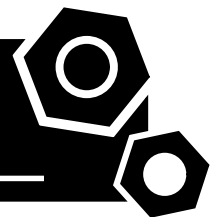


**DIESEL ENGINE DRIVEN
STATIONARY AIR COMPRESSOR
DR120-10**

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.

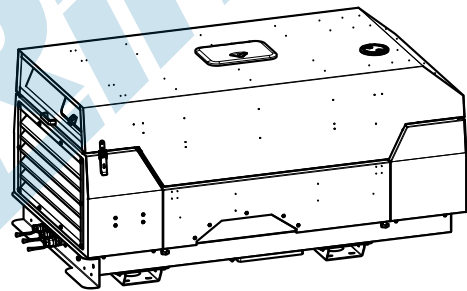
2 General Features

- 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 10 hours running
- Powder coated canopy

3 Equipment Specification

Air Compressor

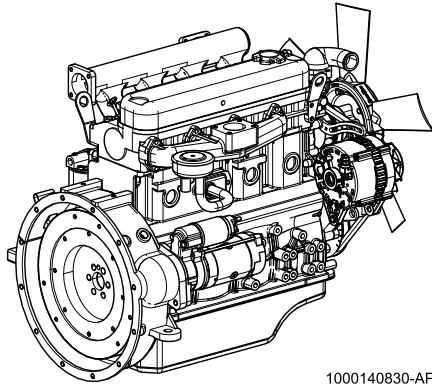


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Model.....	DR120-10
Drive type	Diesel engine driven
Speed under full load.....	2600rpm
Rated flux	127cfm(3.6m³/min)
Rated discharge pressure	10.0bar
Max. unloading pressure	10.0bar
Min. working pressure	5.0bar
Discharge port	2xG3/4"+1xG1"
Total capacity of oil system.....	20L
Lubricating oil type.....	Synthetic oil
Total capacity of coolant system.....	10L
Fuel tank capacity.....	75L
Dry weight.....	1061kg
Dimensions L×W×H.....	2185x1104x1007mm

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

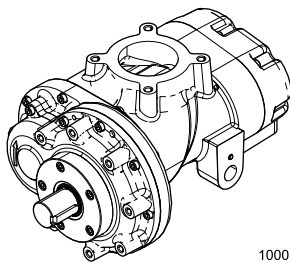
Diesel engine



1000140830-AP1-A3

Engine Manufacturer/Brand	Powerlink
Engine Model	4D2.3A-C41
Dimensions L×W×H.....	752×539×613mm
Dry Weigh (approx.)	220Kg
Number of Cylinders.....	4
Bore.....	85mm
Stroke	100mm
Displacement.....	2.27L
Compression Ratio	18
Type of injection.....	Direct injection
Intake System.....	Natural aspirated
Intake Resistance	≤4kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel.....	No.2 or ASTM D975
Type of Oil	API-CH-4 or ACEA E5
Oil Capacity	6L
Type of Coolant	Glycol mixture
Coolant Capacity	4.65L
Back Pressure	≤10kPa
Standby Power	N/A
Prime Power	30kW
Fuel Consumption(100%load).....	240g/kW.h

Compressor



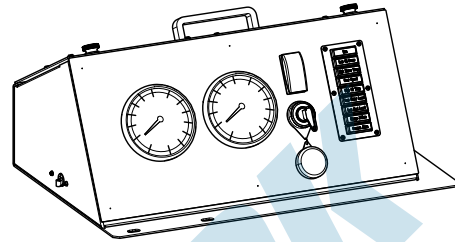
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Structure

Oil-injection double-screw

Suction temperature	0-40°C
Working pressure	≤10.0bar
Rated speed	4550rpm
Speed ratio	1.75
Weight	67kg

