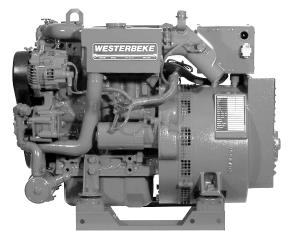
# WESTERBEKE DIESEL GENERATOR

## A truly "quiet breed" of reliable power...





10 BTDA Diesel Generator

#### Quiet and Compact

Designed by Westerbeke, the Company that pioneered the truly "quiet breed" of generators, the 3-cylinder, 4-cycle 10 BTDA is powerfully quiet. Running at 1800-rpm with a tuned air intake silencer and four point vibration mounts, the 10 BTDA runs smooth and quiet. This generator also has one of the smallest envelopes of any generator in its class.

#### **Powerful and Reliable**

The 10 BTDA is powered by a naturally aspirated, industrial, 1.3 liter engine specially engineered to operate in a hostile marine environment. Powerful but lightweight, it is economical to operate and designed to run at a slow 1800-rpm for longer life.

#### **Easy Operation and Maintenance**

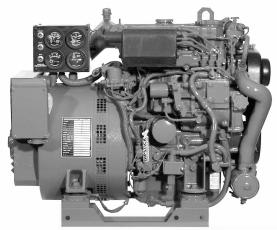
To minimize engine maintenance, the 10 BTDA is fresh water cooled and equipped with a simple control system rather than complex, troublesome, electronic components. Easy access to all servicing points and individually removable top and side panels of the optional sound enclosure allow easy installation and maintenance.

#### Full Torque, Power Take-Off Interface

A customer sourced, electric clutch and hydraulic pump can be mounted to the full torque, power takeoff interface for use with such items as bow or stern thrusters, compressors, winches and emergency "get-home" systems.

#### **Five Year Limited Warranty**

The 10 BTDA is backed by Westerbeke's 5-year limited warranty. The presence of Westerbeke in over 65 countries around the world provides customers with easy access to parts, service and technical support worldwide. Established in 1937, Westerbeke is committed to providing its customers with quality products and unequaled after sales support.



10 BTDA Diesel Generator

#### Standard Features

- Instrument panel and safety stop switch
- Remote start-stop plug-in connection
- Extra oil pressure switch for remote signal or control functions
- Safety shut-downs high coolant temperature, low oil pressure, high exhaust temperature
- A.C. circuit breaker (single phase)
- 50 amp alternator
- Power take-off interface
- Self-bleeding fuel system
- Fresh water cooling and coolant recovery tank
- 45 degree water injected exhaust elbow
- Gear driven raw water pump
- Tuned air intake silencer
- Vibration mounts fail safe rubber type
- Lube oil drain hose and drip trav
- Oil fill top and side
- Belt guard
- Operators' manual and parts list

### Optional Sound Guard SST



#### with Sound Guard SST **Generator Dimensions**

Length 31.5" (800 mm) 36.1" (916 mm) Width 19.1" (485 mm) 23.2" (589 mm) Height 24.0" 25.3" (610 mm) (643 mm) Weight 513 lbs. (233 kilos) 595 lbs. (270 kilos)







#### **Generator Design**

**DESIGN:** Brushless, four pole, revolving field, power takeoff. **VOLTAGE REGULATION:** Standard +/- 5% no load to full load. **FREQUENCY REGULATION:** 3 Hz (5%) no load to full load. **INSULATION:** Class "H", as defined by NEMA MG1-1.65.

**TEMPERATURE RISE:** Within NEMA MG1-22.40 definition when operating at full load.

**COOLING:** Cast centrifugal blower, direct connected.

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

	Electrical Characteristics					Ratings		Engine	
Model	Volts	Amps	Hertz	Phase	Wire	Power Factor	KW	RPM	Start
10 BTDA-614	120/240	83.3/41.6	60	1	4	1.0	10	1800	Remote
7.5 BTDA-514	230	32.6	50	1	4	1.0	7.5	1500	Remote
Three phase units, 50 & 60 Hz, are available in these ratings.						Generator field adjustable to 50 or 60 Hz.			

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Specifications	
Number of cylinders	3 Cylinder vertical in-line
Type	4 cycle
Displacement	80.43 cu. in. (1.318 liter)
Bore and stroke	3.07" x 3.62" (78 mm x 92 mm)
Compression ratio	22:1
Rated rpm	60 Hz - 1800 rpm 50 Hz - 1500 rpm
HP @ 1800/1500 rpm	18.9/16.5
Maximum angle of operation	15° Continuous, 30° Intermittent
Exhaust elbow connection	2.0" OD (50.8mm)
Raw water connection	1.0" OD (25.4mm)
Dry weight	513 lbs. (232.7 kilos)
Combustion system	Swirl type
Aspiration	Naturally aspirated
Lubrication system	Forced lubrication by trochoid pump
Cooling system	5 quarts (4.7 liters)
Starting aid	12 volt sheathed type glow plug
Full load fuel consumption	1.12 GPH (4.24 LPH) @ 1800 rpm 0.87 GPH (3.31 LPH) @ 1500 rpm
Fuel injection pump	Bosch type
Governor	Centrifugal type
Injectors	Throttle type
Fuel Filter	Primary
Lube oil filter	Full flow, spin-on element
Fuel supply and return piping	1/4" ID (6.35 mm) minimum
	3/8" ID (9.52 mm) maximum

Fuel transfer numn	10 Valt DC alactric type
Fuel transfer pump	12 Volt DC electric type
Lubricant capacity	4 quarts (3.8 liters)
Starting motor	12 volt, solenoid actuated
Battery charging alternator	50 ampere (12 Volts)
Cold cranking amps	240 amps @ 69 degrees F
Alternator/regulator	Automatic, solid state built-in
Electrical system	12 volts DC, negative ground

Construction	- Engine Components
Cylinder head	Cast Iron
Cylinder block	Cast Iron
Crankshaft	Forged crankshaft, four main bearings
Valves	Overhead, rotating type
Fuel System	Self-bleeding
Intake system	Tuned intake silencer for maximum noise reduction
Cooling system	Fresh water-cooled with shell and tube type heat exchanger
Exhaust manifold	Cast aluminum, fresh water-cooled

Optional Equipment
Remote start-stop panel
15' & 30' connectable panel ext. harness (up to 60'/18.3m)
Dual station engine instrument panel with senders
Ship-shore switch
Power takeoff adapter
Fuel/water Separator
Hydro-hush muffler and fittings
"A" on board spare parts kits; "B" extended cruising spare parts kit
Anti-siphon valve for overboard cooling discharge water
Technical manual
Sound Guard sound enclosure

