





**DIESEL GENERATOR** 

**FUEL OPTIMISED** 

#### ELECTRICAL

|                |        | Pri         | me  | Star | ıdby |    |                |                           |                   |
|----------------|--------|-------------|-----|------|------|----|----------------|---------------------------|-------------------|
| Frequency (Hz) | Phases | Voltage (V) | kVA | kW   | kVA  | kW | MCB Rating (A) | Minimum ATP<br>Rating (A) | Rated Speed (RPM) |
| 50             | 3      | 400/230V    | 13  | 11   | 14   | 11 | 20             | 30                        | 1500              |
| 50             | 1      | 230V        | 10  | 10   | 10   | 10 | 32             | 40                        | 1500              |
| 60             | 3      | 380/220V    | 14  | 11   | 15   | 12 | 25             | 30                        | 1800              |
| 60             | 3      | 220/127V    | 15  | 12   | 16   | 13 | 40             | 40                        | 1800              |
| 60             | 3      | 480/277V    | 16  | 13   | 18   | 14 | 25             | 30                        | 1800              |

| POWER FACTOR |     |
|--------------|-----|
| 3 Phase      | 0.8 |
| I Phase      | 1   |

| MAXIMUM LOAD IMPACT* |       |  |  |  |
|----------------------|-------|--|--|--|
| kVA                  | 12.50 |  |  |  |
| kW                   | 10.00 |  |  |  |

\*With 20% voltage and 10% frequency deviation @ 50Hz, 400V

#### **ALL RATINGS ARE TO STANDARD REFERENCE CONDITIONS ISO 8528**

Prime: This rating is for the supply of continuous electrical power, at variable load, in lieu of commercially purchase power. There is no limitation on the annual hours of operation and 10% over load power can be supplied for 1 hour in 12.

Standby: This rating is for the supply of continuous electrical power, at variable load, in the event of a utility power failure. No overload is permitted.

"Stage Illa" models are only emissions compliant at 50Hz Prime Power in accordance with 97-68EC.

ALTERNIATOR LIMITAGES



| CANOPY/SKID                              |   |
|--|---|
| Lockable Maintenance Access Doors        | • |
| Control Panel Viewing Window             | • |
| Fork Pockets                             | • |
| Single Lift Point                        | × |
| Rental Sledging Base                     | X |
| Bunding                                  | • |
| Open Frame                               | X |
| Bund Level Indicator                     | Δ |
| 50mm Rock Wool Sound Insulation          | • |
| Yellow Paint                             | • |
| Red Paint                                | Δ |
| White Paint                              | Δ |
| Standard: • Not Available: x Optional: 4 | 7 |

| ALTERNATOR HMT30B2              |                                     |
|---------------------------------|-------------------------------------|
| Poles                           | 4                                   |
| Winding Connections             | Star (3Ph) / Parallel (1Ph)         |
| Insulation                      | Class H                             |
| Enclosure                       | IP23                                |
| Exciter System                  | Self-excited, brushless             |
| Voltage Regulator               | A.V.R. (electronic)                 |
| Steady State Voltage Regulation | +/- 1.0%                            |
| Bearing                         | Single Bearing                      |
| Coupling                        | Flexible Disc                       |
| Cooling                         | Direct drive centrifugal blower fan |
| Coating                         | Winding Protection Standard         |
|                                 |                                     |

| STARTING SYSTEM     |    |      |  |  |  |
|---------------------|----|------|--|--|--|
| Starter Motor       | kW | 1.10 |  |  |  |
| Battery Capacity    | Ah | 66   |  |  |  |
| Number of Batteries |    | 1    |  |  |  |
| Auxiliary Voltage   | V  | 12   |  |  |  |

| ENGINE                   |           |                                     |  |  |  |
|--------------------------|-----------|-------------------------------------|--|--|--|
|                          | 1500 R    | PM                                  |  |  |  |
| Output Rating (PRP)      | kW        | 13.20                               |  |  |  |
| Output Rating (Standby)  | kW        | 14.52                               |  |  |  |
|                          | 1800 R    | PM                                  |  |  |  |
| Output Rating (PRP)      | kW        | 16.20                               |  |  |  |
| Output Rating (Standby)  | kW        | 17.82                               |  |  |  |
| Manufacturer and Model   |           | Yanmar 3TNV88BGGEH                  |  |  |  |
| Fuel                     |           | Diesel                              |  |  |  |
| Injection                |           | Indirect                            |  |  |  |
| Aspiration               |           | Natural                             |  |  |  |
| Cylinders                |           | 3                                   |  |  |  |
| Bore and Stroke          | mm        | 88×90                               |  |  |  |
| Displacement             | L         | 1.642                               |  |  |  |
| Cooling                  |           | Coolant                             |  |  |  |
| Engine Oil Specification |           | SEA 3 class 10W30 / API grade CD,CF |  |  |  |
| Compression Ratio        |           | 19.1:1                              |  |  |  |
| Engine Oil Capacity      | L         | 6.70                                |  |  |  |
| Coolant Capacity         | L         | 4.80                                |  |  |  |
| Governor                 |           | Mechanical                          |  |  |  |
| Air Filter               |           | Dry                                 |  |  |  |
| Engine Oil Consumption   | 100% Load | 0.27 g/kWh                          |  |  |  |

