睿珀机电
SHANGHAI AGRIPOWER

Diesel generating set

AG-1500P/S

400V/50Hz Main power//Perkins 4012-46TAG2A

ISO14001:2015

ISO9001 :2015

OHSAS 18001:2007

Product features

Operative norm：

- ISO 8528:AC generator set driven by reciprocating internal combustion engine
- IEC 60034-1:Basic technical requirements for rotating motors
- YD/T 502： Communication diesel generator set
- GB/T 20136-2006 General test method for internal combustion engine power stations

Merit：

1. Integrated building block structure design, small volume, compact structure, sophisticated technology;
2. Few parts, light weight, low failure rate and low maintenance cost;
3. Supercharging and supercharging intercooling technology as the leading products, strong power;
4. High-performance damping system and rigid base, small vibration;
5. Efficient fuel supply system and air intake system, fuel atomization and air mixing more fully, more complete combustion, lower emissions;
6. Standardized design, comprehensive and intelligent products, parts and components have strong versatility, easy installation and easy maintenance;
7. maintenance-free battery, with fast start performance;

Technical parameters of the unit

Generator set

Generator model:	AG-1500P/S	Main power(kW):	2000
Standby power(kW):	1320	unit capacity(kVA):	1500
Rated speed(rpm):	1500	frequency(Hz):	50
Rated voltage(V):	400	Rated current(A):	2165.1
Power factor(cosφ):	0.8(lag)	Wiring mode:	3 phase 4 wire
Generator weight (kg)	20660	Smoke pipe diameter (mm)	1×φ250
Air intake(m³/min):	2804	Air exhaust(m³/min):	2684
Generator size(mm):	12192L×2438W×2896H	Recommended base size(mm):	5600L×2600W

Unit performance index（G2）

Parameter		unit	Oerformance index
Frequency drop		%	≤3
Steady state frequency band		%	≤0.5
Relative frequency setting drop range		%	≥3.5
Relative frequency setting rise range		%	≥2.5
Transient frequency deviation	100% sudden power reduction	%	≤+10
	Surge power		≤-7
Frequency recovery time		s	≤3
Relative frequency tolerance band		%	2
Steady-state voltage deviation		%	≤±1
Voltage unbalance degree		%	1
Transient voltage deviation	100% sudden power reduction	%	≤+20
	Surge power		≤-15
Voltage recovery time		s	≤4
Voltage modulation		%	0.3
Relative voltage setting range		%	≤±5
Voltage setting rate of change		%/s	0.2～1
Telephone harmonic factor	THF	%	＜2
Telephone influence factor	TIF	——	＜50

Engine technical parameters

Engine

Manufacturer: Perkins
Model: 4012-46TAG2A
Engine structure: four-stroke
Number : 12/V
Displacement:L 45.842
Cylinder diameter:mm 160
Stroke:mm 190
Compression ratio: 13：1
Speed:rpm 1500
Primary/standby power ::kW 1331/1459
Speed regulation mode:: E
Cooling method: closed water cooling
Dry weight (engine only) : kg 4400

Start the system

Starting rated power:kW 8.2
Starting rated voltage:V DC24

Fuel system

Fuel injection form: high pressure common rail
Fuel return flow:L/min 17

Fuel consumption

Engine output	L/h	g/kwh
100%	310	200
75%	234	206
50%	187	202
25%	NA	NA

Intake system

Maximum allowable intake resistance (clean filter element) : kPa 2
Intake air flow: m³/min 125

Lubrication system

Total lubrication system capacity: L 177
Maximum allowable oil temperature :℃ 105

Cooling system

Engine coolant volume: L 265
Coolant flow: L/min 1020

Exhaust system

Maximum exhaust back pressure: kPa 5
Exhaust flow: kg/min 350
Exhaust temperature: ℃ 450

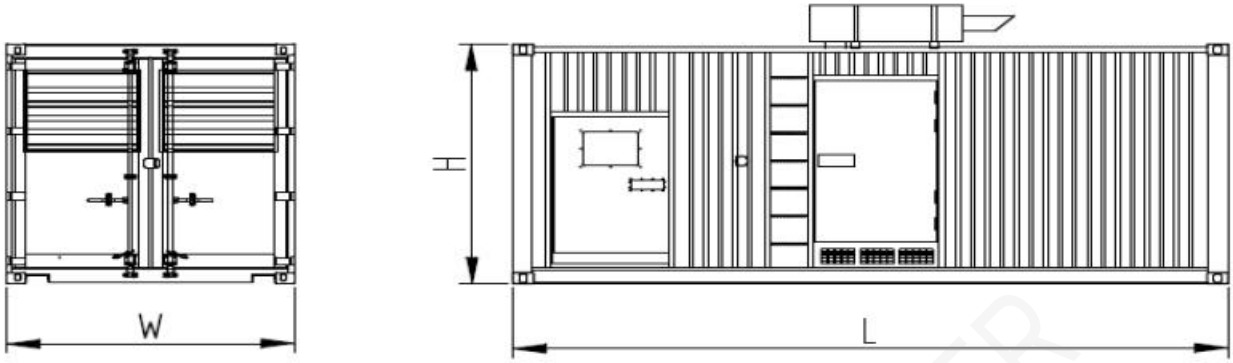
Technical parameters of generator

Dynamo

*50Hz,AC400V,cosφ=0.8

MODEL	Rated power(kW)	Standby power(kW)	Mechanical efficiency(%)	Insulation/ temperature rise	Class of protection	Weight(kg)
LEROY SOMER LSA50.2L8	1200	1260	94.4	H/H	IP21	3155

Size and weight



* The above figure is for reference only, the actual size and weight are subject to the final design drawing。

Model	Engine model	size（L×W×H）（mm）	Dry weight（kg）	Wet weight（kg）
AG-1500P/S	4012-46TAG2A	12192×2438×2896	21150	21660

Special instructions

1. Main power (PRP) is the maximum power that the unit can run continuously with variable load under standard environment (atmospheric pressure, relative humidity, ambient temperature), and the overload of 10% is allowed to run for 1h every 12h。
2. Working conditions and power correction:
   (1) Altitude: ≤1000m (> 1000m), need to do power correction; Power reduction by 10% per 1000m increase)
   (2) Ambient temperature: 40℃ (when > 40℃, power correction is required)
   (3) Relative humidity: ≤60%
3. When the field use conditions of the diesel generator set do not meet the above conditions, the output power of the unit should be corrected, and the final correction coefficient, please refer to the detailed technical data of the corresponding engine and generator.