

## VGP825M 50Hz POWERED BY PERKINS SERIES



### TECHNICAL SPECIFICATIONS

#### DIESEL GENERATING SET 400/230V-50Hz-3Phase

| Model                | VGP825M    |                                |
|----------------------|------------|--------------------------------|
| Power(ESP)           | kVA/kw     | 825/660                        |
| Power(PRP)           | kVA/kw     | 750/600                        |
| Starter Voltage      | V          | 24                             |
| Rated Current        | A          | 1191                           |
| Rated rotation speed | r/min      | 1500                           |
| Power Factor         |            | 0.8                            |
| Fuel Consumption     | Litre/hour | 157                            |
| Fuel Tank Capacity   | Litre      | Open Type : L / Silent Type: L |
| Noise level          | dB(A)@7m   | Silent Type: 88±2              |

### WEIGHT AND DIMENSIONS

| GEN-Set     | Dimension ( L*W*H )  | Weight |
|-------------|----------------------|--------|
| Open Type   | 4320mm*1720mm*2172mm | 5730Kg |
| Silent Type | 6058mm*2438mm*2591mm | 8908Kg |

### STANDARDS:

**Genset:** GB/T2820—2009,ISO8528

**Alternator:** MECC ALTE, ECO40 VL4A

**Diesel Engine:** PERKINS , 4006-23TAG2A

**Standby Power:** Continues running at variable load for duration of an emergency. No overload is permitted on these ratings.

**Prime Power:** Continues running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period.

### CONFIGURATION:

**Standard:** Engine, alternator, cooling system, Base frame (excluding fuel tank), shock absorber, air inlet system, control box (including mains floating charge), plastic fan blades (when the engine and water tank do not bring).

**Optional:** Base frame (including fuel tank), water jacket heater, fuel water separator, fuel heater, fuel level sensor (only supporting underframe tank), switch box (with switch), power switch, the water level sensor, motor anti condensation heater, automatic fueling system (only supporting base frame including fuel tank), battery frame.

**Accessories:** Silencer, bellow, exhaust silencing system accessories (with the matching engine), regular battery, starting cord assembly, data of gen-set, random tool (with the matching engine).



## ENGINE Specification

|                                     |               |
|-------------------------------------|---------------|
| <b>Manufacturer: PERKINS</b>        |               |
| Model                               | 4006-23TAG2A  |
| Engine speed Rated                  | 1500 RPM      |
| Cylinder /Arrangement               | 6/ L          |
| Displacement                        | 22.921L       |
| Bore and Stroke                     | 160mm × 190mm |
| Compression ratio                   | 13.6: 1       |
| Max. stand by power at rated RPM    | 711KW         |
| Frequency regulation , steady state | ≤0.25%        |
| Governor : type                     | Electrical    |

### Exhaust System

|                     |          |
|---------------------|----------|
| Exhaust gas flow    | 180L/min |
| Exhaust temperature | 430°C    |
| Max back pressure   |          |

### Fuel System

|                                           |          |
|-------------------------------------------|----------|
| Fuel consumption100% (of the Prime Power) | 157L / h |
| Fuel consumption75% (of the Prime Power)  | 121L / h |
| Fuel consumption50% (of the Prime Power)  | 83L / h  |
| Fuel consumption25% (of the Prime Power)  |          |

### Oil system

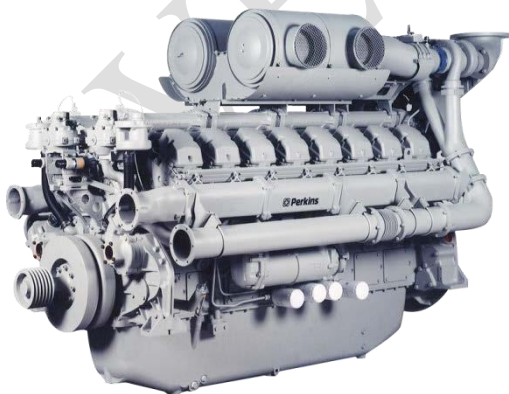
|                              |        |
|------------------------------|--------|
| Total oil capacity w/filters | 113.4L |
|------------------------------|--------|

### Air intake

|                 |         |
|-----------------|---------|
| Engine air flow | 71L/min |
|-----------------|---------|

### Coolant System

|                            |         |
|----------------------------|---------|
| Radiator & engine capacity | 105 L   |
| Max water temperature      | 98°C    |
| Thermostat                 | 71-85°C |



- ☐ Perkins engines with fast and reliable cold boost.
- ☐ Advanced technology on burning Combustion optimization, low fuel consumption and low noise, emission meets German TALuft standard.
- ☐ Reasonable coupling creates best compounding function, provides reliable and high-performance power products.
- ☐ Integrated structure of generator with fuel tank and base frame and internal high-efficiency anti-vibration.

