

YANMAR®

DIESEL GENERATORS

YEG series

[4-pole, 3-phase generators]

Generator Output
13.8~74.0kVA



DIMENSIONS Unit=mm(in.)

| Construction | Canopy type | | | Silent type | | | | |
|--------------|-------------|------------|------------|-------------|-------------|-------------|-------------|-------------|
| | W | L | H | W | L | H | | |
| Model | YEG170DTLC | YEG230DTLC | YEG450DTLC | YEG170DTLS | YEG230DTLS | YEG450DTLS | YEG650DTLS | YEG750DTLS |
| L | 1300(51.2) | 1480(58.3) | 1600(63.0) | 1600(62.99) | 1830(72.05) | 2050(80.71) | 2350(92.52) | 2350(92.52) |
| W | 670(26.4) | 670(26.4) | 750(29.5) | 700(27.56) | 700(27.56) | 750(29.53) | 920(36.22) | 920(36.22) |
| H | 920(36.2) | 920(36.2) | 1000(39.4) | 950(37.40) | 950(37.40) | 1050(41.34) | 1350(53.15) | 1350(53.15) |

ACCESSORIES

○:Standard ▲:Option

| Model | Canopy type | YEG170DTLC | YEG230DTLC | YEG450DTLC | - | - |
|-------------------------|-----------------------------|-------------|------------|------------|------------|------------|
| | Silent type | YEG170DTLS | YEG230DTLS | YEG450DTLS | YEG650DTLS | YEG750DTLS |
| Generator control panel | Frequency meter | ○ | ○ | ○ | ○ | ○ |
| | AC voltmeter | ○ | ○ | ○ | ○ | ○ |
| | AC ammeter | ○ | ○ | ○ | ○ | ○ |
| | Ammeter select switch | ▲ | ▲ | ▲ | ▲ | ▲ |
| | Voltage regulator | ○ | ○ | ○ | ○ | ○ |
| | Circuit breaker | ○ | ○ | ○ | ○ | ○ |
| Engine control panel | Pilot lamp | ○ | ○ | ○ | ○ | ○ |
| | Hour meter | ○ | ○ | ○ | ○ | ○ |
| | Fuel level gauge | ○ | ○ | ○ | ○ | ○ |
| | Starting key switch | ○ | ○ | ○ | ○ | ○ |
| | Emergency stop button | ○ | ○ | ○ | ○ | ○ |
| | Warning lamp | Water temp. | ○ | ○ | ○ | ○ |
| L.O press. | | ○ | ○ | ○ | ○ | ○ |
| Battery charge | | ○ | ○ | ○ | ○ | ○ |
| Protection system | High water temp. | ○ | ○ | ○ | ○ | ○ |
| | Low oil press. | ○ | ○ | ○ | ○ | ○ |
| | Battery charge | ○ | ○ | ○ | ○ | ○ |
| | Over current shut off trip | ○ | ○ | ○ | ○ | ○ |
| Output terminal | 3-phase, 4-wire terminals | ○ | ○ | ○ | ○ | ○ |
| | Ground terminal | ○ | ○ | ○ | ○ | ○ |
| Others | Remote start/stop system | ▲ | ▲ | ▲ | ▲ | ▲ |
| | Automatic start/stop system | ▲ | ▲ | ▲ | ▲ | ▲ |
| | Terminal for AMF/ATS panels | ▲ | ▲ | ▲ | ▲ | ▲ |
| | Wheel | ▲ | ▲ | ▲ | ▲ | ▲ |

OPTIONAL PARTS

Automatic Mains Failure Panel

Against power cuts in the commercial supply, the YEG can be set to start automatically when the power goes off, and stop when it comes back on. You know that you can trust the New YEG to do the work that is needed, and stop when you don't want it on.



Terminal for AMF/ATS panels



Control panel:YEG450DTLS

Note : All data subject to alteration without notice.

YANMAR CO.,LTD.

1-32, Chayamachi, Kita-ku, Osaka 530-8311, Japan
Telephone:+81-6-6376-6411 Facsimile:+81-6-6377-1243
www.yanmar.co.jp

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The New YEG Series — Know the Dependability and Economy of World Class Power Generation

Quiet, safe, clean and ready to use, the New YEG series generator sets are the top-quality, straightforward answer to your power needs. You get the advantages of 4-pole generation in a newly enhanced, durable, cost-saving form

Quiet and Good to the Environment

The first thing you notice about the New YEG series is that there is so little noise. Yanmar's own CAE techniques have gauged the stiffness of materials just right and damped radiant noise. Those methods have also produced the perfect muffler volumes and optimum use of sound isolation materials. It all adds up to extra-low noise that is ideal for use in urban and residential areas.

