

# TC330M 50Hz POWERED BY CUMMINS SERIES



## TECHNICAL SPECIFICATIONS

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

| Model                | TC330M     |                            |
|----------------------|------------|----------------------------|
| Power(ESP)           | kVA/kw     | 330/264                    |
| Power(PRP)           | kVA/kw     | 300/240                    |
| Starting Voltage     | V          | 24                         |
| Rated Current        | A          | 476                        |
| Rated rotation speed | r/min      | 1500                       |
| Power Factor         |            | 0.8                        |
| Fuel Consumption     | Litre/hour | 71.37                      |
| Fuel Tank Capacity   | Litre      | Open Type : / Silent Type: |
| Noise level          | dB(A)@7m   | Silent Type:               |

## WEIGHT AND DIMENSIONS

| GEN-Set (For reference only) | Dimension ( L*W*H ) | Weight |
|------------------------------|---------------------|--------|
| Open Type                    | 2950*1100*1850mm    | 2332kg |
| Silent Type                  | 4366*1406*2260mm    | 3875kg |

## STANDARDS:

**Genset:** GB/T2820—2009,ISO8528

**Alternator:** MECC-ALTE, ECO38 1L4 C

**Diesel Engine:** CUMMINS , QSM11-G2

**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

## Manufacturer: CUMMINS

|                                     |                                    |
|-------------------------------------|------------------------------------|
| Model                               | QSM11-G2                           |
| Engine speed Rated                  | 1500 RPM                           |
| Cylinder /Arrangement               | 6 / L                              |
| Displacement                        | 10.8 L                             |
| Bore and Stroke                     | 125 mm×147 mm                      |
| Compression ratio                   | 16.2 : 1                           |
| Max. stand by power at rated RPM    | 300KW                              |
| Frequency regulation , steady state | /                                  |
| Governor : type                     | Electronic                         |
| Aspiration and Cooling              | Turbocharged and Charge Air Cooled |

## Exhaust System

|                     |         |
|---------------------|---------|
| Exhaust gas flow    | 1065L/s |
| Exhaust temperature | 500°C   |
| Max back pressure   | 10kPa   |

## Fuel System

|                                           |            |
|-------------------------------------------|------------|
| Fuel consumption100% (of the Prime Power) | 71.37L / h |
| Fuel consumption75% (of the Prime Power)  | 53.59L / h |
| Fuel consumption50% (of the Prime Power)  | 36.50L / h |
| Fuel consumption110% (of the Prime Power) | 76.41L / h |

## Oil system

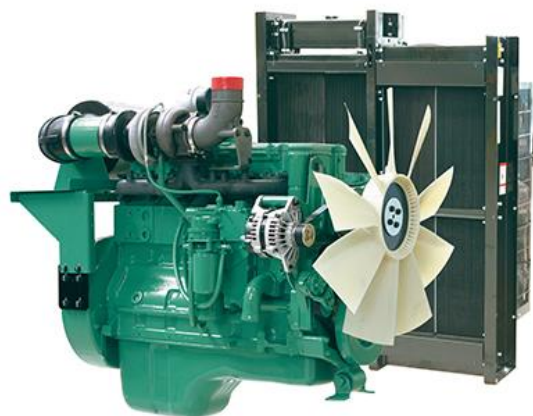
|                              |       |
|------------------------------|-------|
| Total oil capacity w/filters | 36.7L |
|------------------------------|-------|

## Air intake

|                 |        |
|-----------------|--------|
| Engine air flow | 436L/s |
|-----------------|--------|

## Coolant System

|                       |         |
|-----------------------|---------|
| Engine capacity       | 9.5L    |
| Max water temperature | 104°C   |
| Thermostat            | 82-93°C |



- Cummins engines with advanced design, reliable performance, durable operation.
- Alloy-steel and connecting steel-lever, high durability
- High combustion efficiency and low fuel consumption, work continuously
- P/T pump injection technology, low cost, completely combustion

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



# ALTERNATOR Specification

## Manufacturer: MECC-ALTE

|                                       |             |
|---------------------------------------|-------------|
| Type                                  | ECO38 1L4 C |
| Number of phase power                 | 3           |
| Factor (Cos Phi)                      | 0.8         |
| Pole                                  | 4           |
| Bearing                               | 1           |
| Coupling                              | Direct      |
| Exciter type                          | Brushless   |
| Insulation : class , temperature rise | H / H       |
| Degree of protection                  | IP23        |
| AVR model                             | DSR         |
| Altitude                              | ≤1000m      |
| Winding Pitch                         | 2/3         |
| Winding Leads                         | 12          |

### FEATURES

- Leading reality in the national scene, fortified by sixty years of experience in the electro mechanical field, Mecc Alte is today at its height in the world production of synchronous alternators.
- Committed daily to research, development and updating activities, Mecc Alte 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 6120MKIII**

**AUTO START & AUTO MAINS FAILURE CONTROL MODULES**

## DIMENSIONS

### OVERALL

**216mm x 158mm x 43mm**  
(8.5" x 6.2" x 1.5")

### PANEL CUTOUT

**184mm x 137mm**  
(7.2" x 5.3")

### MAXIMUM PANEL THICKNESS

**8 mm**  
**0.3"**



## KEY FEATURES

- 4-line back-lit LCD text display
- Multiple display languages
- Five-key menu navigation
- LCD alarm indication
- Customisable power-up text and screen images
- Data logging facility
- Internal PLC editor
- Protections disable feature
- Fully configurable via PC using USB communications
- Front panel configuration with PIN protection
- Power save mode
- 3-phase generator sensing and protection
- 3-phase mains (utility) sensing and protection
- Automatic load transfer control
- Generator current and power monitoring (kW, kvar, kVA, pf)
- Mains (utility) current and power monitoring (kW, kvar, kVA, pf)
- kW overload alarm
- Over current protection
- Breaker control via fascia buttons
- Fuel and start outputs configurable when using CAN
- 6 configurable DC output
- convenience
- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout for ease of use
- Multiple parameters are monitored & displayed simultaneously for full visibility
- The module can be configured to suit a wide range of applications for user flexibility
- PLC editor allows user configurable functions to meet user specific application requirements

## KEY BENEFITS

- Automatically transfers between mains (utility) and generator for