

TC110M

50Hz POWERED BY CUMMINS SERIES



TECHNICAL SPECIFICATIONS

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

Model	TC110M	
Power(ESP)	kVA/kw	110/88
Power(PRP)	kVA/kw	100/80
Starting Voltage	V	24
Rated Current	A	159
Rated rotation speed	r/min	1500
Power Factor		0.8
Fuel Consumption	Litre/hour	26
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		
Silent Type	3140*1056*1850mm	1800kg

STANDARDS:

Genset: GB/T2820—2009,ISO8528

Alternator: MECC-ALTE, ECP34 2S4 C

Diesel Engine: CUMMINS , QSB5.9-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	QSB5.9-G2
Engine speed Rated	1500 RPM
Cylinder /Arrangement	6 / L
Displacement	5.9 L
Bore and Stroke	102 mm×120 mm
Compression ratio	17.3 : 1
Max. stand by power at rated RPM	106KW
Frequency regulation , steady state	≤3%
Governor : type	Electronically-control high pressure common rail
Aspiration and Cooling	Turbocharged and Charge Air Cooled

Exhaust System

Exhaust gas flow	263 L/s
Exhaust temperature	467°C
Max back pressure	10kPa

Fuel System

Fuel consumption100% (of the Prime Power)	26 L / h
Fuel consumption75% (of the Prime Power)	21 L / h
Fuel consumption50% (of the Prime Power)	15 L / h
Fuel consumption110% (of the Prime Power)	28 L / h

Oil system

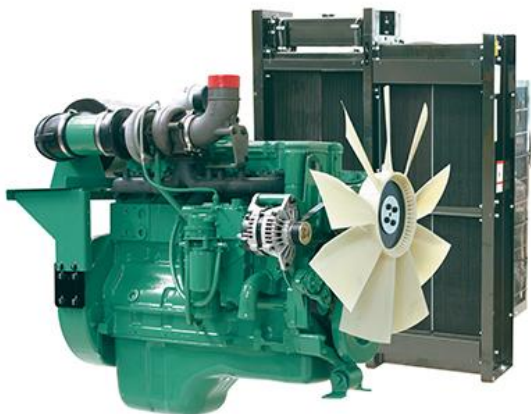
Total oil capacity w/filters	16.4 L
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Air intake

Engine air flow	125L/s
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Coolant System

Engine capacity	9L
Max water temperature	104°C
Thermostat	82-95°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	ECP34 2S4 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