| FUEL SYSTEM                 |   |       |  |  |
|-----------------------------|---|-------|--|--|
| Diesel Specification        |   | EN590 |  |  |
| Standard Fuel Tank Capacity | L | 23    |  |  |

| FUEL TANK OPTIONS |          |              |  |  |  |
|-------------------|----------|--------------|--|--|--|
|                   | Material | Capacity (L) |  |  |  |
| Standard Tank     | Plastic  | 23           |  |  |  |
| Tank Option 1     | Steel    | 100          |  |  |  |
| Tank Option 2     |          |              |  |  |  |



| FUEL CONSUMPTION                    |                     |       |        |        |
|-------------------------------------|---------------------|-------|--------|--------|
| 100% Load Prime                     | L/h                 |       |        | 3.18   |
| 75% Load Prime                      | L/h                 | 5011  |        | 2.50   |
| 50% Load Prime                      | L/h                 | 50Hz  |        | 1.80   |
| 100% Load Standby                   | L/h                 |       |        | 3.51   |
| 100% Load Prime                     | L/h                 |       |        | 4.02   |
| 75% Load Prime                      | L/h                 | (0)   |        | 3.06   |
| 50% Load Prime                      | L/h                 | 60Hz  |        | 2.25   |
| 100% Load Standby                   | L/h                 |       |        | 4.60   |
| EXHAUST SYSTEM                      |                     |       |        |        |
| Maximum Temperature 100% Standby    | °C                  |       |        | 390.00 |
| Exhaust Gas Flow 100% Standby       | m <sup>3/</sup> min | 50Hz  |        | 2.08   |
| Maximum Allowed Back Pressure       | mbar                |       |        | 9.80   |
| Maximum Temperature 100% Standby    | °C                  |       | 500.00 |        |
| Exhaust Gas Flow 100% Standby       | m <sup>3/</sup> min | 60Hz  |        | 4.03   |
| Maximum Allowed Back Pressure       | mbar                |       |        | 12.70  |
| Exhaust Flange Size                 | mm                  | 50.00 |        | 0      |
| `AIR SYSTEM                         |                     |       |        |        |
| Intake Air Flow 100% Standby        | m³/h                |       |        | 66.50  |
| Total Cooling Air Flow 100% Standby | m³/s                | 50Hz  |        | 0.70   |
| Alternator Fan Airflow              | $m^3/s$             |       |        | 0.09   |
| Intake Air Flow 100% Standby        | m³/h                |       |        | 79.80  |
| Total Cooling Air Flow 100% Standby | $m^3/s$             | 60Hz  |        | 0.753  |
| Alternator Fan Airflow              | m³/s                |       |        | 0.108  |
| SOUND PRESSURE (CANOPY ONLY         | )                   |       |        |        |
| LpA (7m) 50Hz                       | C                   | IB(A) |        | 57     |
| LpA (7m) 60Hz                       | C                   | IB(A) |        | 69     |

| MECHANICAL FEATURES                |                  |                    |   |
|------------------------------------|------------------|--------------------|---|
| Cooling Pack                       |                  |                    | • |
| Air Filter                         |                  |                    | • |
| Mechanical Governor                |                  |                    | • |
| Electronic Governor                |                  |                    | × |
| High Coolant Temperature Sender    |                  |                    | • |
| Low Oil Pressure Sender            |                  |                    | • |
| Advanced Coolant Temperature Sende | r                |                    | × |
| Advanced Oil Pressure Sender       |                  |                    | X |
| Oil Temperature Sender             |                  |                    | X |
| Water Level Sender                 |                  |                    | X |
| Radiator Guards                    |                  |                    | • |
| Hot Component Guards               |                  |                    | • |
| Manual Oil Drain Pump (Canopy)     |                  |                    | • |
| Water Jacket Heater                |                  |                    | X |
| Manual Fuel Fill                   |                  |                    | Δ |
| Electric Fuel Fill                 |                  |                    | X |
| Racor Fuel Filter (No Alarm)       |                  |                    | X |
| Racor Fuel Filter (With Alarm)     |                  |                    | X |
| Pre-Filter with Separator          |                  |                    | × |
| External Spark Arrestor            |                  |                    | Δ |
| Fuel Level Sender                  |                  |                    | • |
| Fuel Heater                        |                  |                    | Δ |
| External Fuel Fill (Belly Tank)    |                  |                    | Δ |
| 3 Way Fuel Valve and Coupling Nest |                  |                    | X |
| Residential Silencer               |                  |                    | • |
| Industrial Silencer                |                  |                    | × |
| Standard: ●                        | Not Available: x | Optional: $\Delta$ |   |



