

### MG POWER DIESEL GENERATOR Cummins® powered Genset Model:MGC 80



\*Drawing above for illustration purposes only

#### I. GENERAL DATA

Prime Power	kW/kVA	80	100
Standby Power	kW/kVA	88	110
Frequency	Hz/rpm	50	1500
Voltage	V	400	230
Current	A	144	
Connection	/	3P 4W/Y	
Rated Power Factor	/	0.8	
Open Type (LxWxH)	mm	2200x940x1480	
Open Type(Weight)	kg	1150	
Silent Type (LxWxH)	mm	2800x1100x1470	
Silent Type(Weight)	kg	1600	



■ 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	6BT5.9-G2	Engine Power	92	kW
Aspiration	Turbocharged	Displacement	5.9	L
Type	In-line	Bore×Stroke	102×120	mm
No. of Cylinders	6	Compression Ratio	17.3:1	
Governor Type	Electronic Governor	Rated Speed	1500	RPM

#### ■ Fuel System

Prime Power Fuel Consumption	22.3	L/h	Standby Power Fuel Consumption	23.6	L/h
Fuel #	ASTM D975 No.2-D or BS2869 1998 Class A1, A2		Injection System	BYC A	

#### ■ Lubrication System

Lub Oil Capacity	16.4	L			
Lub #	API CF-4 15W40		Max.Temperature	121	°C

#### ■ Coolant System

Coolant Capacity	22.4	L	Max. Top Tank Temp.	104	°C
Std. Thermostat (Modulating) Range	82-95	°C	Fan Drive Method	Shaft drive	
Cooling Fan Air Flow	240	m3/min			

#### ■ Air Intake System

Combustion Air Flow	6/6.48	m3/min	Maximum Air Intake Restriction	3.7	kPa
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#### ■ Exhaust System

Exhaust Gas Flow	15/16.8	m3/min	Max.Back Pressure	10	kPa
Exhaust Gas Temp	≤565	°C	Exhaust Pipe Size	φ76	mm

#### ■ Starting System

Start Mode	DC24V Electric start	Battery	2×120	Ah
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### V. ALTERNATOR DATA

Alternator Model	SLG274C	Rate Power	80/100	kW/kVA
PF.	0.8	Voltage	400/230	V
Phase	3	Frequency	50	Hz
Connection	3P 4W/Y	Bearing	1	
Winding Pitch	2/3	Proteccion Class	IP23	
Insulation Class	H	Efficiency	90.4%	
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)

