

# DIESEL GENERATORS

**YEG series**  
 <4-pole, 3-phase generators>

# YANMAR®

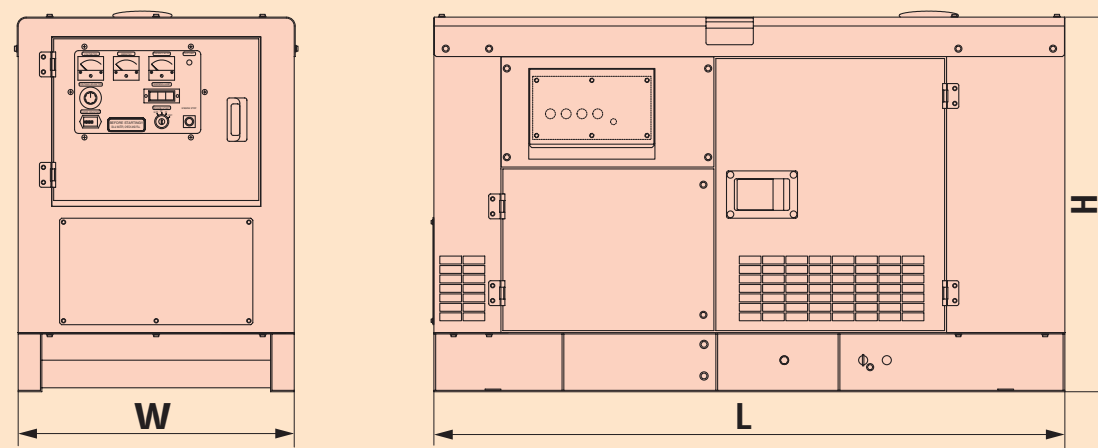
**New**  
 4-pole  
 Genset



Photograph may show optional equipment

## DIMENSIONS

Unit=mm(in.)



Model	YEG170DTLS	YEG230DTLS	YEG450DTLS	YEG650DTLS	YEG750DTLS
L	1600(62.99)	1830(72.05)	2050(80.71)	2350(92.52)	2350(92.52)
W	700(27.56)	700(27.56)	750(29.53)	920(36.22)	920(36.22)
H	950(37.40)	950(37.40)	1050(41.34)	1350(53.15)	1350(53.15)

## ACCESSORIES

○:Standard ▲:Option

Model		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	Single phase, Three-wire	○	○	○	○	○
	Ground terminal	○	○	○	○	○
Others	Remote start/stop system	▲	▲	▲	▲	▲
	Automatic start/stop system	▲	▲	▲	▲	▲
	Wheel	▲	▲	▲	▲	▲



Control panel:YEG450DTLS

### Automatic Mains Failure Panel (optional)

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.



Note: All data subject to alteration without notice.

## YANMAR CO.,LTD.

1-32, Chayamachi, Kita-ku, Osaka 530-8311, Japan  
 Telephone: 06-6376-6411 Facsimile: 06-6377-1243  
<http://www.yanmar.co.jp>

# 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 engines. The New YEG series satisfies EPA Tier 2. 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



Silent bonnet

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 12 hours' continuous use at 70% load for YEG170,230 and 450, and good for 10 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.*



Side view

## SPECIFICATIONS

Model			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	17.0	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	380	380/220	380	380/220	380	380/220	380	380/220	380	380/220	380	380/220				
	Current (prime power)	A	19.1	23.1/39.9	25.8	31.3/54.1	51	60.8/105	74.8	88.6/153	85.4	102.1/176.4	102.1/176.4					
	Voltage (single phase)	V	220	220/127	220	220/127	220	220/127	220	220/127	220	220/127	220	220/127				
	Revolutions	min <sup>-1</sup>	1500	1800	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, water-cooled, 4-stroke diesel																
	Model	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			3.318			4.412			4.412			
	Continuous rating output	kW	12.3	14.8	16.4	19.6	30.7	36.4	44.7	53	51.1	61.1	61.1					
	Rated output	kW	13.5	16.3	18.0	21.6	34.4	40.8	49.2	58.3	56.4	67.3	67.3					
	Revolutions	min <sup>-1</sup>	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		
		Radiator	lit.	1.2			2.2			3.8			3.8			3.8		
Lubricant qty	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	12.39						
UNIT	Fuel tank capacity	lit.	60			70			120			130			130			
	Dry weight	kg	575			635			890			1330			1370			

