

## HGM1875EA TECHNICAL DATA SHEET

| Genset Model                  | HGM1875EA               |
|-------------------------------|-------------------------|
| <b>Standby power (50HZ)</b>   | <b>1500kW / 1875VA</b>  |
| <b>Prime power (50HZ)</b>     | <b>1350kW / 1688kVA</b> |
| <b>Standard configuration</b> |                         |

General description:

- Engine (Googol QTA8V-EG1490)
- Ambient temperature 40°C radiator, belt-driven cooling fan, with fan safety guard
- 24VDC charger
- Alternator: single bearing, IP23, H
- Damper
- Dry type Air filter, fuel filter & oil filter
- Standard control panel
- 2×12VDC start batteries and connecting wires
- Exhaust elbow pipe, flexible pipe, conical pipe, muffler
- Documents



| Genset Power |                |       |              |                    |                  |                  |                |
|--------------|----------------|-------|--------------|--------------------|------------------|------------------|----------------|
| Voltage (V)  | Frequency (Hz) | Phase | Power factor | Standby Ampere (A) | Prime Ampere (A) | Standby (kW/kVA) | Prime (kW/kVA) |
| 400/230      | 50             | 3     | 0.8          | 2706               | 2435             | 1500/1875        | 1350/1688      |
| 380/220      | 50             | 3     | 0.8          | 2849               | 2563             | 1500/1875        | 1350/1688      |

### RATING DEFINITION AS PER ISO8528

**Prime Power (PRP):** Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12.

**Standby Power Rating (ESP):** Output available with varying load during a normal power supply failure. Average power output is 80% of the standby power rating. Typical annual operating time less than 500 hours. No overload is available.

The relationship between engine power and altitude: above 1500 meters above sea level, the power decreases by 4% for every 300 meters above sea level.

### Warranty

The products provided by HONNY Company are all brand-new products, and each unit has undergone strict factory inspection.

All products of HONNY Company provide warranty service. The warranty period is 12 months after delivery or 1000 hours of operation in total, whichever expires first.

| Engine data        |                                  |
|--------------------|----------------------------------|
| Engine data        |                                  |
| Manufacturer/Model | Googol /QTAA10V-EG1670           |
| Air intake system  | Turbocharged, air-to-air cooling |
| Fuel System        | High pressure Common Rail        |

|                                             |                                 |     |
|---------------------------------------------|---------------------------------|-----|
| Cylinder/Alignment                          | V-type 10-cylinder, four-stroke |     |
| Displacement Litre                          | 53.8L                           |     |
| Bore x stroke mm                            | 185×200（mm）                     |     |
| Compression ratio                           | 15:1                            |     |
| Rated Engine speed RPM                      | 1500                            |     |
| Engine Standby Power kW/HP                  | 1670/2272.1                     |     |
| Common engine power kW/HP                   | 1520/2068                       |     |
| Injection system                            | ECU Electronic injection system |     |
| Exhaust system                              |                                 |     |
| Exhaust flow m³/min                         | 384                             |     |
| Exhaust temperature °C                      | ≤520                            |     |
| Maximum allowable exhaust back pressure kPa | 5                               |     |
| Air intake system                           |                                 |     |
| Gas volume (rated power) m³/min             | 153                             |     |
| Cooling Air Flow m³/min                     | 2476                            |     |
| Maximum allowable air intake resistance kPa | 5                               |     |
| Fuel consumption                            |                                 |     |
| 100% common power (L/h)                     | 340.2                           | L/h |
| 75% common power (L/h)                      | 259.4                           | L/h |
| 50% common power (L/h)                      | 178.4                           | L/h |
| 25% common power (L/h)                      | 101                             | L/h |
| Fuel consumption rate                       |                                 |     |
| 100% common power (g/kW.h)                  | 210.4                           |     |
| 75% common power (g/kW.h)                   | 213.9                           |     |
| 50% common power (g/kW.h)                   | 220.7                           |     |
| 25% common power (g/kW.h)                   | 249.9                           |     |
| Lubrication system                          |                                 |     |
| Total oil capacity L                        | 150                             |     |
| Low oil pressure alarm kPa                  | 200                             |     |
| Low oil pressure parking kPa                | 160                             |     |
| Cooling system                              |                                 |     |
| Engine Coolant Capacity L                   | 85                              |     |
| Maximum coolant temperature °C              | 90                              |     |
| Thermostat operating temperature °C         | 71                              |     |

|                       |                                                |  |
|-----------------------|------------------------------------------------|--|
| Alternator data       |                                                |  |
| Alternator data       |                                                |  |
| Manufacturer/Model    | Googol / GP1688-4P                             |  |
| Phase                 | 400 V                                          |  |
| Voltage               | Three-phase four-wire, Y-wound                 |  |
| Number of Wires       | 1                                              |  |
| Number of bearings    | 0.8                                            |  |
| Power factor          | IP23                                           |  |
| Protection            | ≤1000m                                         |  |
| Altitude requirements | PMG permanent magnet brushless self-excitation |  |
| Excitation method     | H/H                                            |  |

