睿珀机电
SHANGHAI AGRIPOWER

Diesel generating set

AG-1500C/S

400V/50Hz Main powerCummins QSK38-G14

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-1500C/S	Main power(kW):	1200
Standby power(kW):	1320	unit capacity(kVA):	1500
Rated speed(rpm):	1500	Rated frequency(Hz):	50
voltage(V):	400	rated current(A):	2165.1
Power factor(cosφ):	0.8(lag)	Wiring mode:	3 phase 4 wire
Generator weight (kg)	20983	Minimum smoke pipe diameter (mm)	2×φ203
air intake(m³/min):	1684.86	Air exhaust(m³/min):	1590
Generator size(mm):	12192L×2438W×2896H		

Unit performance index（G3）

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: Cummins

Model: QSK38-G14

Engine structure: four-stroke

Number : 12/V

Displacement:L 37.8

Cylinder diameter:mm 159

Stroke:mm 159

Compression ratio: 14.2：1

Speed:rpm 1500

Primary/standby power ::kW 1346/1489

Speed regulation mode:: E

Cooling method: closed water cooling

Dry weight (engine only) : kg 4474

Start the system

Starting rated power:kW 9

Starting rated voltage:V DC24

Fuel system

Fuel injection form: high pressure common rail

Fuel return flow:L/min N/A

Fuel consumption

Engine output	L/h	g/kwh
100%	329	205
75%	256	210
50%	175	220
25%	97	232

Intake system

Maximum allowable intake resistance (clean filter element) : kPa 3.74

Intake air flow:m^3/min 94.86

Lubrication system

Total lubrication system capacity: L 144

Maximum allowable oil temperature :℃ 120

Cooling system

Engine coolant volume: L 361

Coolant flow: L/min 1668

Exhaust system

Maximum exhaust back pressure: kPa 10

Exhaust flow: kg/min 242.28

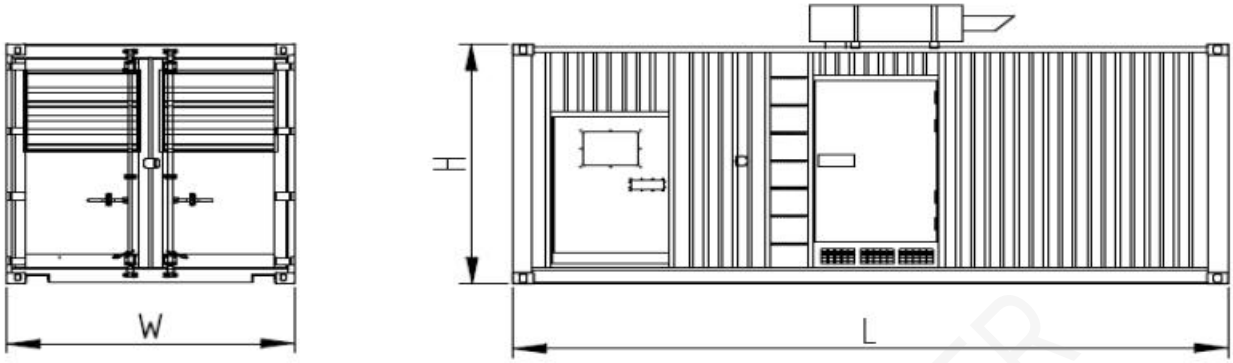
Exhaust temperature: ℃ 452

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)
LEROYSOMER : LSA50.2L8	1200	1260	95.3	H/H	IP23	3150

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-1500C/S	QSK38-G14	12192×2438×2896	20417	20983

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: ≤1500m (> 1500m), 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.