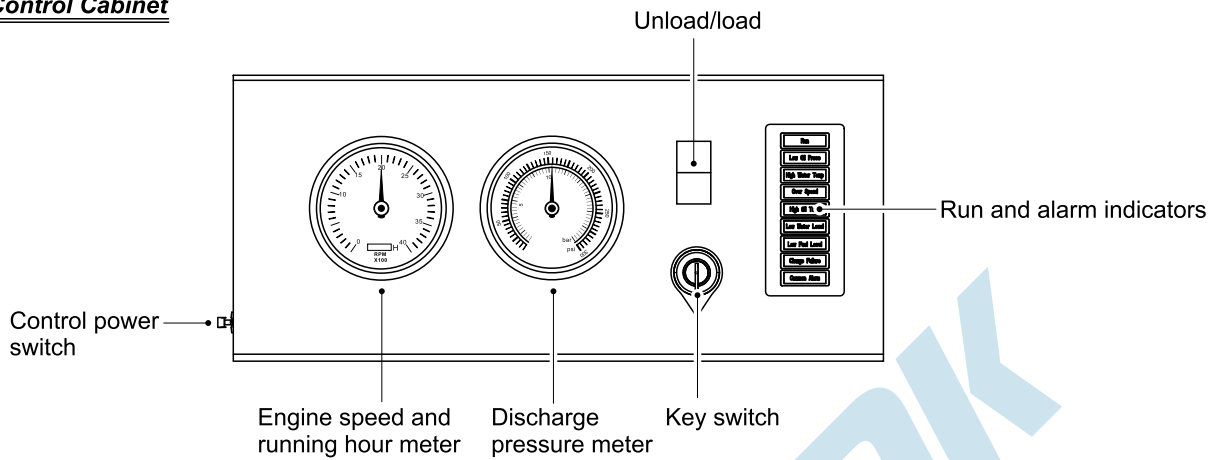
4 Air and Oil Path System



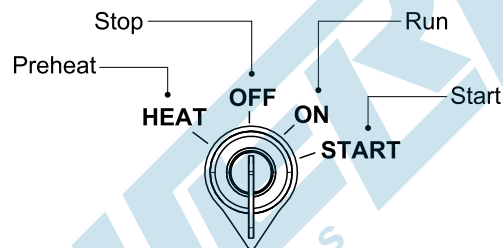
- Suction Valve
 - Control mode Direct proportion
 - Working pressure $\leq 8.0\text{bar}$
- Pressure Regular Valve
 - Working pressure 8.0bar
 - Pressure setting mode Manual
- Minimum Pressure Valve
 - Activation pressure 5.0bar
 - Fully opened pressure $5.0-5.5\text{bar}$
- Thermostatic Valve
 - Activation temperature 85°C
 - Fully opened temperature 100°C
- Air/oil Tank
 - Working pressure $\leq 8.0\text{bar}$
 - Activation pressure of safety valve 8.8bar
- Air/oil Separator
 - Working pressure $\leq 8.0\text{bar}$
 - Oil residue ratio (approx.) $\leq 3\text{ppm}$

