

# DIESEL GENERATOR DATA SHEET

## MG POWER DIESEL GENERATOR Cummins® powered Genset Model:MGC 104



\*Drawing above for illustration purposes only

### I. GENERAL DATA

| Prime Power                       | kW/kVA | 104           | 130      |
|-----------------------------------|--------|---------------|----------|
| Standby Power                     | kW/kVA | 114           | 143      |
| Frequency                         | Hz/rpm | 50            | 1500     |
| Voltage                           | V      | 400           | 230      |
| Current                           | А      | 188           |          |
| Connection                        | /      | 3P 4W/Y       |          |
| Rated Power Factor                | /      | 0             | .8       |
| Open Type $(L \times W \times H)$ | mm     | 2350×950×1500 |          |
| Open Type(Weight)                 | kg     | 1280          |          |
| Silent Type (L×W×H)               | mm     | 2800×11       | .00×1470 |
| Silent Type(Weight)               | kg     | 17            | 00       |



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

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## **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 $^{\circ}\mathrm{C}$ , 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          | $\leq$ 63A: Micro Circuit Breaker (MCB) $>$ 63A $\leq$ 1250A: Molded case circuit breaker(MCCB) , $>$ 1250A: Air circuit breaker(ACB) |  |  |
| 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            | $\Diamond$ Heavy-duty air filter $\ \diamond$ Coolant heater $\diamond$ Lub oil heater $\diamond$ Fuel and Water Separator              |  |  |  |
|-------------------------------|---|--|--|--|
| Alternator And<br>Accessories | $\diamond$ Stamford $\diamond$ Leroy Somer $\diamond$ Marathon $\diamond$ Anti condensation heater $\diamond$ PMG                       |  |  |  |
|                               | ⇔High voltagekV   |  |  |  |
| Cooling System                | $\diamond$ 50 $^\circ\!\mathrm{C}$ radiator $\diamond$ Heat exchanger + water cooling tower + External water circulation pumping system |  |  |  |
| 0,                            | $\Diamond$ Remote horizontal water tank system  |  |  |  |
| Control System                | $\Diamond$ AMF $\diamond$ Parallel $\diamond$ Practical type in low temperature environment $\diamond$ Control Screen Heater            |  |  |  |
|                               | ♦Other (Comap、DEIF)   |  |  |  |
| Circuit Breaker               | $\Diamond$ 3/4 poles $\diamond$ Fixed/handcart type $\diamond$ Electric mechanism   |  |  |  |
| Automatic Transfer<br>Swtich  | ◇ATS cabinet  |  |  |  |
| Start Battery                 | $\Diamond$ Nickel-cadmium battery $\Diamond$ Maintenance-free battery $\Diamond$ Power charger and selector                             |  |  |  |
|                               | ♦ Charging current meter  |  |  |  |
| External Fuel Tank            | $\diamond$ 500L $\diamond$ 1000L $\diamond$ 1500L $\diamond$ 2000L $\diamond$ 2500L $\diamond$ 3000L $\diamond$ 4000L $\diamond$ 5000L  |  |  |  |
| Others                        |   |  |  |  |