Note: All data sheets are for reference only and subject to change without prior notice.



# ALTERNATOR Specification

**Manufacturer:** MECC-ALTE

|                                       |            |
|---------------------------------------|------------|
| Type                                  | ECO40 VL4A |
| Number of phase power                 | 3          |
| Factor (Cos Phi)                      | 0.8        |
| Pole                                  | 4          |
| Bearing                               | 1          |
| Coupling                              | Direct     |
| Exciter type                          | AREP       |
| Insulation : class , temperature rise | H / H      |
| Degree of protection                  | IP23       |
| AVR model                             | DER-1      |
| Altitude                              | ≤1000m     |
| Winding Pitch                         | 2/3        |
| Winding Leads                         | 6/12       |

## FEATURES

- Leading reality in the national scene, fortified by sixty years of experience in the electro mechanical field, MeccAlte is today at its height in the world production of synchronous alternators.
- Committed daily to research, development and updating activities, MeccAlte is a testimony to constant improvement in all areas from technology, organisation and quality with its ISO 9001 certification.

## STANDARDS

- Marine certifying institutions  
Korean Register of Shipping, American Bureau of Shipping, China Classification Society, Germanischer Lloyd, Nippon Kaiji Kyokai, Russian Maritime Register of Shipping.
- Product certifying institutions  
CSA International  
Underwriters Laboratories  
Istituto Marchio di Qualità



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## Control Panel

**Model:** DSE 7320

### AUTO START & AUTO MAINS FAILURE CONTROL MODULES

#### DIMENSIONS

##### OVERALL

240mm x 181mm x 42mm  
(9.4" x 7.1" x 1.6")

##### PANEL CUTOOUT

220mm x 160mm  
(8.7" x 6.3")

##### WEIGHT

400g (0.4kg)



##### KEY FEATURES

- 4-Line back-lit LCD text display
- Five key menu navigation
- Front panel editing with PIN protection
- Customisable status screens
- Power save mode
- Support for up to three remote display units
- 9 configurable inputs
- 8 configurable outputs
- Flexible sender inputs
- Configurable timers and alarms
- 3 configurable maintenance alarms
- Multiple date and time scheduler
- Configurable event log (250)
- Tier 4 CAN engine support
- Integral PLC editor
- Easy access diagnostic page
- CAN and Magnetic Pick-up/Alt. sensing
- Fuel usage monitor and low fuel alarms
- Charge alternator failure alarm
- Manual speed control (on compatible CAN engines)
- Manual fuel pump control
- Engine exerciser
- "Protections disabled" feature
- kW & kV Ar protection

- Reverse power (kW & kV Ar) protection
- LED and LCD alarm indication
- Power monitoring (kW h, kV Ar, kVA h, kV Ar h)
- Load switching (load shedding and dummy load outputs)
- Automatic load transfer (DSE7320)
- Unbalanced load protection
- Independent Earth Fault trip
- True dual mutual standby with load balancing timer (DSE7310 only)
- USB connectivity
- Backed up real time clock
- Fully configurable via DSE Configuration Suite PC software
- Configurable display languages
- Remote SCADA monitoring via DSE Configuration Suite PC software
- User selectable RS232 and RS485 communications
- Configurable Gencomm pages
- Advanced SMS messaging (additional external modem required)
- Start & stop capability via SMS messaging
- Additional display screens to

- help with modem diagnostics
- Idle control for starting & stopping.
- DSENet® expansion compatible

##### KEY BENEFITS

- 132 x 64 pixel ratio display for clarity
- Real-time clock provides accurate event logging
- Multiple date and time scheduler
- Set maintenance periods can be configured to maintain optimum engine performance
- Ethernet communications (via DSE860/865 modules), provides advanced remote monitoring at low cost
- Modules can be integrated into building management systems(BMS)
- Increased input and output expansion capability via DSENet®
- Licence-free PC software
- IP65 rating (with supplied gasket) offers increased resistance to water ingress
- PLC editor allows user configurable functions to meet specific application requirements.