5 Control System

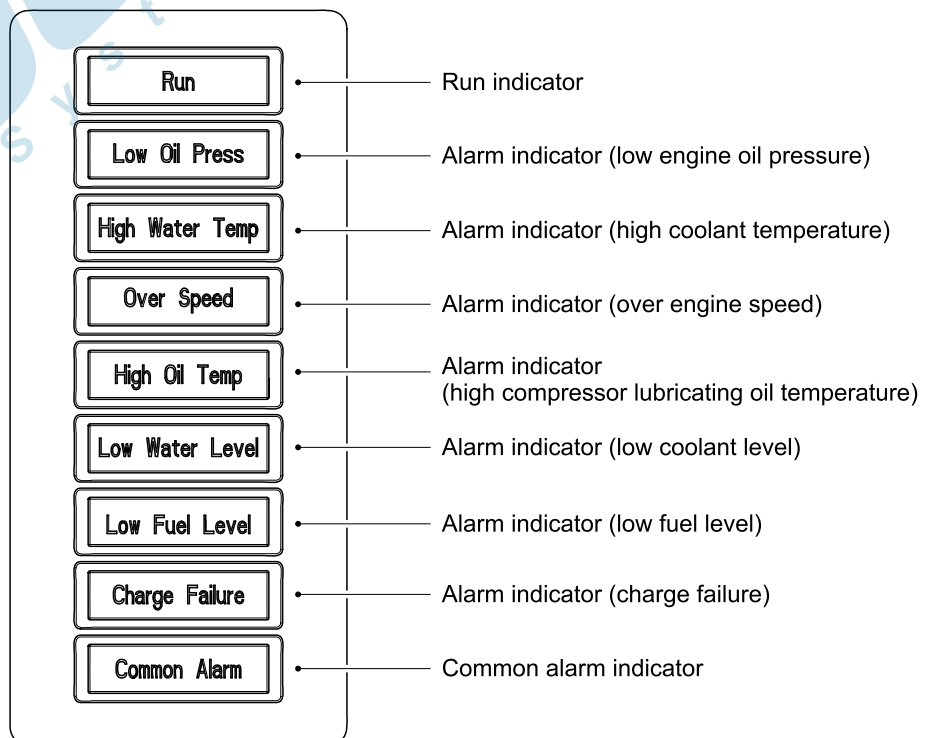
Control Cabinet



Key switch



Run and Alarm Indicators



6 Overall Dimensions

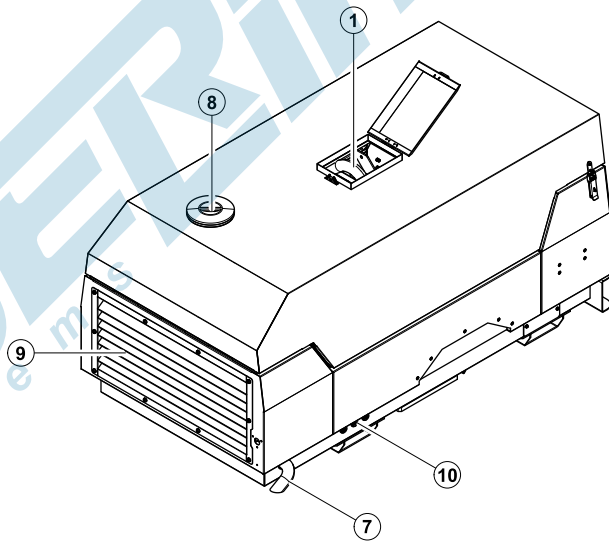
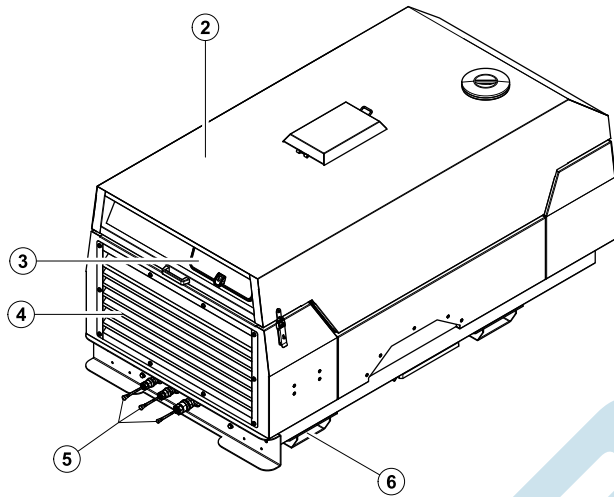
3000020094-DR1-C3

Dry weight

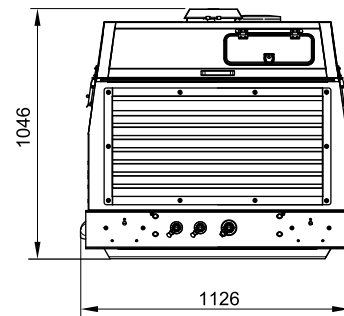
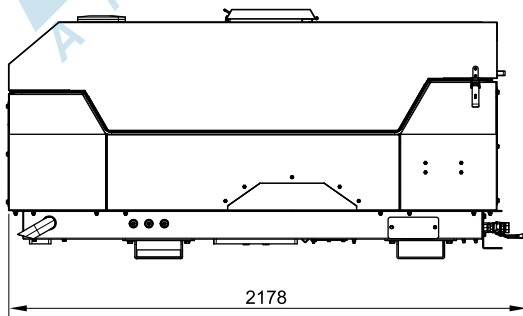
1096kg

Dimensions

2178x1126x1046mm



- ⑩ Waste water/oil drain outlet
- ⑨ Hot air outlet
- ⑧ Coolant inlet
- ⑦ Exhaust gas pipe
- ⑥ Fork lift channel
- ⑤ Discharge ball valve
- ④ Cooling air inlet
- ③ Control cabinet
- ② Access door
- ① Lifting lug

