



YANMAR

## YN31

Powered by:

### 4TNV 98 GGE

31 kVA at 50 Hz

Directive 97/68/EC (Stage II) 

| Generating Set Performance |     | 50 Hz              |                      |
|----------------------------|-----|--------------------|----------------------|
| SERVICE                    |     | Continuous Service | Intermittent Service |
| Rated Output               | kVA | 31.0               | 33.0                 |
| Active Power Output *      | kW  | 25.0               | 27.0                 |
| Rated Speed                | rpm | 1500               |                      |
| Standard Voltage           | V   | 400 / 230          |                      |
| Available Voltage          | V   | 230 / 132          |                      |

Performance data refers to Standard Reference Conditions of ISO 8528 : + 25 °C , 100 m ALT, relative humidity 30 %

During running-in period the output increases by approx. 5 % which is taken into consideration at delivery.

\* Considering cos phi= 0,

| Prime Mover Performance                 |         | Continuous Service                      | Intermittent Service |
|---|---------|---|----------------------|
| SERVICE                                 |         |   |                      |
| Rated Output                            | kW (CV) | 30.7 (41.7)                             | 34.0 (46.2)          |
| Manufacturer                            |         | YANMAR                                  |                      |
| Engine Model                            |         | 4TNV 98 GGE                             |                      |
| 4-Stroke Diesel Engine - Injection Type |         | DIRECT                                  |                      |
| Aspiration Type                         |         | NATURAL                                 |                      |
| Number and Arrangement of Cylinders     |         | 4 - L                                   |                      |
| Bore x Stroke                           | mm      | 98 x 110                                |                      |
| Total Displacement                      | L       | 3.318                                   |                      |
| Cooling System                          |         |   |                      |
| Lube Oil Specifications                 |         | API (CF, CF4, CI4) ACEA (E-3, E-4, E-5) |                      |
| Fuel Consumption (at 100% load)         | L/hr    | 8.92                                    |                      |
| Oil Consumption (at full load)          |         | -                                       |                      |
| Compression Ratio                       |         | 18.5                                    |                      |
| Lube Oil Maximum Capacity               | L       | 10.5                                    |                      |
| Lube Oil Minimum Capacity               | L       | 4.5                                     |                      |
| Speed Governor                          | Type    | Mechanical                              |                      |
| Air Filter                              | Type    | Medium Dry Type                         |                      |

**PRIME POWER (P.R.P.):** The prime power is the maximum power available with varying loads for an unlimited number of hours. The average power output during a 24h period of operation must not exceed 80% of the declared prime power between the prescribed maintenance intervals and at standard environmental conditions.

A 10% overload is permissible for 1 hour every 12 hours of operation.

**STAND BY POWER:** Is the maximum power available for a period of 500 hours/year with a mean load factor of 90% of the declared stand-by power.

No kind of overload is permissible for this use.

| Synchronous Generator *           |       |  |
|-----------------------------------|-------|--|
| Poles                             | N°    | 4  |
| Winding Connections (standard)    |       | Star - series  |
| Frame Mounting                    |       | SAE 3 11 <sup>1/2</sup> "                                  |
| Insulation                        | class | H  |
| Enclosure (according to IEC-34-5) |       | IP 23  |
| Phases                            |       | 3 + N  |
| Voltage Regulator                 |       | A.V.R. (electronic)  |
| Steady State Voltage              |       | within ± 1.5% from no load to full loading with cosφ=0.8+1 |

\*Alternators used by Gentec Gensets meet the requirements of following Standard: IEC 34-1; CEI 2-3; ; VDE 0530; BS 4999-5000:NF 51-100,11



| Generating Set Installation Data                          |                       | 1500 rpm |
|---|-----------------------|----------|
| <b>EXHAUST SYSTEM</b>                                     |                       |          |
| Max Exhaust Temperature at Full Load                      | ° C                   | 550      |
|   | ° F                   | 1022     |
| Exhaust Gas Flow  | m <sup>3</sup> /min   | 8.50     |
| Heat Rejected to Exhaust                                  | Kcal/Kwh              | -        |
| Maximum Allowed Back Pressure                             | mm / H <sub>2</sub> O | 770.25   |
| <b>AIR REQUIREMENT</b>                                    |                       |          |
| Air Requirement for Combustion at 100% load / rated speed | m <sup>3</sup> /min   | 2.69     |
|   | ft <sup>3</sup> /min  | 94.99    |
| <b>ELECTRIC STARTING SYSTEM</b>                           |                       |          |
| Starting Motor Output                                     | kW                    | 2.3      |
|   | CV                    | 3.12     |
| Minimum Recommended Battery Capacity                      | Ah                    | 92       |
| Auxiliary Voltage   | Vcc                   | 12       |
| <b>LIQUID CAPACITY</b>                                    |                       |          |
| Lube Oil System including Sump, Filters, etc              | L                     | 10.50    |
| <b>FUEL TANK CAPACITY</b>                                 |                       |          |
| Open Skid Genset  | L                     | 115      |
| Soundproofed  | L                     | 60       |
| <b>SOUND EMISSION LEVEL (Soundproofed gensets)</b>        |                       |          |
| 1 Metre (Free Field)                                      | dB (A)                | 69       |
| 7 Metres (Free Field)                                     | dB (A)                | 62       |

| Generating Set transport data                    |                                  |              |
|--|----------------------------------|--------------|
| <b>WEIGHT AND DIMENSIONS OPEN SKID GENSET</b>    |                                  |              |
| Length   | m - ft                           | 1.62 - 5.32  |
| Width  | m - ft                           | 0.75 - 2.46  |
| Height   | m - ft                           | 1.26 - 4.14  |
| Shipping Volume Seaworthy (Standard Supplier)    | m <sup>3</sup> - ft <sup>3</sup> | 1.54 - 54.18 |
| Dry Weight (with standard accessories)           | kg - lb                          | 545 - 1,199* |
| <b>WEIGHT AND DIMENSIONS SOUNDPROOFED GENSET</b> |                                  |              |
| Length   | m - ft                           | 2.00 - 6.56  |
| Width  | m - ft                           | 0.95 - 3.11  |
| Height   | m - ft                           | 1.27 - 4.16  |
| Shipping Volume Seaworthy (Standard Supplier)    | m - ft                           | 2.41 - 84.87 |
| Dry Weight (with standard accessories)           | kg - lb                          | 905 - 1,991* |

\* Weights and dimensions based on standard product configuration (this information could change for optional configurations)

Local distributor



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