

MG POWER DIESEL GENERATOR Cummins® powered Genset Model: MGC 45



*Drawing above for illustration purposes only

I . GENERAL DATA

Prime Power	kW/kVA	45	56
Standby Power	kW/kVA	50	63
Frequency	Hz/rpm	50	1500
Voltage	V	400	230
Current	A	81	
Connection	/	3P 4W/Y	
Rated Power Factor	/	0.8	
Open Type (L×W×H)	mm	1800×850×1330	
Open Type(Weight)	kg	950	
Silent Type (L×W×H)	mm	2300×1100×1290	
Silent Type(Weight)	kg	1320	



■ Available for voltages 400/230V, 480/277V, 380/220V, 440/254V, 416/240V, 220/127V, 208/120V

■ All datas based on ISO 3046, altitude 100m (328ft), barometric pressure 100kPa (29.53inHg), air temperature 25°C (77°F), relative humidity 30%.

■ Please contact with YANAN engineer for correct generator capacity selection when the load application can't meet with the standard reference.

■ YANAN diesel generators comply with standards: ISO8528, ISO14000, ISO3046, GB755, BS5000, VDE0530, IEC34-1

II. STANDARD CONFIGURATION

Engine	Cummins, including air filters, fuel filters, oil filter, starting motor and charging alternator etc.
Alternator	YANAN brushless AC alternator
Radiator	50°C, fan protective shroud
Base Frame	≤550KW: base mounted fuel tank, anti-vibration pads, battery holder
	>550KW: channel steel base frame, anti-vibration pads, battery holder
Circuit Breaker	≤63A: Micro Circuit Breaker (MCB) >63A ≤1250A : Molded case circuit breaker(MCCB) , >1250A: Air circuit breaker(ACB)
Control System	DEEP SEA 6120
Start Battery	Dry charged battery, available for 6 times starts under standard condition; connection cables.
Installation Accessories	Bellow, Elbow and flange, Exhaust silencer, etc.
Documents	Electric drawing, operation & maintenance manual, certification etc.

III. OPTIONAL CONFIGURATION

Engine Accessories	◇ Heavy-duty air filter ◇ Coolant heater ◇ Lub oil heater ◇ Fuel and Water Separator
Alternator And Accessories	◇ Stamford ◇ Leroy Somer ◇ Marathon ◇ Anti condensation heater ◇ PMG
	◇ High voltage _____ kV
Cooling System	◇ 50°C radiator ◇ Heat exchanger + water cooling tower + External water circulation pumping system
	◇ Remote horizontal water tank system
Control System	◇ AMF ◇ Parallel ◇ Practical type in low temperature environment ◇ Control Screen Heater
	◇ Other (Comap、DEIF)
Circuit Breaker	◇ 3/4 poles ◇ Fixed/handcart type ◇ Electric mechanism
Automatic Transfer Swtich	◇ ATS cabinet
Start Battery	◇ Nickel-cadmium battery ◇ Maintenance-free battery ◇ Power charger and selector
	◇ Charging current meter
External Fuel Tank	◇ 500L ◇ 1000L ◇ 1500L ◇ 2000L ◇ 2500L ◇ 3000L ◇ 4000L ◇ 5000L
Others	_____

IV. ENGINE DATA

Engine Model	4BTA3.9-G2	Engine Power	64	kW
Aspiration	Turbocharged & Aftercooled	Displacement	3.9	L
Type	In-line	Bore×Stroke	102×120	mm
No. of Cylinders	4	Compression Ratio	17.3:1	
Governor Type	Electronic Governor	Rated Speed	1500	RPM

■ Fuel System

Prime Power Fuel Consumption	12.9	L/h	Standby Power Fuel Consumption	14.1	L/h
Fuel #	ASTM D975 No.2-D or BS2869 1998 Class A1, A2		Injection System	BYC PB	

■ Lubrication System

Lub Oil Capacity	10.9	L			
Lub #	API CF-4 15W40		Max.Temperature	121	°C

■ Coolant System

Coolant Capacity	21.9	L	Max. Top Tank Temp.	104	°C
Std. Thermostat (Modulating) Range	82-95	°C	Fan Drive Method	Shaft drive	
Cooling Fan Air Flow	210	m3/min			

■ Air Intake System

Combustion Air Flow	3.3/3.54	m3/min	Maximum Air Intake Restriction	3.7	kPa
---------------------	----------	--------	--------------------------------	-----	-----

■ Exhaust System

Exhaust Gas Flow	8.94/9.9	m3/min	Max.Back Pressure	10	kPa
Exhaust Gas Temp	≤560	°C	Exhaust Pipe Size	φ76	mm

■ Starting System

Start Mode	DC24V Electric start	Battery	2x120	Ah
------------	----------------------	---------	-------	----

V. ALTERNATOR DATA

Alternator Model	SLG224E	Rate Power	48/60	kW/kVA
PF.	0.8	Voltage	400/230	V
Phase	3	Frequency	50	Hz
Connection	3P 4W/Y	Bearing	1	
Winding Pitch	2/3	Protection Class	IP23	
Insulation Class	H	Efficiency	88.6%	
Tel. Influence	TIF: < 50	Voltage Regulation	±1.0%	
Harmonic Coefficient	THF: < 2%	AVR	AS440	
Voltage Adjust Scope	≥±5%	Excitation System	Self Excited	

VI. CONTROL SYSTEM DATA

MODEL DSE6120

■ Main feature

Electronic J1939 (CAN) and nonelectronic MPU and alternator sensing engine support for diesel, gas and petrol engines all in one variant. With a number of flexible inputs, outputs and protections, the modules can be easily adapted to suit a wide range of applications.



DSE6120 MKIII

■ Key Function

- ▲ Utility voltage sensing
- ▲ Generator/load power monitoring (kW, kV A, kV Ar, pf)
- ▲ Generator overload protection (kW)
- ▲ Efficient power save mode
- ▲ mains and generator closed via front panel
- ▲ 4 configurable DC outputs
- ▲ 4 configurable analog./digital inputs
- ▲ 6 configurable digital inputs
- ▲ Support for 0-10 V & 4-20 mA Oil pressure sensors
- ▲ Configurable staged loading outputs
- ▲ CAN, MPU and alternator speed sensing in one variant
- ▲ 3 engine maintenance alarms
- ▲ Engine speed protection
- ▲ Engine pre-heat
- ▲ Multiple date and time scheduler
- ▲ Engine idle control for starting & stopping
- ▲ Fuel pump control
- ▲ Battery voltage monitoring
- ▲ Start on low battery voltage
- ▲ Configurable remote start input
- ▲ Alternative configuration
- ▲ Alarm including common alarm, common electric and common shutdown
- ▲ LCD and LED alarm indication
- ▲ Configurable event log (50)
- ▲ Heated display option available

☆ *For more information, please visit the [official website](#).*

VII. WARRANTY POLICY

1. Guarantee for one year or 1000 hours (accord to whichever reach first) from ex-factory date. Refer to 《YANAN Diesel Generator Warranty Manual》 for more details.
2. Wearing parts(filters), incorrect man-made operation, maintenance failures are excluded from the warranty policy

VIII. DRAWING (for illustration purposes only)