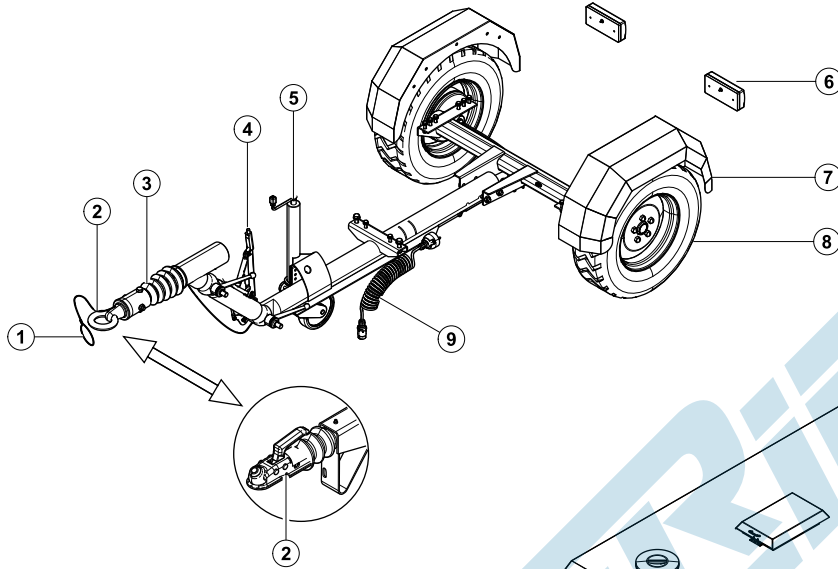


7 Optional Trailer

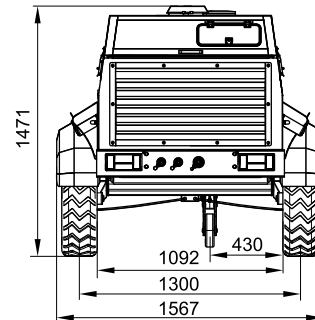
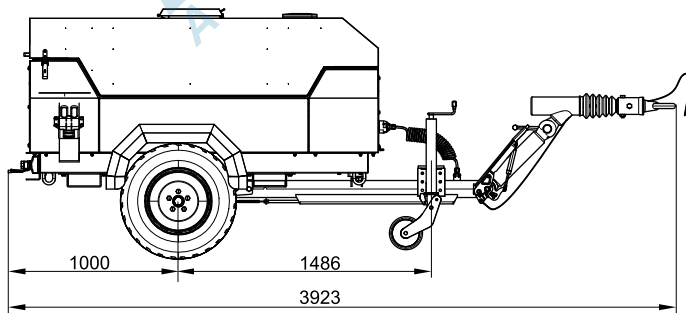
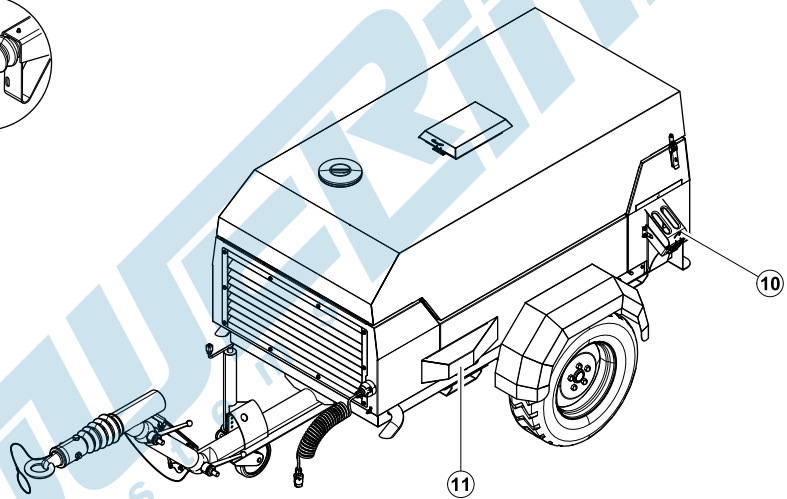
3000020094-DR3-C3

HIGHWAY TYPE TRAILER

Dry weight of the whole	1257kg
Towing speed	≤ 80km/h
Tyre size	195R14
Dimensions of the whole	3923x1567x1471mm



