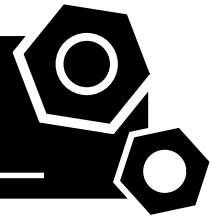


**DIESEL ENGINE DRIVEN
STATIONARY AIR COMPRESSOR
DR780-23**

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- JB/T6430-2002
- JB/T3771-2008
- JB/T4223-2007
- GB/T15487-1995
- ISO 1217-2009
- ISO 2151-2004
- ASME B 19.1-1995

Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25°C to 50°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.

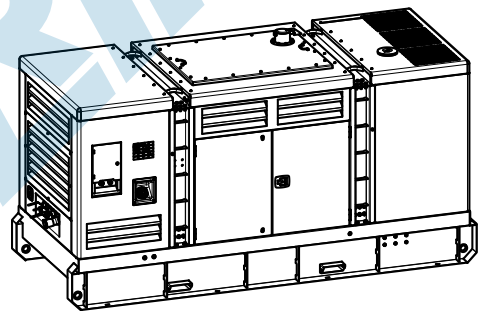
2 General Features

- Cummins 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 of engine
- Double layer air filter of compressor
- Lubricating oil filter
- Vertical air/oil tank (ASME approval)
- Air/oil separator
- Emergency stop button
- Lockable battery isolator switch
- 2x12V/200AH sealed for life maintenance free battery
- Fuel tank for 14 hours running
- Powder coated canopy

3 Equipment Specification

Air Compressor

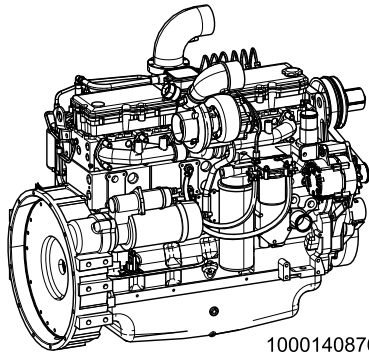


3000020529-AP1-A1

Model.....	DR780-23
Drive type	Diesel engine driven
Speed under full load.....	1800rpm
Rated flux	777cfm(22.0m ³ /min)
Rated discharge pressure	23.0bar
Max. unloading pressure	23.0bar
Min. working pressure	10.0bar
Discharge port	2xR1 1/2"+1xR2 1/2"
Total capacity of oil system.....	110L
Lubricating oil type.....	Synthetic oil
Total capacity of coolant system.....	57L
Fuel tank capacity.....	750L
Dry weight.....	5034kg
Dimensions L×W×H.....	4441x1783x2337mm

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

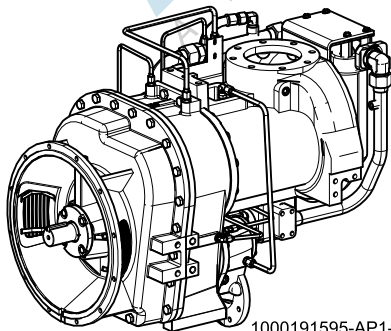
Diesel Engine



1000140876-AP1-A5

Engine Manufacturer/Brand.....	Cummins
Engine Model.....	6LTAA8.9-C360
Dimensions L×W×H.....	1210x919x1116mm
Dry Weight (approx.)	650Kg
Number of Cylinders.....	6
Bore.....	114mm
Stroke.....	145mm
Displacement.....	8.8L
Compression Ratio.....	16.3
Type of injection.....	Direct injection
Intake System.....	Turbocharged, air-to-air charge cooled
Intake Resistance.....	≤6.0kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	24V
Type of Fuel.....	No.2-ASTM D975
Type of Oil.....	CI-4
Type of Coolant.....	Glycol mixture
Back Pressure.....	≤10.1kPa
Standby Power.....	N/A
Prime Power.....	264kW
Fuel Consumption(100%load).....	222g/kW.h

Compressor



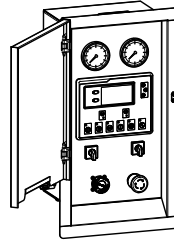
1000191595-AP1-A2

Structure.....	Oil-injection double-screw
Suction temperature.....	0-40°C
Working pressure.....	≤23.0bar

