## WESTERBEKE DIESEL ENGINE



# Long lasting 3000-rpm performance...





35E Three Marine Diesel Engine

## **Lightweight and Compact**

Designed by Westerbeke, pioneers in lightweight marine diesel engines, the 35E Three is a compact three-cylinder engine perfect for difficult installations. The 35E Three provides a power to weight ratio to be envied while requiring modest engine room space.

## Powerful, Reliable and Quiet

The 35E Three is rated at a low 3000-rpm for longer engine life. It is designed and built using experience gained in supplying over 1,100 whaleboat engines to the United States Navy. The 80.43 cubic inch displacement of the 35E Three delivers reliable power without sacrificing smooth and quiet operation. For enhanced quiet performance, this engine also has tuned air intake silencer.

### **Easy Operation and Maintenance**

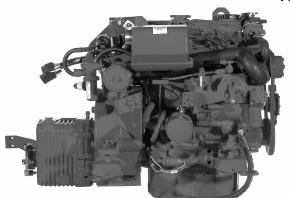
To minimize engine maintenance, the 35E Three is fresh water cooled and equipped with a simple control system. Easy access to all servicing points and a self-bleeding fuel system allow easy installation and routine maintenance.

#### **Full Engine Instrumentation Option**

Westerbeke offers an optional admiral panel. The admiral panel includes, tachometer, hour meter, voltmeter, water temperature and oil pressure gauge. Westerbeke also offers an optional captain panel with tachometer, hour meter, and warning lights.

### The Name You Can Trust

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.



35E Three Marine Diesel Engine

## **Standard Features**

- Fresh water cooling
- Engine pre-wired to plug-in connector
- Self-bleeding fuel system
- 12 volt 50 ampere alternator
- Flow control domestic hot water connections
- Coolant recovery tank
- Throttle, stop, and shift control brackets
- Low oil pressure and high water temperature alarms
- Gear driven raw water pump
- Short profile marine gear with 2.0:1 reduction
- Glow plug cold starting aid
- Four point adjustable flex mounts
- Lube oil drain hose
- Tuned air intake silencer with filter
- Operators' manual and parts list



**Optional Admiral Panel** 

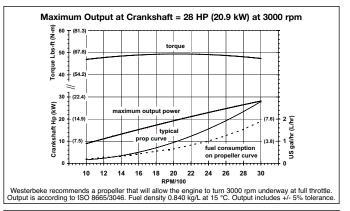
### **Admiral Panel Dimensions**

| Length | 9.75" | (247.7 mm) |
|--------|-------|------------|
| Depth  | 4.0"  | (101.6 mm) |
| Height | 6.0 " | (152.4 mm) |









#### Specifications

|   | Number of cylinders                    | 3 Cylinder vertical in-line                            |
|---|--|--|
|   | Cycles                                 | 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   |
|   | Maximum angle of installation          | Not to exceed 14°                                      |
|   | Maximum angle of operation             | Not to exceed 30° for 30 min.                          |
|   | Crankshaft, direction of rotation      | Counterclockwise as viewed<br>from flywheel end        |
|   | Propeller shaft, direction of rotation | Right hand – std. trans.                               |
|   | Dry weight                             | 386 lbs (175.1 kilos)                                  |
|   | Combustion system                      | Swirl type   |
|   | Aspiration                             | Naturally aspirated                                    |
|   | Lubrication system                     | Forced lubrication by trochoid                         |
|   | Cooling system                         | 5 quarts (4.73 liters)                                 |
|   | Starting aid                           | 12 volt sheathed type glow plug                        |
|   | Engine stop                            | Manual type  |
|   | Fuel injection pump                    | Bosch type   |
|   | Governor                               | Centrifugal type                                       |
|   | Injectors                              | Throttle type  |
|   | Fuel filter                            | Primary  |
|   | Lube oil filter                        | Full flow, spin-on element                             |
|   | Lubricant capacity                     | .98 U.S. gallons (3.7 liters)                          |
|   | Fuel transfer pump                     | Electric   |
|   | Fuel supply and return piping          | 1/4" ID (6.35 mm) minimum<br>3/8" ID (9.53 mm) maximum |
|   | Starting motor                         | 12 volt, solenoid actuated                             |
|   | Battery charging alternator            | 50 ampere (12 volts)                                   |
|   | Cold cranking amps                     | 237 amps   |
|   | 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 crar       | kshaft, four main bearings  |
| Valves Overhead v            | alves, rotating type        |
| Fuel System Self bleedir     | ng                          |
| Intake system Tuned intak    | e silencer                  |
| for maximu                   | m noise reduction           |
| Cooling system Fresh water   | -cooled with tube and       |
| shell type h                 | eat exchanger               |
| Exhaust manifold Cast alumin | um, fresh water-cooled with |
| built-in expa                | ansion tank                 |