The all-round people-friendliness is obvious in the exhaust data, too, thanks to the Yanmar TNV engine. It features even better flow mixing in the main chamber and the special mouth around the injector, plus efficient use of incoming air for cleaner burning and low emissions.

The New YEG series gives the air and fuel charging more fluid energy. The swirl continues during combustion for even better mixing and lower emissions.

The New YEG series is kind to the environment. Beside low noise and emissions, it contains no asbestos, mercury, polybrominated biphenyl, polybrominated diphenyl ether or cadmium. The use of safe materials was a core theme from the word go.



Compact, Powerful and Long-lasting

Yanmar has a long tradition of producing world-beating small, hard-working engines. Their combination here with superb 3-phase, 4-wire generators, tried and tested in many harsh working environments across Asia and the Middle East, brings substantially bigger generation capacity for the same package size. The sound proofed bonnet is lightweight and takes up very little space.

The TNV are Yanmar's state-of-the-art small industrial engines, now even more durable than ever due to enhanced block cooling, stiffer cranks and pistons, and finer journal and other tolerance. The gensets have protective devices against lubrication oil pressure drop, excessive water temperature rise and faulty battery charging. These are gensets that will continue to run and run.

Fuel Thrifty and Easy to Run, Simple to Maintain

Yanmar has developed a remarkable new shape for the air flow of the combustion chamber through a rigorous process of experimentation and analysis. It achieves great mixing of fuel with air that maximizes air use and minimizes fuel consumption. The combination of low fuel consumption engines with high-efficiency power generation makes these quality gensets remarkably cheap to run.

The convenience extends to every aspect of use and maintenance. You can put the light and compact New YEG almost anywhere without special foundation work, and all components are mounted on the single bed. Specially designed anti-vibration blocks establish even smoother running. The various filters and battery are located on the same side

as the instrument panel for straightforward daily inspection and handling. The big fuel tank is good for over 15~25 hours' continuous use at 70% load for.

YEG170,230 and 450, and good for 10~15 hours for YEG650 and 750.

In fact, all engine, generator and power functions are operated from a single location, and the control panel is big, high up and easy to see! The New YEG is a dream series for sureness and simplicity of use.

All the Safety of Yanmar

Full attention is given to the fine details of safety and dependability that count for so much. The output terminals are covered and placed well way from the instrument panel to prevent electric shocks etc. An earth terminal is included. All rotating parts are well covered, too, for accident-free operation. The use of damper coils in the brushless, AVR generation increases reliability still further by equalizing wave distortion.

You can trust Yanmar, too, because as a New YEG series owner you qualify for the extensive support, service and parts supply of Yanmar's worldwide network. That is the security of being a valued part of Yanmar's global family.



Silent type



Canopy type

SPECIFICATIONS

Model*1: Suffix-"C" for canopy, and "-S" for silent type
Model*2: Suffix-"C" for canopy, and "-B" for silent type

