



Generator set
Sound-proof type
D100DS

SPECIFICATIONS





1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- ISO8528
- GB/T2820
- YD/502-2007
- JB/T20136-2006

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 above sea Level.

Factory Inspection

- Inspection items.
- · Protection devices working test.
- · Starting ability in normal temperature.
- 50% rated power load moment capability.
- Voltage deviation and speed variation: 0%, 25%, 50%, 75%, 100%, 110% Load.

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.

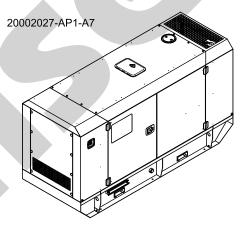
2 General Features

- Deutz engine BF4M1013EC G2
- Close coupled to a Mecc alternator ECP34-2S/4
- Microprocessor control module PLC-AMF20
- SCHNEIDER main circuit breaker: 160A
- Rotate speed governor: Mechanical governor
- · Excitation system: Self excited, SHUNT
- A.V.R model: SR7/2
- · Key switch
- · Emergency stop switch

- · ATS (automatic transfer switch) receptacle
- 1x12V/72AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 45°C radiator
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- · Base fuel tank for 10 hours running
- · Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

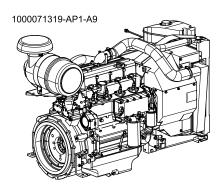
General technical data



Model	D100DS
Tank capacity	275L
Dry weight	1587kg
Noise level @7m	N/A
Dimensions L×W×H	2523x1140x1579mm
Standby Power	110kVA/88kW
Prime Power	100kVA/80kW

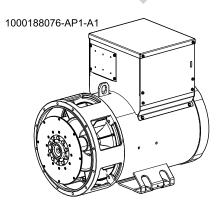
Voltage	380V		400V	4	15V	
Ampere	151.9A		144.3A	1	139A	
Genset Fuel Consumption						
Frequency/Load	requency/Load 25% 50		75%	100%	110%	
50Hz (L/h)	7.2	13.1	19.3	25.8	N/A	

Diesel Engine



Engine Manufacturer/Brand	Deutz
Engine Model	BF4M1013EC G2
Dimensions L×W×H	1548x733x1151mm
Dry Weigh (approx.)	560kg
Number of Cylinders	4
Bore	108mm
Stroke	130mm
Displacement	4.76L
Compression Ratio	19
Type of injection	Single injection pumps
Intake System	Turbocharged
Intake Resistance	≤2.5kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel	Diesel
Type of Oil	TR0199-99-3002/6
Oil Capacity	11L
Type of Coolant	Glycol mixture
Coolant Capacity	19.7
Back Pressure	≤3kPa
Standby Power	102KW
Prime Power	97kW
Fuel Consumption(100%load)	25.8L/h

Alternator



Alternator Manufacturer	/Brand Mecc alte
Alternator Model	ECP34-2S/4
Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Windings	100% copper
Insulation Class	H
Winding Pitch	2/3
Terminals	12
Drip Proof	IP21
Altitude	≤1000m
Overspeed	2250rpm
Air Flow	. 19.3m³/min(50Hz),23m³/min(60Hz)
Voltage Regulation	±1.0%
Total harmonic TGH / T	HCat no load < 1.5 % - on load < 5%
Telephone Interference	THF<2%;TIF<40

