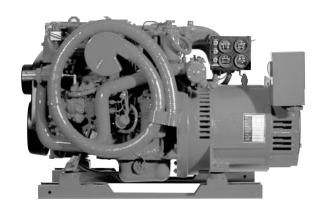
# WESTERBEKE DIESEL GENERATOR

## Proven power and reliability...





20 BEDA Diesel Generator

### **Quiet and Compact**

The 20 BEDA is a 4-cylinder smooth, quiet and compact diesel generator. A tuned air intake silencer provides increased power while diminishing sound. Designed and built using experience gained in supplying generators to the United States Navy and Coast Guard, the 20 BEDA has evolved to be not only compact, but lightweight as well.

### **Easy Operation and Maintenance**

To minimize engine maintenance, the 20 BEDA is fresh water cooled and equipped with a simple field tested control system. Easy access to all servicing points and individually removable top and side panels of the optional sound enclosure allow easy installation and maintenance.

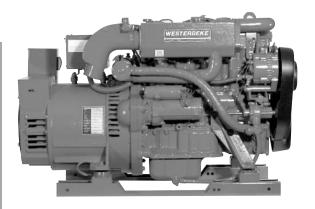
#### **Powerful and Reliable**

The 20 BEDA is powered by a naturally aspirated 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.

Full Torque Power Take-Off
An optional PTO, back-end mounted for full torque power take-off, is available. Installation is made simple with Westerbeke's optional sound guard. The lightweight, frameless enclosure is equipped with a removable cover to accommodate a PTO.

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

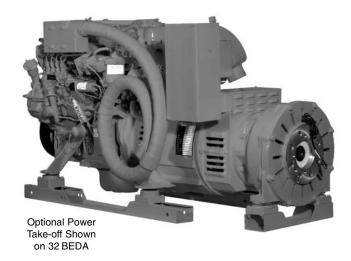
The 20 BEDA is backed by Westerbeke's 5-year limited warranty. The presence of Westerbeke in over 65 countries around the world provides customers with easy access to parts, service and technical support worldwide. Established in 1937, Westerbeke is committed to providing its customers with quality products and unequaled after sales support.



20 BEDA Diesel Generator

#### Standard Features

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









Generator Design

**DESIGN:** Brushless, four pole, revolving field, power takeoff. **VOLTAGE REGULATION:** Standard  $\pm$  2% 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 n	narine radio-telephones	and standard TVs.

	Electrical Characteristics				Ratings		Engine		
Model	Volts	Amps	Hertz	Phase	Wire	Power Factor	KW	RPM	Start
20 BEDA-614	120/240	166/83	60	1	4	1.0	20	1800	Remote
16 BEDA-514	230	69.6	50	1	4	1.0	16	1500	Remote

Three phase units, 50 & 60 Hertz, are available in these ratings. Contact your nearest Westerbeke Distributor for information.

<sup>\*</sup>Adjustable to 50 or 60 hertz

Specification			
Number of cylinders	4 Cylinder vertical in-line		
Туре	4 cycle		
Displacement	154 cu. in. (2.5 liter)		
Bore and stroke	3.50" x 4.00" (88.9 mm x 101.6 mm)		
Compression ratio	21:1		
Rated rpm	60 Hz - 1800 rpm		
	50 Hz - 1500 rpm		
HP @ 1800	33 HP		
Maximum angle of operation	Not to exceed 25° in all directions		
Exhaust elbow connection	3" OD (76.2mm)		
Sea water connection	1" OD (25.4 mm)		
Dry weight	943 lbs. (427.7 kilos)		
Combustion system	Swirl type		
Aspiration	Naturally aspirated		
Lubrication system	Forced lubrication by gear pump		
Cooling system	11.5 quarts (10.9 liters)		
Starting aid	12 volt sheathed type glow plug		
Full load fuel consumption	2.0 GPH (7.57 LPH) approx.		
Fuel injection pump	Bosch type, solenoid shutoff		
Governor	Electronic		
Injectors	Throttle type		
Fuel Filter	Full flow, spin-on element		
Lube oil filter	Full flow, spin-on element		
Lubricant capacity	15 U.S gal. (5.7 liters)		
Fuel transfer pump	12 volt electric type		
Fuel supply and return piping	1/4" ID (6.35 mm) minimum		
	3/8" ID (9.53 mm) maximum		
Starting motor	12 volt, solenoid actuated shift		
Alternator	50 amps		
Cold cranking amps	250-300 amps		
Electrical system	12 volts DC, negative ground		

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

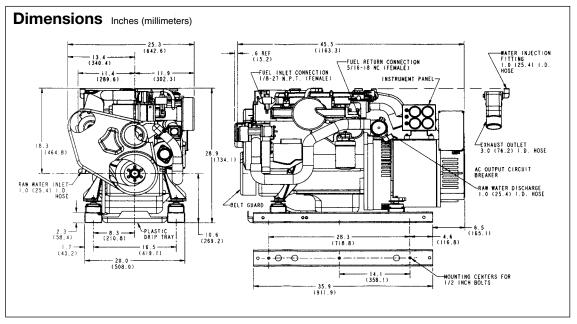
#### **Optional Equipment** Remote start-stop panel 15' & 30' connectable panel ext. harness (up to 60'/18.3m) Dual station engine instrument panel with senders Ship-shore switch Power takeoff with electric clutch Fuel/water separator Hydro-hush muffler and fittings "A" on board spare parts kits; "B"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



Enclosure "back-end" view shown

The optional Sound Guard SST enclosure features a high quality, stainless steel base and frame for optimum corrosion resistance and sturdiness. The enclosure is pre-connected for easy installation and the industry standard for ease of serviceability. The Sound Guard SST is designed to keep your genset at a whisper to enhance your boating experience.

> Length - 49.6" (1260 mm) Width - 27.2" (691 mm) Height - 30.8" (782 mm) Weight - 134 lbs. (60.8 kilos)



**Authorized Dealer**