

# Soundproof Diesel Engine DCA 45ESI





# DESERT MACHINERY

## آليات الصحراء

### SPECIFICATIONS

|              |                  |  |  |
|--------------|------------------|--|--|
| <b>MODEL</b> | <b>DCA-45ESI</b> |  |  |
|--------------|------------------|--|--|

#### Alternator

|                    |  |                    |      |
|--------------------|--|--------------------|------|
| Frequency          | Hz                                       | 50                 | 60   |
| Rated Output (kVA) | Continuous                               | 37                 | 45   |
|                    | Standby                                  | 38.9               | 47.3 |
| Rated Voltage (V)  | ② Dual Voltage                           |                    |      |
|                    | 190-220V, 380-440V                       | 190-240V, 380-480V |      |
| Power Factor       | 0.8                                      |                    |      |
| No. of Phase       | 3 Phase, 4 wire                          |                    |      |
| Exciting system    | Brushless, Rotating Exciter (with A.V.R) |                    |      |

#### Diesel Engine

|                        |   |     |  |
|------------------------|---|-----|--|
| Manufacturer & Model   | Isuzu BB-4JG1T                          |     |  |
| Type                   | In lined, Direct Injected, Turbocharged |     |  |
| Bore x stroke          | 4-95.4x107                              |     |  |
| Displacement (L)       | 3.059                                   |     |  |
| Fuel                   | ASTM No. 2 Diesel Fuel or Equivalent    |     |  |
| Fuel Tank Capacity (L) | 100                                     |     |  |
| Fuel Consumption (L/H) | 6.3                                     | 7.8 |  |
| Battery                | 95D31Rx1                                |     |  |

#### Dimensions and Weight

|   |      |    |  |
|---|------|----|--|
| Length (mm)                                 | 1900 |    |  |
| Width (mm)                                  | 880  |    |  |
| Height (mm)                                 | 1250 |    |  |
| Dry Weight (kg)                             | 960  |    |  |
| <b>Sound Level</b>                          |      |    |  |
| 7m dB (A) 1500/1800rpm (min <sup>-1</sup> ) | 60   | 62 |  |

#### \*1 Rated Voltage Classification

|           |          |          |
|-----------|----------|----------|
| Frequency | 50Hz     | 60Hz     |
| ①         | 190-220V | 200-240V |
| ②         | 190-220V | 190-240V |
|           | 380-440V | 380-480V |
| ③         | 380-440V | 380-480V |

\*2 Fuel Consumption is based on operation at 75%

\*3 Sound level reflects high-speed operation and is calculated by averaging the measurements at four points, each 7 meters from the source

\*4 Depending on location and area, output voltage may differ from values listed in catalog

The specifications given herein are subject to change without notice.



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## PERFORMANCE FEATURES

### HIGH PERFORMANCE

The Denyo generating systems guarantees the following levels of performance:

**TEMPERATURE:** 100°C  
temperature rise at 40°C ambient (JEC2130)

**VOLTAGE REGULATION:** Within  
±0.5% (except DCA 400SP)

**FREQUENCY REGULATION:**  
Within 5.0% through no load to  
full-load.

### INSULATION RESISTANCE

-Higher than 3 Mega-ohms,  
measured between armature  
windings and earth, field windings  
and earth, field control circuit and  
earth.

- The innovative excitation  
system\* fitted on all models, in  
conjunction with the AVR and  
advanced brushless generator,  
provides fast voltage regulation in  
response to load variations,  
enabling use soon after start up.  
This system provides output  
stability during load variations.

- Synchronous brushless  
alternator for minimal wear.

-Designed to function in all  
climatic conditions.

-Will safely power the most  
sensitive loads, such as thyristors,  
invertors and computer systems,  
without the risk of damage to

these loads, thanks to the high  
level electrical characteristics of  
the generator's output.

### ECONOMICAL PERFORMANCE

-Easy starting and quick response.

-Utilizing highly reliable diesel  
engines with low fuel  
consumption, manufactured by  
Japan's leading engine  
manufacturers.

-Uninterrupted generator  
operation for up to 12 hours  
under 75% load.

### UNSURPASSED FLEXIBILITY

To meet today's varying needs  
successfully, your equipment  
must be as flexible as you are.  
The Denyo DCA Series generator  
range provides you with the  
flexibility to get the job done  
simply and economically, without  
any delays.

### TRUE HEAVY-DUTY PERFORMANCE

For a particular job, you may  
need that extra power from  
generator. With the DCA Series,  
the standby power rating (110%  
or 105% load except DCA-  
610SPM) can be used  
continuously for 1 hour in every 8  
hours of continuous operation.  
This extra power performance of  
Denyo generators means you can  
get the job done, without the  
inconvenience of using another  
generator.

### PARALLEL OPERATION FEATURE

time to time, at a construction  
site, mine site or in other

situations, large temporary power  
supply is required for a particular  
job. To meet this requirement  
Denyo's DCA Series generators  
incorporate a built-in parallel  
operation drive system, allowing  
plant on-site, without the need to  
procure any other equipment.

### DUAL VOLTAGE

For companies that operate  
internationally or have motors  
that require power at different  
voltages, a different generator is  
usually required for each voltage  
setting. However, the DCA Series  
generators are equipped with a  
dual voltage system, so one  
generator can be used to power  
motors with different voltage  
settings. An extremely convenient  
feature.

### ALL MODELS CAN RUN AT 50Hz/60Hz

Simply adjust the engine speed  
on the control panel to use a DCA  
Series generator at either 50Hz or  
60Hz.

### EXTREMELY QUIET OPERATION

In urban areas and at the  
worksite, there is an ever  
increasing demand for reduced  
noise pollution. In response to  
these concerns, Denyo has  
pioneered and a soundproof and  
super soundproof range of  
generators. The DCA Series  
generators are extremely quiet  
when operating at full load, even  
though all soundproof models are  
compactly designed. Check the  
specifications for the sound level  
of each model