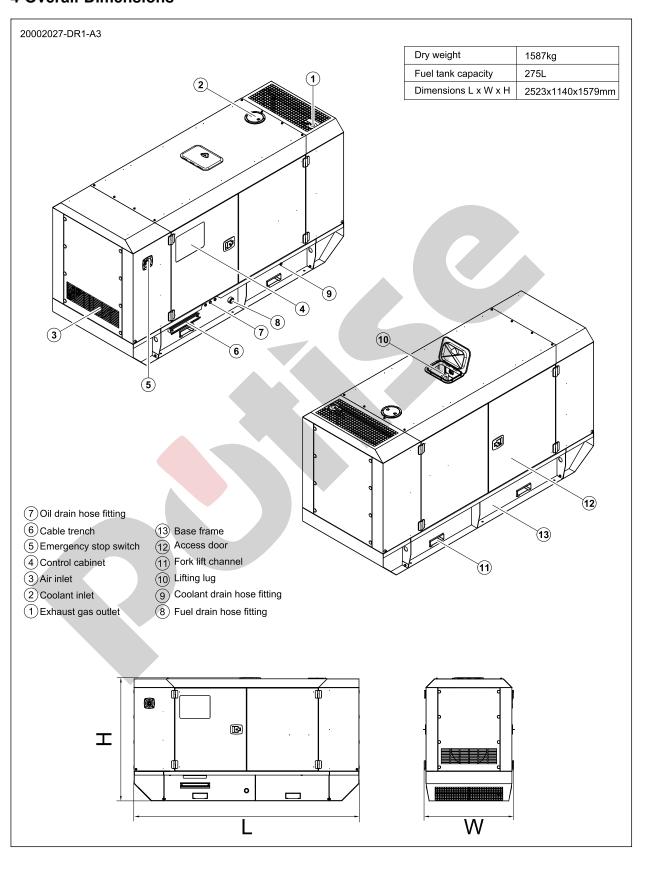
PLC-AMF20 Control System



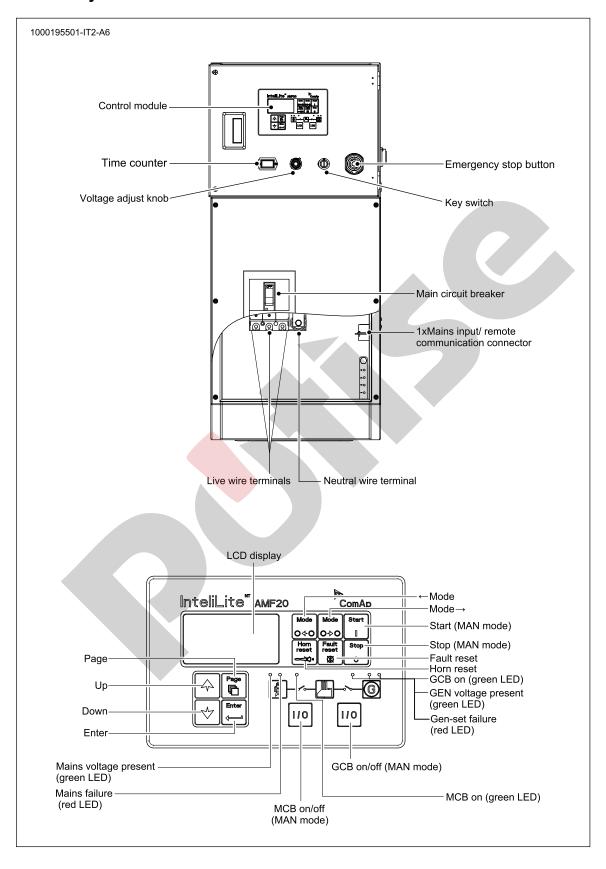
PLC-AMF20 is an advanced control module based on microprocessor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and display all values and alarms information on the LCD. In addition, the control module can automatically shut down the engine and indicate the engine failure.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, automatic and remote work mode selectable
- Real time clock for time and date display, overall runtime display, 200 log entries
- Overall power output display
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed etc.
- Communication with PC via RS485 OR RS232 interface, using MODBUS protocol

4 Overall Dimensions

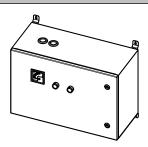


5 Control System



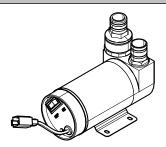
6 Optional Accessories

1. ATS Cabinet



- Adopt advanced ATS with high quality
- High reliability, high stability, ease of operation

2. Automatic Oil Drain Pump



- Drain the oil from engine automatically
- Easy to operate with inching switch

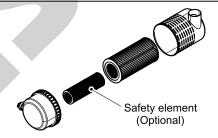
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3. Battery Charger



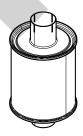
- Switch power supply structure, wide input alternating voltage range, small size, light weight, high efficiency rate
- Short-circuit protection

4. Double Layer Air Filter



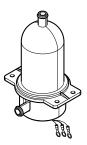
- Air filter with safety element
- High filtration precision and filtering ability

5. Spark Arrestor



 Any explosive exhaust particles can be captured in dangerous environment.

6. Water Jacket Preheat Unit



- Water jacket preheat unit should be used to start the engine quickly if the temperature is lower than 5°C
- The preheat unit is equipped with a thermostat

20002027-A3-E

03.2013

