Technical Specification for Cummins Industrial Type Generator Set

**Rated Power 30KW/38KVA TPD38C5-1**

### DIESEL GENERATOR DATA:

- **Generator set model**: TPD38C5-1
- **Generator rated power**: 30KW/38KVA
- **Generator standby power**: 33KW/41KVA
- **Rated frequency**: 50HZ
- **Rated voltage**: 400/230V (Can be adjusted)
- **Rated speed**: 1500RPM
- **Fuel consumption**: 10L/h
- **Open type size**: 1680x730x1285 MM
- **Silent type size**: 2400x1000x1560 MM
- **Open type weight**: 700 Kg
- **Silent type weight**: 1200 Kg

### ENGINE DATA:

- **Engine model**: 4BT3.9-G1
- **Engine brand**: CUMMINS
- **Engine rated power**: 36KW/45KVA
- **Engine standby power**: 40KW/50KVA
- **Engine speed**: 1500RPM
- **Bore & Stroke**: 102 × 120 mm
- **Displacement**: 3.9 L
- **Compression ratio**: 17.3:1
- **Fuel consumption at 100% load**: 229 g/kW.h
- **Type**: In line, 4 cylinders, 4 stroke
- **Aspiration**: Turbocharged
- **Governor**: Mechanical
- **Cooling method**: Water cooled by radiator

### ALTERNATOR DATA:

- **Alternator model**: PI 144J, GM-30-4, TP-30-4
- **Alternator brand**: STAMFORD, MARATHON, TONTEK
- **Rated power**: 32KW, 30KW, 30KW
- **Frequency**: 50HZ
- **Speed**: 1500RPM
- **Voltage**: 400/230V (Can be adjusted)

**-Green Power, Power with our heart!-**
Power factor: 0.8 (lagging)
Phase and wire: 3 phase 4 wires
Excite type: Single Bearing, Close coupled. Brushless, self-exciting, AVR
Protection class: IP23
Insulation class: H

**CONTROL SYSTEM DATA:**
Deepsea-DSE6020 (Standard)

![Control Module Display](image)

**The control module display**
- Generator voltage
- Generator frequency
- Battery voltage
- Engine speed
- Load current
- Engine run-time Hours
- Engine oil pressure (Panel Meter)
- Engine coolant temperature (Panel Meter)

**Protecting Functions**
- Over frequency / under frequency
- Over voltage / under voltage
- Over current
- Over speed / under speed
- Emergency stop
- Low oil pressure
- High water temperature
- Failure to start/Failure to stop
- Battery charger failure
- Comprehensive shutdown or warning on fault condition

**SCOPE OF SUPPLY:**
- Diesel generator (Open type): 1 Set
- Soundproof canopy: 1 Set
- Control system: 1 Set
- CHINT breaker: 1 Pcs
- Daily use base fuel tank for 8 working hours: 1 Pcs
- Muffler: 1 Pcs
- Maintenance-free battery DC24V and connection wires: 1 Set
- Flange: 1 Pcs
- Bellows: 1 Pcs
- Standard maintenance tool: 1 Set

**OPTION:**
- ABB MCCB circuit breaker
- Residential exhaust muffler
- 12 hours/24 hours base fuel tank
- Dual wall base fuel tank
- External fuel tank
- Droop Kit for synchronizing work
- Anti Condensation Heater
- Super silent canopy
- 50°C radiator
- Water heater
- Oil heater
- Oil-water separator
- PMG excitation
- Remote Control panel

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*Paralleling System

*ATS control cabinet

**DOCUMENTATION:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine documents</td>
<td>1 Set</td>
</tr>
<tr>
<td>Alternator documents</td>
<td>1 Set</td>
</tr>
<tr>
<td>Control system documents</td>
<td>1 Set</td>
</tr>
<tr>
<td>Generator set operation&amp;manual</td>
<td>1 Pcs</td>
</tr>
<tr>
<td>Generator set testing report</td>
<td>1 Pcs</td>
</tr>
<tr>
<td>Electric drawing</td>
<td>1 Set</td>
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</tbody>
</table>

**FACTORY ACCEPTANCE TEST (FAT):**

The safety function test for the generator set will be carried out in Tontek Power Limited factory in China. All consumables items during the test will be provided.

**WARRANTY:**

18 months or 1500 Working Hours from the shipment date, whichever comes first.