# **MESTERBEKE** DIESEL GENERATOR



# Introducing the smallest, lightest, most convenient power package available.



#### The new one-cylinder diesel generator from Westerbeke.

The new 4.2 BCDT is powered by a onecylinder diesel engine and is designed for optimum performance where space is limited. Its compact design allows it to be installed in spaces most generators can't fit while providing enough power to run our 17,000 BTU Rotary Aire marine air conditioner.

The AC generator is enclosed in a watercooled stainless steel jacket. This allows the 4.2 BCDT greater sound deadening since larger openings in the sound shield are no longer required for air-cooling. The water-cooled jacket is oversized which eliminates blockages and provides a maximum flow of cooling water around the generator. The water jacket also cools the air going through the rotor of the generator, the engine combustion air and the unit mounted controls for the engine and regulation of the AC generator voltage. The diesel engine is also equipped with an oil cooler that insures proper engine lubrication and cooling in installations with high ambient air and cooling water temperatures.



4.2 BCDT Marine Diesel Generator

#### **Generator Dimensions**

Length24.3" (617.2 mm)Width13.6" (345.4 mm)Height21.4" (543.6 mm)Dry Weightw/S.G.: 183.0 lbs. (83.0 kilos)See reverse for more dimensional information.Photographs may show optional equipment.





4.2 BCDT Marine Diesel Generator

The standard plug-in remote control panel is designed to be user friendly and provides the operator with all the necessary information and controls to use the generator. The panel includes one-touch start/stop controls, automatic shutoffs with indicating lights for low oil pressure and high engine temperature, a battery charge indicator light and an AC load indicator.

The generator comes mounted in a sound enclosure constructed of reinforced fiberglass lined with high-density neoprene acoustic insulation for optimum sound reduction. A double mounting system engineered for maximum vibration isolation is incorporated in the sound enclosure.

Westerbeke products are supported by a worldwide network of over 65 master distributors and their dealers providing parts, service and technical support around the world.

#### Standard Features

Water cooled AC electrical generator Fiberglass sound enclosure Remote control panel 32.8ft (10 meter) plug-in cable LED electrical load indicator on panel One touch start/stop control system Low oil pressure shutdown with indicating light High temperature shutdown with indicating light Battery charge rate failure indicating light 12 Volt DC isolated ground electrical system Double anti-vibration mounting system Stainless steel water-cooled exhaust manifold & elbow Engine oil cooler Gear driven sea water pump with neoprene impeller Engine air cooler and intake silencer Fuel filters before and after fuel lift pump Lubricating oil change pump Battery charging, 4 amperes, 12 volt DC Decompression device Hand crank for emergency starting Engine hour meter "CE" Mark U.S. EPA certified Operators'/technical/parts manual

# Generator Design

DESIGN: Brushless, two pole, revolving field. VOLTAGE REGULATION: Standard +/- 7% no load to full load. FREQUENCY REGULATION: 3 Hz (5%) no load to full load. INSULATION: Class "H", as defined by NEMA MG1-1.66. TEMPERATURE RISE: Within NEMA MG1-22.40 when operating at full load.

COOLING: Water cooled.

**ELECTROMAGNETIC INTERFERENCE LEVEL:** Exceeds requirements for most marine radio-telephones and standard TVs.

North Contraction	Electrical Characteristics					Ratings		Engine	
Model	Volts	Amps	Hertz	Phase	Wire	Power Factor	KW	RPM	Start
4.2 BCDT-612	120	35.0	60	1	2	1.0	4.2	3600	Remote
3.5 BCDT-512	230	15.2	50	1	2	1.0	3.5	3000	Remote

WESTERBEKE

Engines & Generators

## **Specifications**

Number of cylinders	1 Cylinder vertical in-line	Lubrication system	Forced pump	
Туре	4 cycle	Cooling system	Water cooled engine	
Displacement	17.7 cu. in. (0.29 liter)	Full load fuel consumption	0.46 GPH (1.76 LPH) (approx.	
Bore and stroke	3.23" x 2.17" (82.0 mm x 55.0 mm)	Governor	Mechanical	
Compression ratio	20:1	Lubricant capacity	0.33 US Gal (1.25 liters)	
Rated rpm	60 Hz - 3600 rpm	Fuel transfer pump	Mechanical	
	50 Hz - 3000 rpm	Fuel supply piping	5/16" ID (7.9 mm)	
Maximum angle of operation	Not to exceed 25° in all directions	Fuel return piping	5/16" ID (7.9 mm)	
Exhaust elbow connection	1 1/2" ID (38.1 mm)	Starting motor	12 volt, solenoid actuated	
Raw water connection	1/2" ID (12.7 mm)	Battery charging	4-5 amps	
Dry weight w/sound guard	183.0 lbs. (83.0 kilos)	Cold cranking amps	76 amps at 70 degrees F	
Combustion system	Direct Injection	Electrical system	12 volts DC, isolated ground	

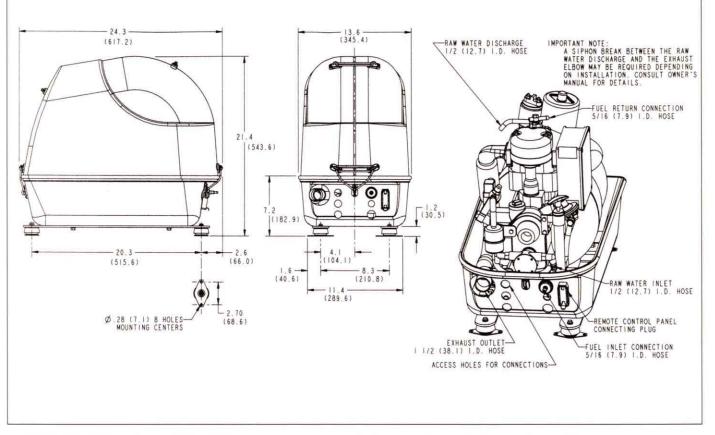
## **Construction – Engine Components**

Cylinder head	Cast Iron
Cylinder block	High resistant light alloy
Valves	Rotocap <sup>®</sup> exhaust valves
Fuel System	Bosch
Exhaust manifold	Stainless steel with water-cooled jacket

<b>Optional Equipment</b>	Distributor/Dealer
Anti-siphon valve	
Muffler	

### Dimensions

Inches (millimeters)



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