Rated speed2650rpm

Weight 771kg

Control Cabinet



1000138882-AP1-C2

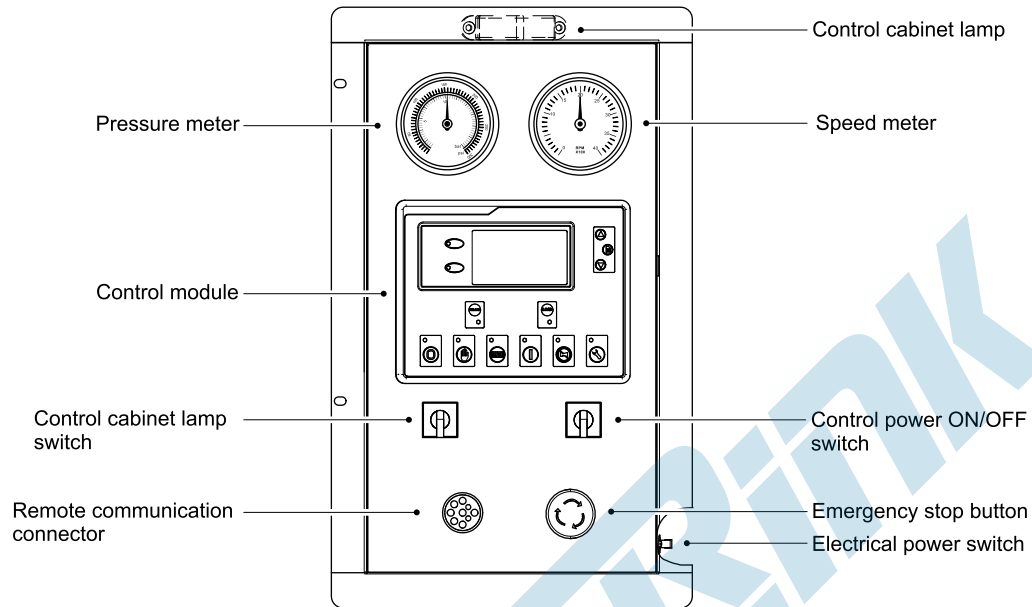
PLC of the machine is an advanced control module based on microprocessor for the automatic control and monitor system of the air compressor, realizing auto start/stop, data measure and alarm protection function. During running the module can accurately measure various parameters, like engine oil pressure, coolant temperature, discharge temperature and pressure etc. and display real values on LCD. When there is any fault, the control module alarms or stops the engine automatically and displays alarm information on LCD.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the air compressor
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like engine oil pressure, discharge temperature and pressure etc.
- Manual and remote work mode selectable
- Real time clock for time and date display, overall runtime display
- Many configurable parameters from control panel

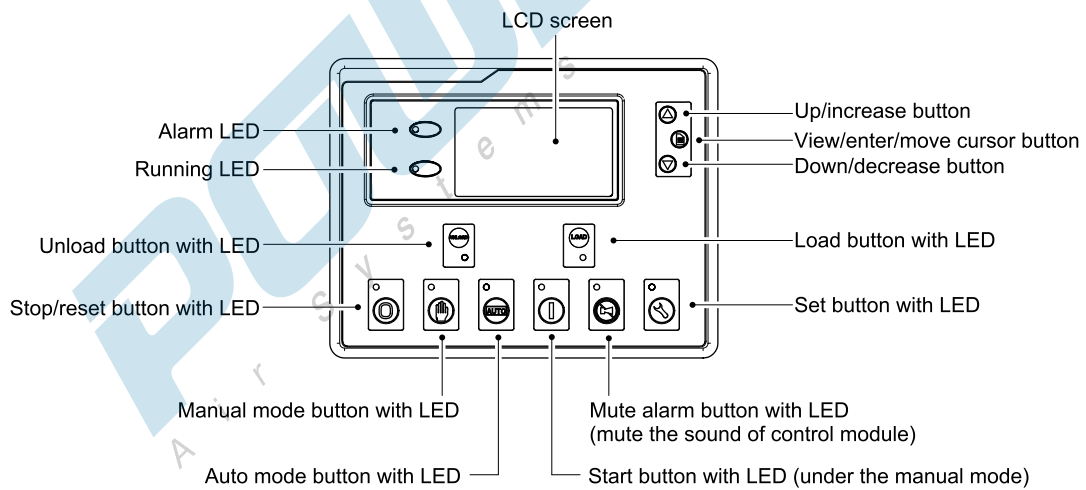
Warning Item	Shutdown Item
High discharge temperature	Emergency stop
High discharge pressure	Failure to start
High coolant temperature	High discharge temperature
Low engine oil pressure	High discharge pressure
Low fuel level	High coolant temperature
Low coolant level	Low engine oil pressure
Ail filter clogged	Low fuel level
Failure to stop	Low coolant level
Battery charge failure	Ail filter clogged
Low battery voltage	
High battery voltage	