|                                                           |                   |
|-----------------------------------------------------------|-------------------|
| Insulation class/temperature rise class                   | <50               |
| Telephone Influence Factor TIF                            | <2%               |
| Telephone Harmonic Factor THF                             | $\leq \pm 1\%$    |
| Steady State Voltage Regulation                           | 1688kVA           |
| Alternator capacity                                       | 96.2%             |
| <b>Genset Data</b>                                        |                   |
| Voltage setting range                                     | $\geq \pm 5\%$    |
| Steady State Voltage Regulation                           | $\leq \pm 0.2\%$  |
| Transient voltage deviation (100% sudden drop power)      | $\leq +17\%$      |
| Transient voltage deviation (50% sudden power)            | $\leq -6.5\%$     |
| Voltage stabilization time (100% sudden drop of power)    | $\leq 0.75S$      |
| Voltage stabilization time (50% sudden power)             | $\leq 0.69S$      |
| Frequency adjustment range                                | $\geq \pm 5\%$    |
| frequency volatility                                      | $\leq \pm 0.25\%$ |
| Transient frequency deviation (100% sudden drop in power) | $\leq +8\%$       |
| Transient frequency deviation (50% sudden power)          | $\leq -5\%$       |
| Frequency recovery time (100% sudden drop in power)       | $\leq 1.48S$      |
| Frequency recovery time (50% surge power)                 | $\leq 1.35S$      |

### **HONNY GENSET QUALITY STANDARD**

HONNY diesel generator sets are designed, produced and tested in strict accordance with the standards. They can be used in various environments and meet the following relevant standards:

GB/T 2820.1~6-2009、ISO8528、ISO3046、YD/T502-2020

#### **Document**

|                                      |                                                              |
|--------------------------------------|--------------------------------------------------------------|
| Original document from Engine        | Generator Set Maintenance Record Manual                      |
| Original document from Alternator    | Generator Set Installation and Operation Manual              |
| Original document from Control panel | Generator set installation and commissioning acceptance list |
| Generator set original test report   | Certificate of origin of the generator set                   |

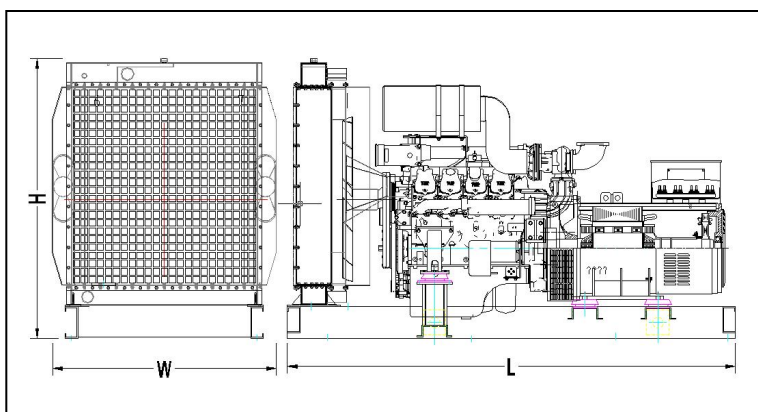
#### **Optional accessories**

| <b>Engine</b>       | <b>Alternator</b>                        | <b>Electric elements</b>                   |
|---------------------|------------------------------------------|--------------------------------------------|
| Water jacket heater | Anti-condensation heater                 | Remote control system                      |
| Oil preheater       | Permanent magnet excitation system (PMG) | Control Panel with triple remote functions |
| Battery charger     | Voltage droop (parallel use)             | ATS                                        |
| Air starter motor   | Other temperature rise classes           | Synchronized or parallel panel             |

|                                  |                                     |                                    |
|----------------------------------|-------------------------------------|------------------------------------|
| Heavy Duty Air Filter for Desert | RTD temperature sensor, 2 per phase | Anti-condensation heater           |
| Heavy Duty Secondary Muffler     |                                     | Voltage<br>3.3kV/6.3kV/10.5kV/11kV |
| <b>Fuel system</b>               | <b>Others</b>                       | <b>Cooling system</b>              |
| base fuel tank&Daily fuel tank   | Waterproof type                     | External Cooling Towers            |
| Water separator                  | Silent/Soundproof /container type   | Remote Radiator                    |
| Automatic oil supply system      | Trailer type                        | Heat exchanger                     |
| Buried fuel tank                 | Emergency Power Supply Vehicle      | Marine cooling system              |

Some options may not be suitable for the whole series of generator sets, please consult HONNY application engineering department or the person in charge of this project of HONNY.

### Measurement and Weight



#### Open type

Overall: L×W×H

Overall: 5050×2200×2800

Weight: 10500kg

### Automated control screen with ATS/AMF function



The use of Deep Sea DSE7320, DSE7220 or DSE6120 controllers is the control screen of the automation unit and the most basic configuration of unattended automation. The control panel is capable of receiving remote on/off unit control signals (ATS control).

Functional features: The unit has automatic, manual, shutdown (emergency stop) and other control functions, circuit breaker opening and closing buttons, rich programmable outputs, input interfaces and humanized interfaces, multi-functional LCD display, the detected parameters are displayed through data, symbols at the same time, etc., which can meet the needs of various automation units.