| <b>ELECTRICAL FEATURES</b>            |                        |                    |          |
|---------------------------------------|------------------------|--------------------|----------|
| AVR DSR                               |                        |                    | •        |
| AVR DER                               |                        |                    | ×        |
| Winding Protection Standard           |                        |                    | •        |
| Winding Protection Standard +         |                        |                    | Δ        |
| Winding Protection Grey               |                        |                    | Δ        |
| Winding Protection Total              |                        |                    | Δ        |
| Winding Protection Total +            |                        |                    | Δ        |
| MAUX                                  |                        |                    | •        |
| PMG                                   |                        |                    | Δ        |
| Anti-Condensation Heater              |                        | Δ                  |          |
| Miniature Circuit Breaker (Integrated |                        | •                  |          |
| Moulded Case Circuit Breaker (with    |                        | ×                  |          |
| Earth Leakage Protection (Shunt Trip) |                        |                    | •        |
| Synchronisation                       |                        |                    | ×        |
| Socket Box (inclusive of heavy duty b | ousbar & micro switch) |                    | ×        |
| Preparation for Earth Spike           |                        |                    | •        |
| Optional Voltages                     |                        |                    | $\Delta$ |
| Remote Screen                         |                        |                    | X        |
| Panel Door Micro Switch               |                        |                    | X        |
| Copper Busbar/Tails                   |                        |                    | ×        |
| Emergency Stop Button                 |                        |                    | •        |
| External Emergency Stop Button        |                        |                    | •        |
| Standard: ●                           | Not Available: x       | Optional: $\Delta$ |          |
| BATTERY FEATURES                      |                        |                    |          |
| Battery Isolator                      |                        |                    | Δ        |

|                    |             |                  | '                  |      |
|--------------------|-------------|------------------|--------------------|------|
| BATTERY FEAT       | URES        |                  |                    |      |
| Battery Isolator   |             |                  |                    | Δ    |
| Battery Type       |             |                  |                    | Dry  |
| Battery Size (Ah)  |             |                  |                    | 66Ah |
| Number of Batterie | es          |                  |                    | 1    |
| Optional Battery   |             |                  |                    | Wet  |
| Battery Charger    |             |                  |                    | X    |
|                    | Standard: ● | Not Available: x | Optional: $\Delta$ |      |

| JCB COMMUN   | ICATION AND | CONTROL          |                    |   |
|--------------|-------------|------------------|--------------------|---|
| KSI          |             |                  |                    | • |
| CPI          |             |                  |                    | × |
| CP2          |             |                  |                    | × |
| ATP          |             |                  |                    | × |
| CAN/USB      |             |                  |                    | × |
| CAN/LAN      |             |                  |                    | × |
| CAN RS-232   |             |                  |                    | × |
| Remote Modem |             |                  |                    | × |
|              | Standard: ● | Not Available: x | Optional: $\Delta$ |   |

| WEIGHT AND DIMENSIONS       |       |        |  |  |  |  |
|-----------------------------|-------|--------|--|--|--|--|
| Length                      | mm    | 1475   |  |  |  |  |
| Width                       | mm    | 750    |  |  |  |  |
| Height                      | mm    | 1104   |  |  |  |  |
| Shipping Volume (sea ready) | $m^3$ | 1.22   |  |  |  |  |
| Weight*                     | Kg    | 506.00 |  |  |  |  |

<sup>\*</sup>Standard build with all fluids except fuel

### **REFERENCE STANDARDS**

JCB Generators are CE certified and conform to the following Directives (subject to a country requiring such standard):

- EN 12100, EN 13857, EN 60204
- 2006/42/CE Machinery safety
- 2006/95/EC Low voltage
- 2004/108/CE Electromagnetic compatibility
- 2000/14/EC Sound Power Level (amended by 2005/88/EC)
- 97/68/EC Emissions(amended by 2002/88/EC & 2004/26/EC)
- Power according to ISO 8528 and ISO 3046
- Ambient reference conditions 1000mbar, 25°C, 30% relative humidity ISO3046
  Information based on standard specification equipment unless otherwise stated.