

# TC550M-2

#### 50Hz POWERED BY CUMMINS SERIES





## TECHNICAL SPECIFICATIONS

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

Model	TCS	TC550M-2	
Power(ESP)	kVA/kw	550/440	
Power(PRP)	kVA/kw	500/400	
Starting Voltage	V	24	
Rated Current	A	794	
Rated rotation speed	r/min	1500	
Power Factor		0.8	
Fuel Consumption	Litre/hour	109.5	
Fuel Tank Capacity	Litre	Open: 880L; Silent: 920L	
Noise level	dB(A)@7m		

### WEIGHT AND DIMENSIONS

GEN-Set (For reference only)	Dimension ( L*W*H )	Weight	
Open Type	3550*1734*2446mm		
Silent Type	4700*1956*2531 (3291) mm		

#### **STANDARDS:**

Genset: GB/T2820—2009,ISO8528

Alternator: MECC-ALTE, ECO40 3S4 C Diesel Engine: CUMMINS, QSK19-G13

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	QSK19-G13
Engine speed Rated	1500 RPM
Cylinder /Arrangement	6 / L
Displacement	18.9 L
Bore and Stroke	159 mm×159 mm
Compression ratio	15.8:1
Max. stand by power at rated RPM	501KW
Frequency regulation , steady state	
Governor: type	Electronic
Aspiration and Cooling	Turbocharged and Charge Air Cooled
Exhaust System	
Exhaust gas flow	1722L/s
Exhaust temperature	486°C
Max back pressure	0kPa
Fuel System	
Fuel consumption100% (of the Prime Power)	109.5L/h
Fuel consumption75% (of the Prime Power)	86.4L / h
Fuel consumption50% (of the Prime Power)	63L / h
Fuel consumption110% (of the Prime Power)	120.8L/h
Oil system	
Total oil capacity w/filters	83L
Air intake	
Engine air flow	694L/s
Coolant System	
Engine capacity	41.6L
Max water temperature	104°C
Thermostat	1



- 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		
Туре	ECO40 3S4 C	
Number of phase power	3	
Factor (Cos Phi)	0.8	
Pole	4	
Bearing	1	
Coupling	Direct	
Exciter type	Brushless	
Insulation : class , temperature rise	Н/Н	
Degree of protection	IP23	
AVR model	DER-1/A	
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" x5.3")

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

## **KEY BENEFITS**

Automatically transfers between mains (utility) and generator for

- 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 flexibilit
- PLC editor allows user configurable functions to meet user specific application requirements