Control Cabinet



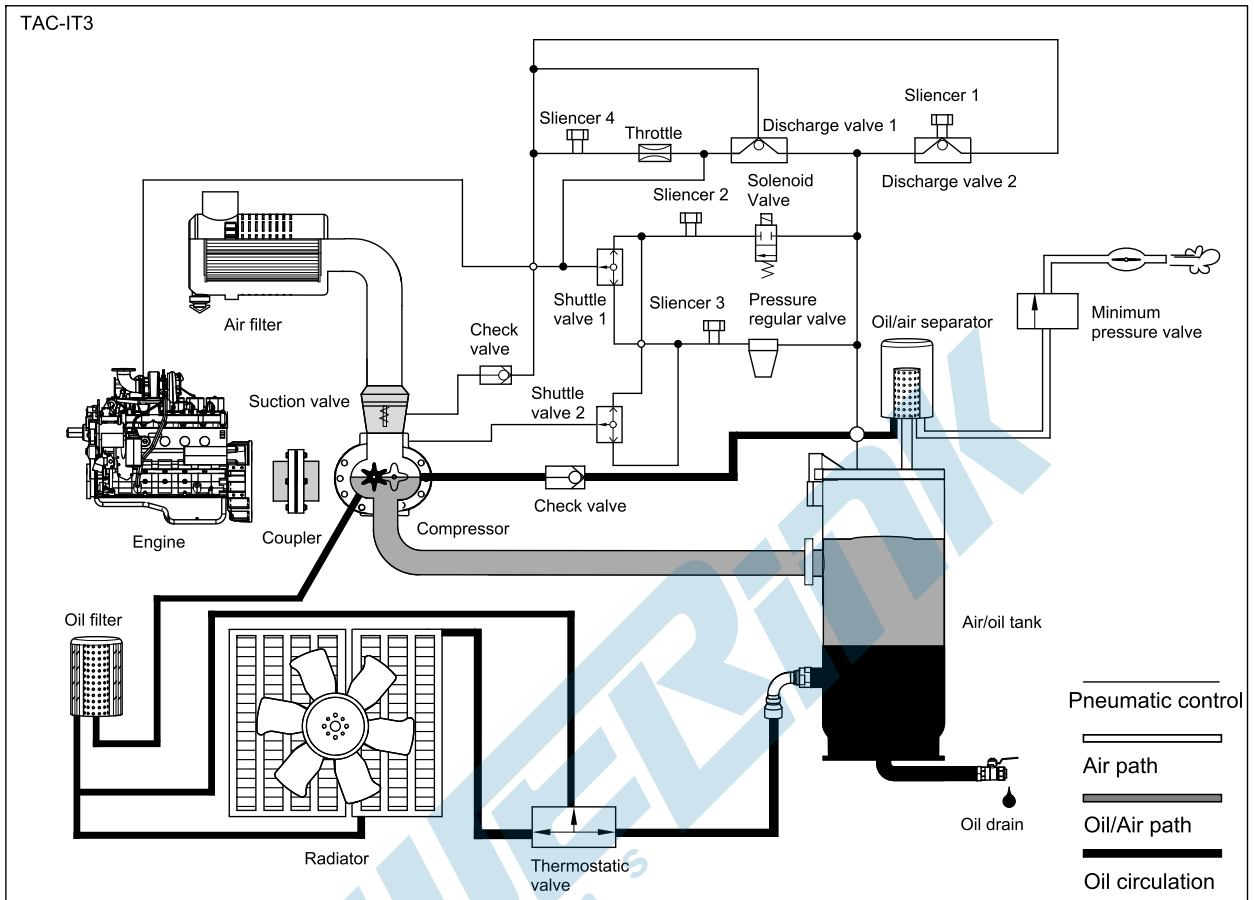
1000142274-AP1-B2

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

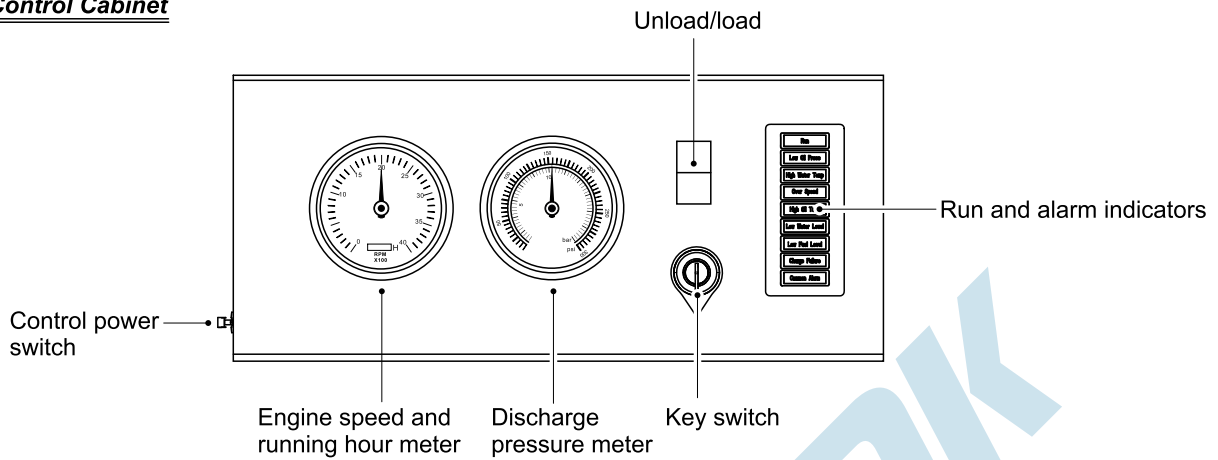
4 Air and Oil Path System



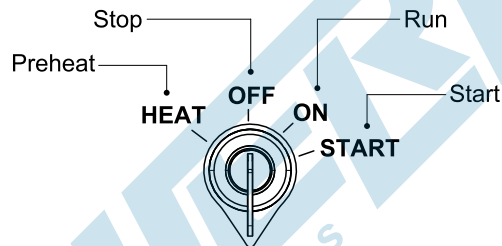
- Suction Valve
 - Control mode Direct proportion
 - Working pressure $\leq 10.0\text{bar}$
- Pressure Regular Valve
 - Working pressure 10.0bar
 - Pressure setting mode Manual
- Minimum Pressure Valve
 - Activation pressure 5.0bar
 - Fully opened pressure $5.0-5.5\text{bar}$
- Thermostatic Valve
 - Activation temperature 85°C
 - Fully opened temperature 100°C
- Air/oil Tank
 - Working pressure $\leq 10.0\text{bar}$
 - Activation pressure of safety valve 11.0bar
- Air/oil Separator
 - Working pressure $\leq 10.0\text{bar}$
 - Oil residue ratio (approx.) $\leq 3\text{ppm}$

