### Diesel Generating Set BF-C28-60

#### Standby Power (60Hz)
- 26.4KW / 33KVA

#### Prime Power (60Hz)
- 24KW / 30KVA

### Standard Features

- **General Features:**
  - Engine (DCEC Cummins 4B3.9-G1)
  - Radiator 50°C max, fans are driven by belt, with safety guard
  - 24V charge alternator
  - Alternator: single bearing alternator IP23, insulation class H/H
  - Absorber
  - Dry type air filter, fuel filter, oil filter
  - Main line circuit breaker
  - Standard control panel
  - Two 12V batteries, rack and cable
  - Ripple flex exhaust pipe, exhaust siphon, flange, muffler
  - User manual

### Generator Ratings

<table>
<thead>
<tr>
<th>Voltage</th>
<th>HZ</th>
<th>Phase</th>
<th>P.F (COSΦ)</th>
<th>Standby Amps</th>
<th>Standby Ratings (KW/KVA)</th>
<th>Prime Ratings (KW/KVA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>480/277</td>
<td>60</td>
<td>3</td>
<td>0.8</td>
<td>40</td>
<td>26.4/33</td>
<td>24/30</td>
</tr>
<tr>
<td>460/266</td>
<td>60</td>
<td>3</td>
<td>0.8</td>
<td>41</td>
<td>26.4/33</td>
<td>24/30</td>
</tr>
<tr>
<td>440/254</td>
<td>60</td>
<td>3</td>
<td>0.8</td>
<td>43</td>
<td>26.4/33</td>
<td>24/30</td>
</tr>
<tr>
<td>416/240</td>
<td>60</td>
<td>3</td>
<td>0.8</td>
<td>46</td>
<td>26.4/33</td>
<td>24/30</td>
</tr>
</tbody>
</table>

- **Prime Power (PRP):** Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97 (eqv ISO8528); A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

- **Standby Power Rating (ESP):** The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

### Sales Promises

Baifa Power provides a full line of brand new and high quality products. Each and every unit is strictly factory tested.

Warranty is according to our standard conditions: a, 15 months, counted on the day BAIFA sold to the first buyer; b, One year after installation; c, 1000 running hours (accumulated); subject to the earlier one. Service and parts are available from Baifa Power or distributors in your location.
### Engine Data

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer / Model</td>
<td>DCEC Cummins 4B3.9-G1, 4-cycle</td>
</tr>
<tr>
<td>Air Intake System</td>
<td>Air natural cooled</td>
</tr>
<tr>
<td>Fuel System</td>
<td>A model fuel pump</td>
</tr>
<tr>
<td>Cylinder Arrangement</td>
<td>4 in line</td>
</tr>
<tr>
<td>Displacement</td>
<td>3.9L</td>
</tr>
<tr>
<td>Bore and Stroke</td>
<td>102*120 (mm)</td>
</tr>
<tr>
<td>Compression Ratio</td>
<td>16.5:1</td>
</tr>
<tr>
<td>Rated RPM</td>
<td>1800rpm</td>
</tr>
<tr>
<td>Max. Standby Power at Rated RPM</td>
<td>30KW</td>
</tr>
<tr>
<td>Governor Type</td>
<td>RSV Mechanical (Std) / Electronic (Optional)</td>
</tr>
</tbody>
</table>

**Exhaust System**

- Exhaust Gas Flow: 4.27 m³/min
- Exhaust Temperature: 410°C
- Max Back Pressure: 10 kPa

**Air Intake System**

- Max Intake Restriction: 5 kPa
- Burning Capacity: 2.2 m³/min
- Air Flow: 150 m³/min

**Fuel System**

- 100% (Prime Power) Load: 228 g/kWh
- 75% (Prime Power) Load: 229 g/kWh
- 50% (Prime Power) Load: 240 g/kWh
- 100% (Prime Power) Load: 7.5 L/h

**Oil System**

- Total Oil Capacity: 11 L
- Oil Consumption: ≤4 g/kWh
- Engine Oil Tank Capacity: 8.5~9.5 L
- Oil Pressure at Rated RPM: 345 kPa

**Cooling System**

- Total Coolant Capacity: 21 L
- Thermostat: 82~95°C
- Max Water Temperature: 104°C
### ALTERNATOR SPECIFICATION

#### GENERAL DATA

Compliance with GB755, BS5000, VDE0530, NEMAMG1-22, IED34-1, CSA22.2 and AS1359 standards.