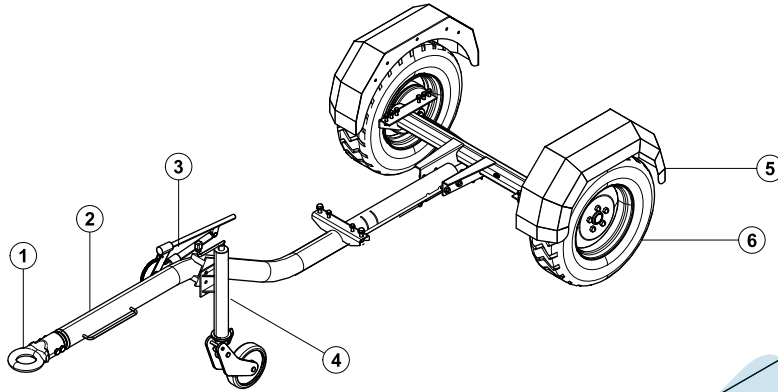
- ⑪ Crashworthy block
- ⑩ Wheelchock
- ⑨ Rear light wire
- ⑧ Tyre
- ⑦ Mudguard
- ⑥ Rear light
- ⑤ Jockey wheel
- ④ Parking brake
- ③ Draw bar with service brake
- ② Ring coupler / ball coupler
- ① Break-away cable



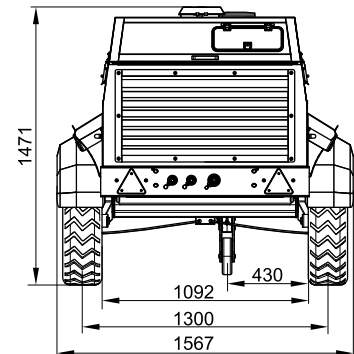
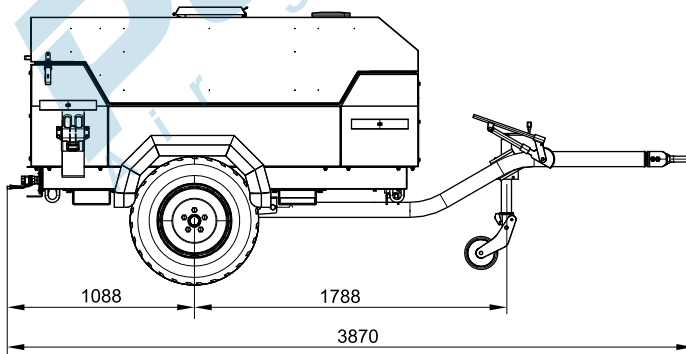
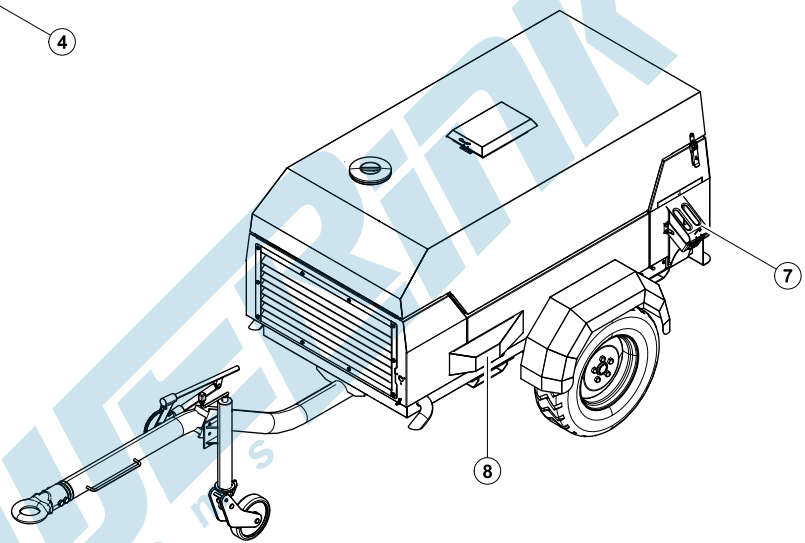
3000020094-DR5-C3

NON-HIGHWAY TYPE TRAILER

Dry weight of the whole	1249kg
Towing speed	≤ 20km/h
Tyre size	215/75 R17.5
Dimensions of the whole	3870x1567x1471mm



- ⑧ Crashworthy block
- ⑦ Wheelchock
- ⑥ Tyre
- ⑤ Mudguard
- ④ Jockey wheel
- ③ Parking brake
- ② Draw bar
- ① Ring coupler



3000020094-C3-E

12.2012

POWERLINK
Air Systems

<http://www.powerlinkworld.com>

Specification may change without prior notice. For more info., contact Power Link or your local distributors please.