# Doosan 440-580 kVA

## 50 Hz Diesel Generator Set

### EA Power



Images are for illustration purpose only

## ENGINE

DOOSAN heavy duty diesel engine

4-cycle, water cooled, turbocharged, direct injection

24 Volt starter and charge alternator with battery, rack and cables

Replaceable air, fuel and oil filter

Industrial type radiator

Flexible fuel piping

Oil sump drain valve and extension pipe

Industrial/Residential type exhaust silencer.

Jacket Water Heater

Diesel gen-set maintenance and operating instructions and electrical circuit diagram

## ALTERNATOR

Brushless, single bearing,4-pole alternator coupled with flexible disc coupling

H type insulation class

IP 23 protection

Self exciting

Electronic AVR

## CONTROL PANEL

DeepSea mains sensing or remote start control module

Emergency stop push button

Output circuit breaker

Static battery charger

Ready for remote monitoring

## CANOPY

Modular type sound-proof canopy

Built from steel and epoxy, polyester powder painted

Lockable doors on both sides of canopy designed for easy access to essential replacement parts

Emergency stop push button

Control Panel viewing window

Bunded base fuel tank (Optional)

Forklift Pockets (Optional)

Power cable entry with a gland plate

## Standby Power

Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source, Overload is not allowed.
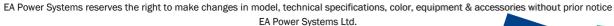
## Prime Power

The maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load. Average load should be 70%.The generator can be overloaded 10% for 1 hour per 12 hrs.

## Base Power

Continuous power rating is used in applications where supplying power is at a constant 100% load for an unlimited number of hours each year.

| | MODEL | | EAD440 | EAD510 | EAD580 |
|---|---|---|---|---|---|
| **OUTPUT** | Standby | kVA | 440 | 509 | 580 |
| | | kW | 352 | 407 | 464 |
| | Prime | kVA | 400 | 463 | 526 |
| | | kW | 320 | 370 | 420 |
| **ENGINE** | Engine | | DOOSAN | DOOSAN | DOOSAN |
| | Model | | P158LE | DP158LC | DP158LD |
| | Configuration | | V | V | V |
| | No. of Cylinders | | 8 | 8 | 8 |
| | Speed | rpm | 1500 | 1500 | 1500 |
| | Displacement | l | 14,6 | 14,6 | 14,6 |
| | Bore x Stroke | mm | 128 x 142 | 128 x 142 | 128 x 142 |
| | Compression Ratio | | 15:1 | 15:1 | 15:1 |
| | Aspiration | | Turbocharged | Turbocharged | Turbocharged |
| | Governor Type | | Electronic | Electronic | Electronic |
| | Cooling | | Water | Water | Water |
| | Coolant Capacity | l | 80 | 79 | 79 |
| | Lubrication Oil Capacity | l | 21 | 22 | 22 |
| | Fuel Consumption l/h | 100%Load | 82,7 | 99,6 | 115,1 |
| | | 75% Load | 60,3 | 72,9 | 83,4 |
| | | 50%Load | 40,6 | 48,9 | 55,1 |
| **ALTERNATOR** | Phase | | 3 | 3 | 3 |
| | Pole | | 4 | 4 | 4 |
| | No. of Leads | | 6-12 | 6-12 | 6-12 |
| | Excitation System | | AVR | AVR | AVR |
| | Insulation Class | | H | H | H |
| | IP Protection | | IP23 | IP23 | IP23 |
| | Power Factor | | 0,8 | 0,8 | 0,8 |
| | Frequency | Hz | 50 | 50 | 50 |
| | Voltage | V | 400 | 400 | 400 |
| **SIZE** | Canopy Set Dimensions (LxWxH) & Weight | mm | 4700 x 1650 x 2250 | 4700 x 1650 x 2250 | 5000 x 1650 x 2250 |
| | | kg | 3962 | 4420 | 4440 |
| | Open Set Dimensions (LxWxH) & Weight | mm | 3000 x 1650 x 1970 | 3100 x 1650 x 1970 | 3300 x 1650 x 1970 |
| | | kg | 3041 | 3500 | 3454 |
| | Fuel Tank Capacity | l | 780 | 780 | 780 |

## CONTROL MODULE

DSE 7 Series Control Module

State of the art, microprocessor controlled

4line, 64 x 132 pixel display LCD display

Automatic mains failure sensing

Front panel manual programming

User friendly setup and button layout

Remote start

Event logging, showing date and time

Stop/Reset, Manual

### Displays

Engine Speed (rpm)

Oil pressure

Fuel Level (%)

Coolant temperature

Running Hours

Battery voltage monitoring

Generator Voltage (LL. LN)

Generator Current (L1-L2-L3)

Generator Frequency (Hz)

Generator Load & Power Monitoring (kW. kVA. kVAr. pf)

Mains Voltage (LL. LN)

Mains Frequency

Generator Set Ready

Mains Ready

### Alarms

High coolant temperature

Low Fuel Level

Low oil pressure

Charge failure

Battery Low/High voltage

Fail to start

Fail to stop

High/Low Generator voltage

Generator Over/Under frequency

Generator Over/Under Speed