#### Alternator Data

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Phase</td>
<td>3</td>
</tr>
<tr>
<td>Connecting Type</td>
<td>3 Phase and 4 Wires, “Y” type connecting</td>
</tr>
<tr>
<td>Number of Bearing</td>
<td>1</td>
</tr>
<tr>
<td>Power Factor</td>
<td>0.8</td>
</tr>
<tr>
<td>Protection Grade</td>
<td>IP23</td>
</tr>
<tr>
<td>Altitude</td>
<td>$\leq 1000m$</td>
</tr>
<tr>
<td>Exciter Type</td>
<td>Brushless, self-exciting</td>
</tr>
<tr>
<td>Insulation Class, Temperature Rise</td>
<td>H/H</td>
</tr>
<tr>
<td>Telephone Influence Factor (TIF):</td>
<td>$&lt; 50$</td>
</tr>
<tr>
<td>THF</td>
<td>$&lt; 2%$</td>
</tr>
<tr>
<td>Alternator Capacity</td>
<td>29.4KVA</td>
</tr>
<tr>
<td>Alternator Efficiencies</td>
<td>85.3$%$</td>
</tr>
</tbody>
</table>

#### GENERATING SET DATA

- Voltage Regulation: $\geq 5\%$
- Voltage Regulation, Stead State: $\leq 1\%$
- Sudden Voltage Warp (100% Sudden Reduce): $\leq 25\%$
- Sudden Voltage Warp (Sudden Increase): $\leq 20\%$
- Voltage Stable Time (100% Sudden Reduce): $\leq 6S$
- Voltage Stable Time (Sudden Increase): $\leq 6S$
- Frequency Regulation, Stead State: $\leq 5\%$
- Frequency Waving: $\leq 1.5\%$
- Sudden Frequency Warp (100% Sudden Reduce): $\leq 12\%$
- Sudden Frequency Warp (Sudden Increase): $\leq -10\%$
- Frequency Recovery Time (100% Sudden Reduce): $\leq 5S$
- Frequency Recovery Time (Sudden Increase): $\leq 5S$
### Standard Features

- Baifa Standard Auto Control System
- Base Fuel Tank
- Starting batteries (Maintenance-Free & Watering-Free) with connective wires
- MCCB
- Oil Drain Valve
- Exhaust System (including until muffler)
- Special tool for Cummins engine
- One set of fuel filter / oil filter / belt
- Documents

### Options

- Daily Fuel Tank
- Battery Charger
- Engine Heater
- Alternator Heater
- Water Separator
- Permanent Magnet Generator (PMG)
- Rainproof Type
- Soundproof Type
- Trailer Type
- Remote Control Panel
- Automatic Transfer Switch
- Switch box
- Spare Parts

### Dimension & Weight

**Open Type with Base Fuel Tank**

- Overall Size: 1760×760×1380 (mm)
- Weight: 730 kg

**Soundproof Type**

- Overall Size: 2290×1060×1680 (mm)
- Weight: 1250 kg

**Trailer Type**

- Overall Size: 2860×1640×2320 (mm)
- Weight: 1850 kg
Baifa Standard Control Panel uses micro processing technique integrating digital, intelligent and network techniques which can carry out functions including auto start/stop, data measure, alarming. The controller uses LCD display, optional Chinese and English display interface with operation easy and reliable. It can be widely used in all types of generator automatic control system for compact structure, advanced circuits, simple connections and high reliability.

Auto Module Control Panel

Auto Module Control Panel is the configuration for nobody on duty controlling generators. This kind of panel adopts auto module control system, with large LCD display to show the menu. Features: MRS10-can receive remote output signal from ATS and realize auto start and stop of generators. MRS16-can realize all functions of MRS10, add RS232 interface which can communicate with PC to realize remote operation. AMF25-Auto Mains Failure controller, can realize all functions of MRS16, furthermore can detect ATS and control directly.