| Model*1 | Canopy type | | YEG170DTLC | | YEG230DTLC | | YEG450DTLC | | - | | - | | | |
|----------------------------|---------------------------------|-----------------------|--|----------------------|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------|--|
| | Silent type | | YEG170DTLS | | YEG230DTLS | | YEG450DTLS | | YEG650DTLS | | YEG750DTLS | | | |
| Frequency | | | 50Hz | 60Hz | 50Hz | 60Hz | 50Hz | 60Hz | 50Hz | 60Hz | 50Hz | 60Hz | | |
| Generator | Output | Stand-by power rating | kVA | 13.8 | 16.7 | 18.7 | 22.7 | 37.4 | 44.4 | 54.1 | 64.1 | 62.0 | 74.0 | |
| | | | kW | 11.1 | 13.4 | 14.9 | 18.1 | 29.9 | 35.5 | 43.3 | 51.3 | 49.6 | 59.2 | |
| | | Prime power rating | kVA | 12.6 | 15.2 | 17 | 20.6 | 33.4 | 39.6 | 49.2 | 58.3 | 56.2 | 67.2 | |
| | | kW | 10.1 | 12.1 | 13.6 | 16.5 | 26.7 | 31.7 | 39.3 | 46.6 | 45.0 | 53.8 | | |
| | Voltage | | V | 50Hz : 380,415 | | | | 60Hz : 380/220 | | | | | | |
| | Current (prime power) | | A | 19.1,17.5 | 23.1/39.9 | 25.8/23.7 | 31.3/54.1 | 50.7/46.5 | 60.2/104 | 74.8/68.4 | 88.6/153 | 85.4/78.2 | 102/176 | |
| | Voltage (single phase) | | V | 50Hz : 220,240 | | | | 60Hz : 220/127 | | | | | | |
| | Revolutions | | min ⁻¹ (rpm) | 1500 | 1800 | 1500 | 1800 | 1500 | 1800 | 1500 | 1800 | 1500 | 1800 | |
| | Phase and wire | | | 3-phase, 4-wire | | | | | | | | | | |
| | Power factor | | % | 80(delay) | | | | | | | | | | |
| Insulation | | | F (Stator,rotor) | | | | | | | | | | | |
| No. of poles | | | 4 | | | | | | | | | | | |
| Excitation | | | Brushless (with damper coil)AVR | | | | | | | | | | | |
| Engine | Type | | Vertical, 4-cycle, water-cooled diesel | | | | | | | | | | | |
| | Model*2 | Canopy type | 3TNV88-GGB1C | 4TNV88-GGB1C | 4TNV98-GGB1C | - | | - | | | | | | |
| | | Silent type | 3TNV88-GGB1B | 4TNV88-GGB1B | 4TNV98-GGB1B | 4TNV106-GGB1B | 4TNV106T-GGB1 | | | | | | | |
| | No. of cyls- bore x stroke | | mm | 3 - 88 X 90 | | 4 - 88 X 90 | | 4 - 98 X 110 | | 4 - 106 X 125 | | 4 - 106 X 125 | | |
| | Displacement | | lit. | 1.642 | | 2.190 | | 3.319 | | 4.412 | | 4.412 | | |
| | Continuous rating output | | kW | 12.2 | 14.9 | 16.5 | 19.9 | 30.7 | 36.4 | 44.9 | 53.3 | 51.4 | 61.5 | |
| | Rated output | | kW | 13.4 | 16.4 | 18.2 | 21.9 | 34.1 | 40.8 | 49.4 | 58.7 | 56.6 | 67.7 | |
| | Revolutions | | min ⁻¹ (rpm) | 1500/1800 | | | | | | | | | | |
| | Combustion system | | | Direct injection | | | | | | | | | | |
| | Cooling system | | | Radiator | | | | | | | | | | |
| | Aspiration | | | NA | | | | | | | | TC | | |
| | Lubricating system | | | Forced lubrication | | | | | | | | | | |
| | Starting system | | | Electric | | | | | | | | | | |
| | Fuel | | | Diesel fuel | | | | | | | | | | |
| | Lubricant | | | API service:CD grade | | | | | | | | | | |
| Cooling water | Engine | lit. | 2 | | 2.7 | | 4.2 | | 6 | | 6 | | | |
| | | lit. | 1.2 | | 2.2 | | 3.8 | | 3.8 | | 3.8 | | | |
| | Total | lit. | 6.7 | | 7.4 | | 10.5 | | 14 | | 14 | | | |
| | | Effective | lit. | 2.8 | | 3.4 | | 5.5 | | 9 | | 9 | | |
| Starting motor | | V-kW | 12-1.2 | | 12-1.4 | | 12-2.3 | | 12-3.0 | | 12-3.0 | | | |
| Charging dynamo | | V-A | 12V-15A | | 12V-15A | | 12V-20A | | 12V-60A | | 12V-60A | | | |
| Battery (5HR) | | V-AH | 12-60(75D31) | | 12-60(75D31) | | 12-64(95D31) | | 12-88(115E41) | | 12-88(115E41) | | | |
| Fuel consumption(70% load) | | lit./hr | 2.31 | 2.87 | 2.94 | 3.71 | 5.53 | 6.86 | 8.82 | 10.57 | 10.36 | 12.39 | | |
| UNIT (canopy type) | Noise level (4/4load, 7m) dB(A) | | 72 | 74 | 74 | 76 | 78 | 81 | - | - | - | - | | |
| | Fuel tank capacity | | lit. | 60 | | 70 | | 120 | | - | | - | | |
| | Dry weight | | kg | 440 | | 515 | | 715 | | - | | - | | |
| UNIT (silent type) | Noise level (4/4load, 7m) dB(A) | | 59 | 64 | 63 | 65 | 63 | 65 | 68.5 | 69.5 | 65 | 69.5 | | |
| | Fuel tank capacity | | lit. | 60 | | 70 | | 120 | | 130 | | 130 | | |
| | Dry weight | | kg | 575 | | 635 | | 890 | | 1210 | | 1230 | | |