5 Control System

Control Cabinet



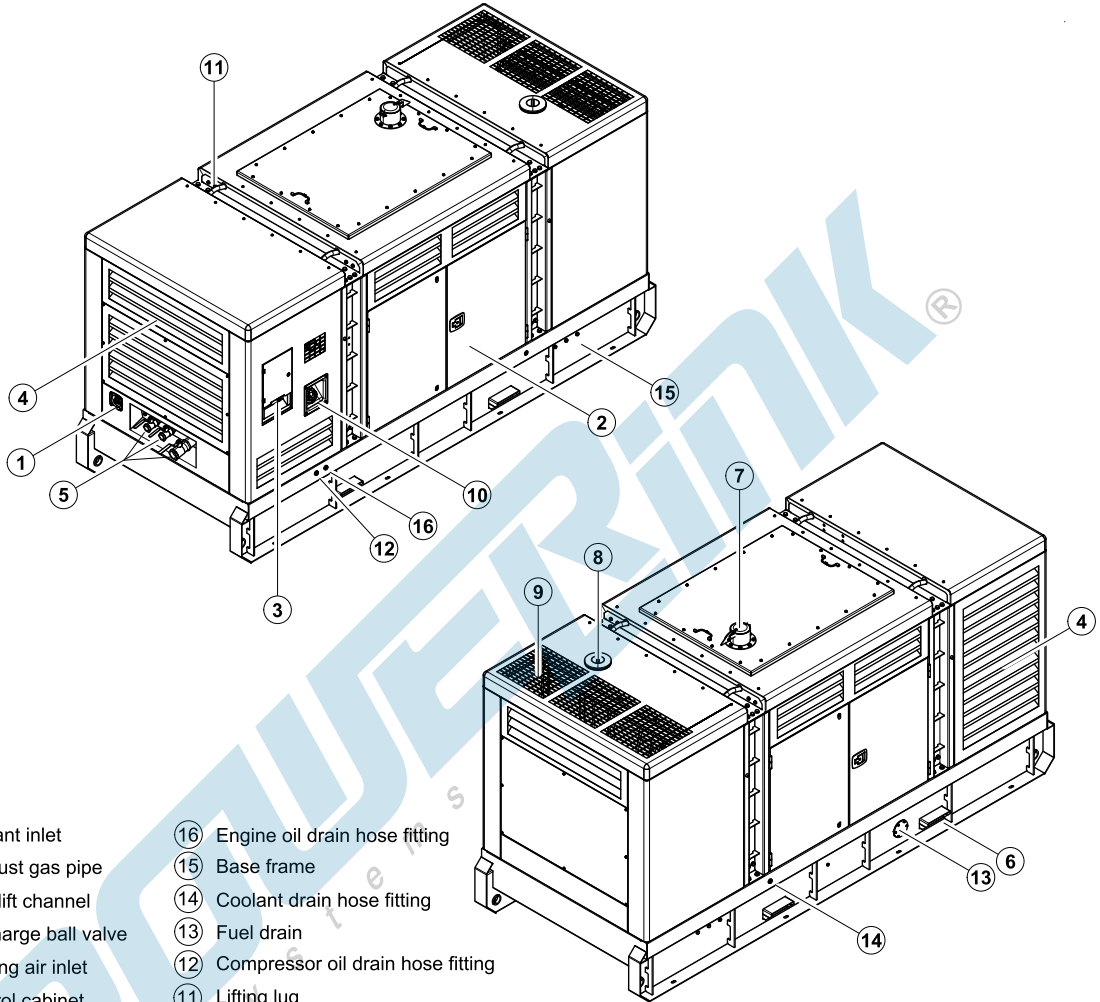
Control Module



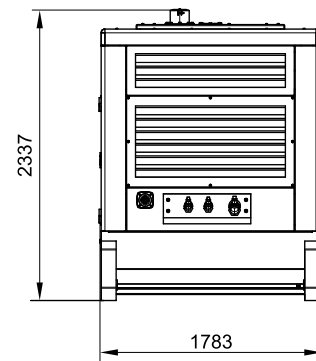
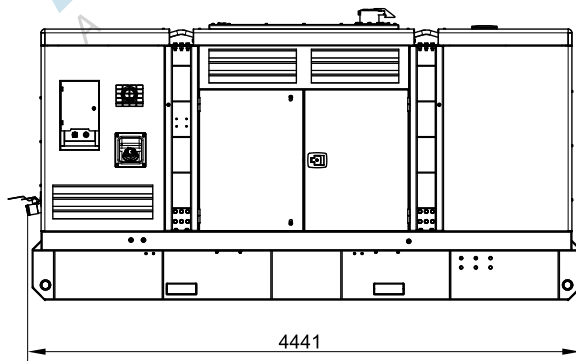
6 Overall Dimensions

3000020529-DR1-A1

Dry weight	5034kg
Dimensions	4441x1783x2337mm



- 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 Emergency stop switch
- ⑬ Fuel drain
- ⑫ Compressor oil drain hose fitting
- ⑪ Lifting lug
- ⑩ Fuel inlet
- ⑨ Hot air outlet
- ⑮ Base frame
- ⑭ Coolant drain hose fitting
- ⑯ Engine oil drain hose fitting



3000020529-A1-E
09.2014

POWERLINK[®]
Air Systems

<http://www.powerlinkworld.com>

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