5 Control System

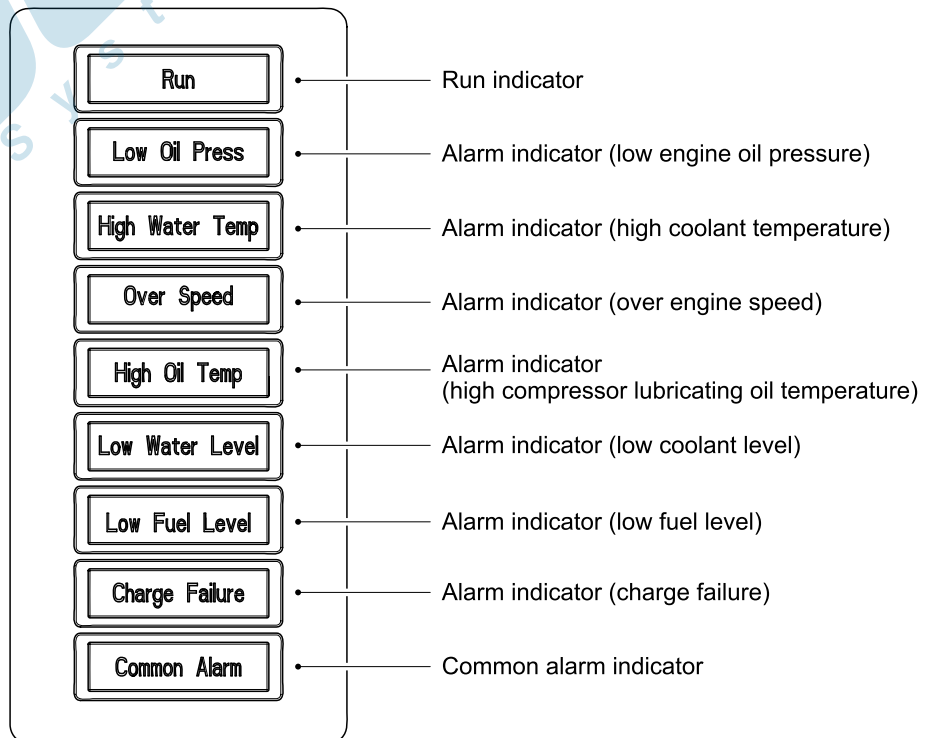
Control Cabinet



Key switch



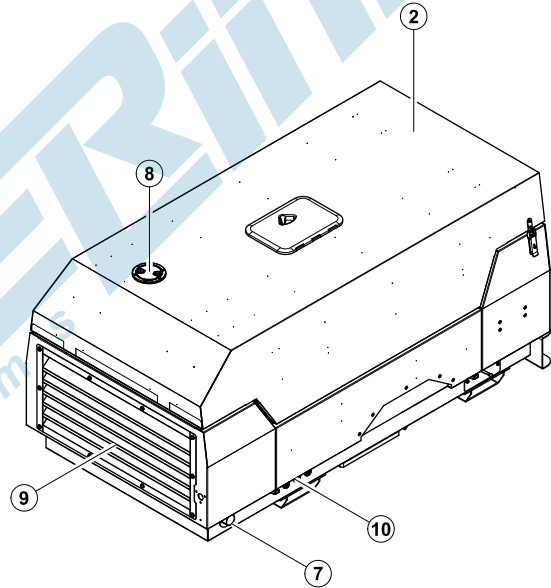
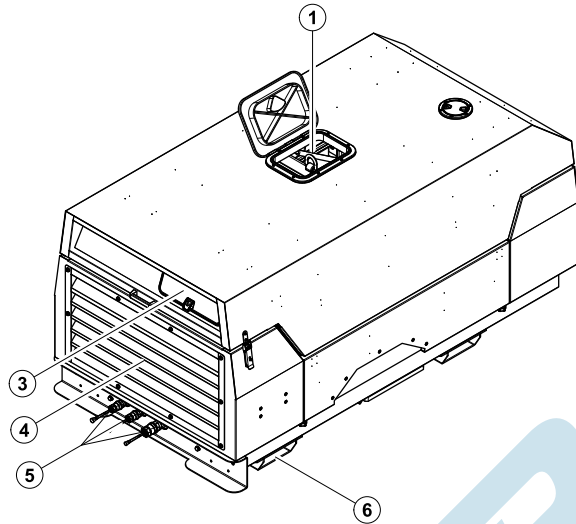
Run and Alarm Indicators



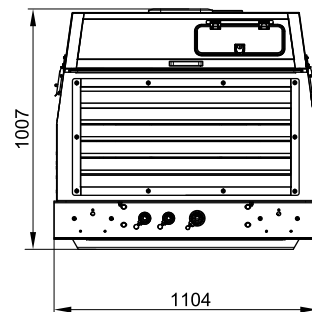
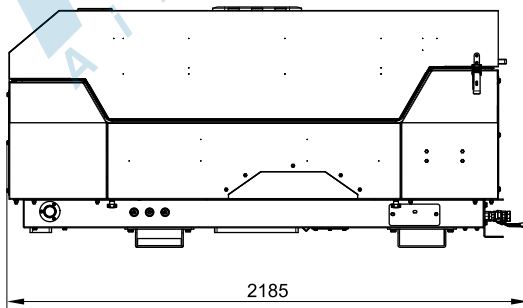
6 Overall Dimensions