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| IV. ENGINE DAT                        | A                            |                     |                                   |             |     |
|---------------------------------------|------------------------------|---------------------|-----------------------------------|-------------|-----|
| Engine Model                          | 6BTAA5.9-G                   | 2                   | Engine Power                      | 130         | kW  |
| Aspiration                            | Turbocharge<br>air aftercool | ed and Air to<br>ed | Displacement                      | 5.9         | L   |
| Туре                                  | In-line                      |                     | Bore×Stroke                       | 102×120     | mm  |
| No. of Cylinders                      | 6                            |                     | Compression Ratio                 | 17.3:1      |     |
| Governor Type                         | Electronic G                 | overnor             | Rated Speed                       | 1500        | RPM |
|                                       |                              |                     |                                   |             |     |
| Fuel System                           |                              |                     |                                   |             |     |
| Prime Power Fuel<br>Consumption       | 30                           | L/h                 | Standby Power Fuel<br>Consumption | 34          | L/h |
| Fuel #                                | ASTM D975                    |                     | Injection System                  | BYC PB      |     |
|                                       | BS2869 1998                  | 8 Class A1, A2      | injection system                  | BICID       |     |
|                                       |                              |                     |                                   |             |     |
| Lubrication Syste                     | em                           |                     |                                   |             |     |
| Lub Oil Capacity                      | 16.4                         | L                   |                                   |             |     |
| Lub #                                 | API CF-4 15W40               |                     | Max.Temperature                   | 121         | °C  |
|                                       |                              |                     |                                   |             |     |
| Coolant System                        |                              |                     |                                   |             |     |
| Coolant Capacity                      | 26.4                         | L                   | Max. Top Tank Temp.               | 104         | °C  |
| Std. Thermostat<br>(Modulating) Range | 82-95                        | °C                  | Fan Drive Method                  | Shaft drive |     |
| Cooling Fan Air Flow                  | 240                          | m3/min              |                                   |             |     |
|                                       |                              |                     |                                   |             |     |
| <ul> <li>Air Intake System</li> </ul> | n                            |                     |                                   |             |     |
| Combustion Air Flow                   | 6.84/7.2                     | m3/min              | Maximum Air Intake<br>Restriction | 3.7         | kPa |
|                                       | -                            | -                   | RESUICION                         |             |     |
| ■ Exhaust System                      |                              |                     |                                   |             |     |
| · ·                                   |                              |                     |                                   |             |     |
| Exhaust Gas Flow                      | 17.7/19.68                   | m3/min              | Max.Back Pressure                 | 10          | kPa |
| Exhaust Gas Temp                      | ≤540                         | ്                   | Exhaust Pipe Size                 | ф76         | mm  |
|                                       |                              |                     |                                   |             |     |
| Starting System                       |                              |                     |                                   |             |     |
| Start Mode                            | DC24V Elect                  | ric start           | Battery                           | 2×120       | Ah  |

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| V. ALIEKNAIOK DAIA |                      |          |                    |              |        |
|--------------------|----------------------|----------|--------------------|--------------|--------|
|                    | Alternator Model     | SLG274E  | Rate Power         | 112/140      | 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     | н        | Efficiency         | 91.7%        |        |
|                    | 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

#### ■ 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.

## MODEL DSE6120



DSE6120 MKIII

### **Key Function**

- ▲ Utility voltage sensing
   ▲ Generator/load powermonitoring
   (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./digitalinputs
   ▲ 6 configurable digital inputs
   ▲ Support for 0-10 V & 4-20 mAoil
- $\blacktriangle$  Configurable staged loadingoutputs  $\blacktriangle$  Configurable remote start input
- ▲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

- ▲Alternative configuration
- ▲ Alarm including common alarm,common
- electric and common shutdown
- ▲LCD and LED alarm indication
- ▲ Configurable event log (50)
- ▲ Heated display option available
- $\precsim$  For more information, please visit the

<u>official website</u>

## W. WARRANTY POLICY

pressure sensors

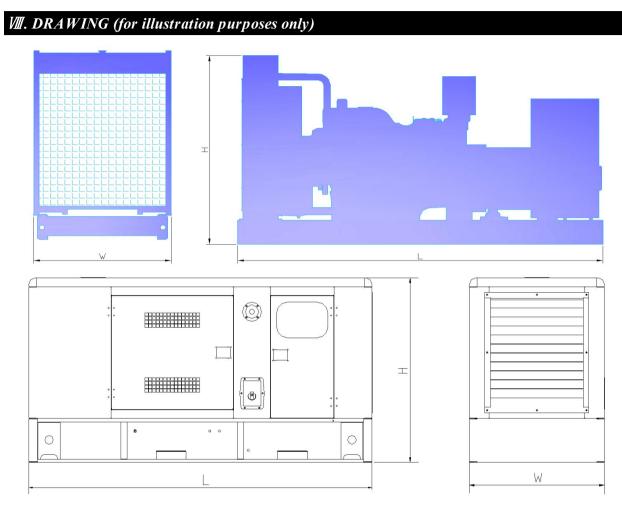
1. Guarantee for one year or 1000 hours (accord to whichever reach first) from ex-factory date. Refer to

# DIESEL GENERATOR DATA SHEET

(CCS IS09001 IS014000 IS018000 SUIS Intertek (YANAN Diesel Generator Warranty Manual) for more details.

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2.Wearing parts( filters), incorrect man-made operation, maintenance failures are excluded from the warranty policy



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