## Standard Equipment

| Standard gear ratio2.0:1Mounting centers14.6", 16.0" or 18.5"Flexible mountsAdjustable fail safe<br>rubber typeFlow control domestic hot water connectionCoolant recovery tankBattery charging alternator50 ampStarting aideStarting aideControl bracketsFor all control attachmentsPrewired EngineGear-driven raw water pumpLube oil drain hoseTransmission oil coolerOil fillTop and service sideCircuit breaker protected DC electrical systemOperator's Manual and Parts List |  |                             |  |
|---|--|-----------------------------|--|
| Flexible mounts Adjustable fail safe rubber type   Flow control domestic hot water connection    Coolant recovery tank    Battery charging alternator 50 amp   Starting aide    Control brackets For all control attachments   Prewired Engine    Gear-driven raw water pump    Lube oil drain hose    Transmission oil cooler    Oil fill Top and service side   Circuit breaker protected DC electrical system  | Standard gear ratio                            | 2.0:1                       |  |
| rubber type   Flow control domestic hot water connection   Coolant recovery tank   Battery charging alternator 50 amp   Starting aide 50 amp   Control brackets For all control attachments   Prewired Engine 6ear-driven raw water pump   Lube oil drain hose Transmission oil cooler   Oil fill Top and service side   Circuit breaker protected DC electrical system   | Mounting centers                               | 14.6", 16.0" or 18.5"       |  |
| Coolant recovery tankBattery charging alternator50 ampStarting aide50 ampControl bracketsFor all control attachmentsPrewired EngineGear-driven raw water pumpLube oil drain hoseTransmission oil coolerOil fillTop and service sideCircuit breaker protected DC electrical system   | Flexible mounts                                |                             |  |
| Battery charging alternator 50 amp   Starting aide For all control attachments   Control brackets For all control attachments   Prewired Engine Gear-driven raw water pump   Lube oil drain hose Transmission oil cooler   Oil fill Top and service side   Circuit breaker protected DC electrical system   | Flow control domestic hot water connection     |                             |  |
| Starting aide<br>Control brackets For all control attachments<br>Prewired Engine<br>Gear-driven raw water pump<br>Lube oil drain hose<br>Transmission oil cooler<br>Oil fill Top and service side<br>Circuit breaker protected DC electrical system   | Coolant recovery tank                          |                             |  |
| Control brackets For all control attachments   Prewired Engine Gear-driven raw water pump   Lube oil drain hose Transmission oil cooler   Oil fill Top and service side   Circuit breaker protected DC electrical system  | Battery charging alternator                    | 50 amp                      |  |
| Prewired Engine<br>Gear-driven raw water pump<br>Lube oil drain hose<br>Transmission oil cooler<br>Oil fill Top and service side<br>Circuit breaker protected DC electrical system  | Starting aide                                  |                             |  |
| Gear-driven raw water pump<br>Lube oil drain hose<br>Transmission oil cooler<br>Oil fill Top and service side<br>Circuit breaker protected DC electrical system   | Control brackets                               | For all control attachments |  |
| Lube oil drain hose<br>Transmission oil cooler<br>Oil fill Top and service side<br>Circuit breaker protected DC electrical system   | Prewired Engine                                |                             |  |
| Transmission oil cooler<br>Oil fill Top and service side<br>Circuit breaker protected DC electrical system  | Gear-driven raw water pump                     |                             |  |
| Oil fill Top and service side<br>Circuit breaker protected DC electrical system   | Lube oil drain hose                            |                             |  |
| Circuit breaker protected DC electrical system  | Transmission oil cooler                        |                             |  |
|   | Oil fill                                       | Top and service side        |  |
| Operator's Manual and Parts List  | Circuit breaker protected DC electrical system |                             |  |
|   |  |                             |  |

## **Optional Equipment**

| Captain panel with alarm (tachometer with lights)                     |                           |  |
|---|---------------------------|--|
| Admiral panel with alarms (tachometer with gauges)                    |                           |  |
| Dual station senders  |                           |  |
| Other gear ratios   | Consult local Distributor |  |
| 72 or 100 amp alternator in place of standard                         |                           |  |
| Remote expansion tank   |                           |  |
| Fuel/water separator  |                           |  |
| Muffler and fittings  |                           |  |
| "A" on board spare parts kits   |                           |  |
| "B" extended cruising spare parts kits                                |                           |  |
| Anti-siphon valve for overboard cooling discharge water               |                           |  |
| Technical Manual  |                           |  |
| Exhaust connection (water injected 45° or 90°elbow)                   |                           |  |
| Propeller shaft couplings (rigid/flexible) - available standard sizes |                           |  |