3000020008-DR1-F2

Dry weight	1061kg
Dimensions	2185x1104x1007mm



- 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

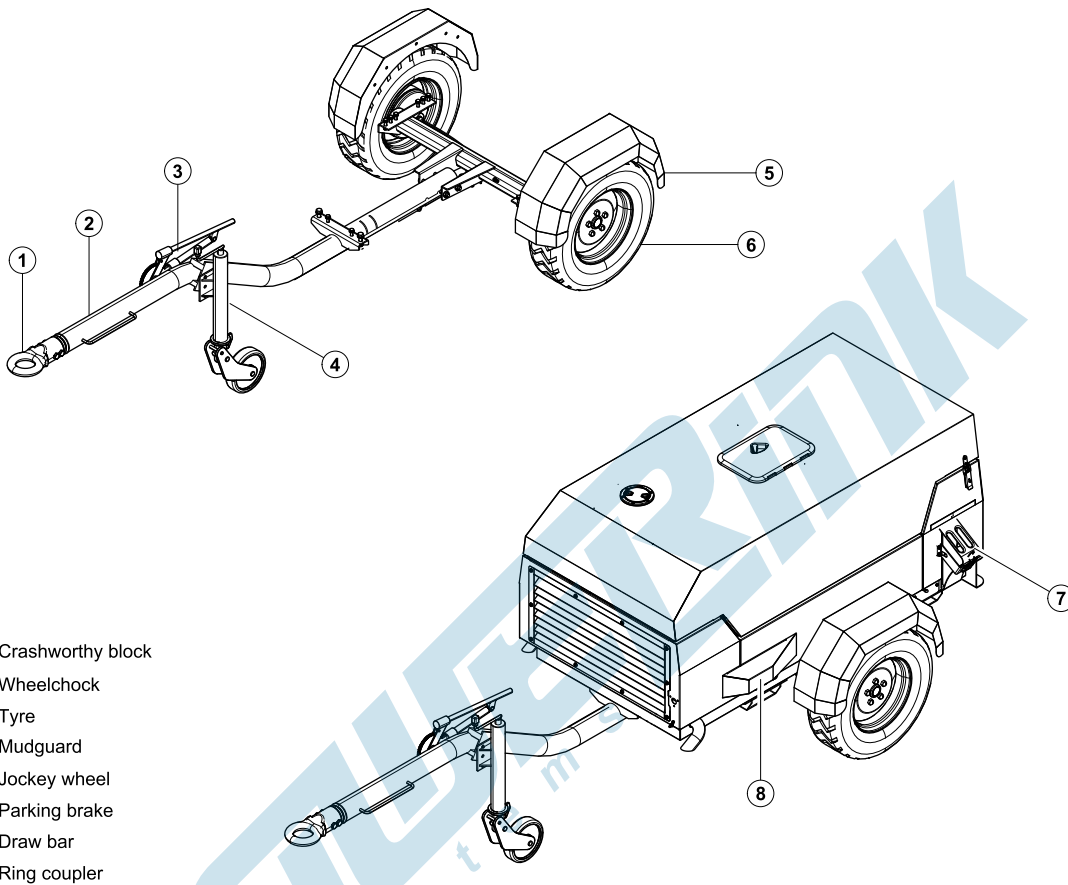


7 Optional Trailer

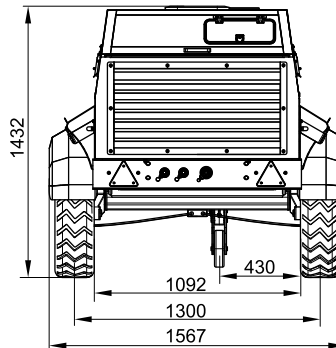
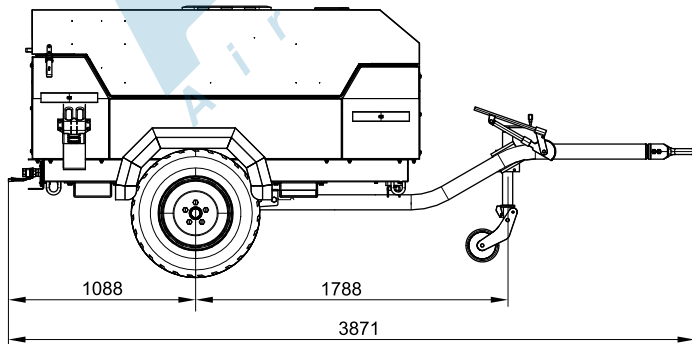
3000020008-DR3-F2

NON-HIGHWAY TYPE TRAILER

Dry weight of the whole	1194kg
Towing speed	≤ 20km/h
Tyre size	215/75 R17.5
Dimensions of the whole	3871x1567x1432mm



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



3000020008-F2-E

04.2013

POWERLINK
Air Systems

<http://www.powerlinkworld.com>

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