

**EASY SOUNDPROOF DIESEL ENGINE DRIVEN GENERATING SET**

# **DCA-500PP**

**High Quality coexists with Reasonable Price**



**High-performance Brushless Power Generator Installed**

This power generator has lower waveform distortion and higher reverse tolerance against rectifier loads realized by improving damper windings. Less instantaneous voltage drop and shorter voltage recovery time lowers the impact on other electric devices in sequential operations.



**An electronic governor control system for realizing lower emissions**



**Voltage Regulation within  $\pm 0.5\%$**



**Frequency Regulation within 5.0% through no-load to full load**



**Denyo Co., Ltd.**

## High Performance

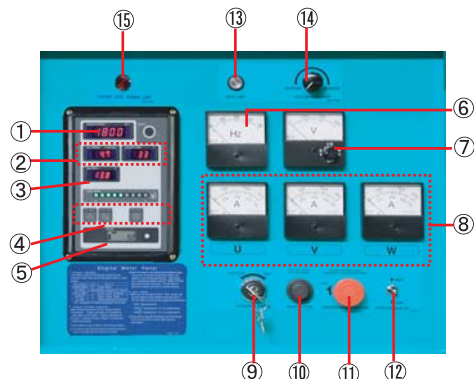
- The innovative excitation system\* fitted on DCA-500PP in conjunction with the AVR and advanced brushless generator, provides fast voltage regulation in response to load variations, enabling use soon after start up. This system provides output stability during load variations.

\*U.S.Patent No.4268788

- 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 highlevel electrical characteristics of the generator's output.



## Control panel



DCA-500PP is fully appointed advanced control panel. It offers high quality basic functions, allowing easy and reliable operation of your generating set.

- |   |  |                              |
|---|--|------------------------------|
| ① Engine speed indicator                                      | ⑤ Integrating time meter               | ⑪ Emergency Stop Button      |
| ② Oil pressure, water temp. indicator                         | ⑥ Frequency meter                      | ⑫ Speed Regulator            |
| ③ Battery charging voltage                                    | ⑦ Volt meter (with change-over switch) | ⑬ Pilot Lamp                 |
| ④ Warning lamp<br>• OIL PRESS<br>• WATER TEMP<br>• OVER SPEED | ⑧ AC Ammeter (U, V, W)                 | ⑭ Voltage Regulator          |
|   | ⑨ Operation Switch                     | ⑮ Coolant level warning lamp |
|   | ⑩ Starter Button                       |                              |

## Safety Device

- A circuit breaker is provided to protect the generator from shorting of the load circuit or an overload.
- An emergency stop device is provided to automatically detect an engine malfunction and shutdown the unit, as well as a warning lamp.

## Excellent access for maintenance

- All daily maintenance requirements can be performed from one side of the machine. The large doors gives you full access to the engine.
- Large fuel gauge is fitted for simple viewing.
- For major engine overhauls, the bonnet can be simply unbolted, which allows full access to the engine.



## Specifications

Model		DCA-500PP	
AC Generator			
Frequency	Hz	50	60
Output Rating	Continuous	450	500
	kVA(kW) Standby	495	550
No. of Phases	3-Phase,4-Wire		
No. of Poles	4		
Rated Voltage(50/60Hz)	V	380-440/380-480* <sup>1</sup>	
Power Factor(lagging)	0.8		
Voltage Regulation	%	Within ± 0.5	
Excitation	Brushless ,rotating exciter with AVR		
Insulation	Class F		
Ambient Conditions			
The generating set should meet the following conditions:			
① Ambient temperature : -5℃ or higher, 50℃* <sup>2</sup> or lower			
② Altitude : Up to 1000m above sea level			
③ Relative humidity : 85% or lower			
* 1 190-220/190-240V type is available as option.			
* 2 If ambient temperature is higher than 45 ℃, Power output derate will occur.			
* 3 Sound level reflects high-speed no-load operation and is calculated by averaging the measurements at four points, each 7 meters from the source.			

Diesel Engine			
Model		Perkins 2506A	
Type		Vertical in-line,Direct Injected, Turbocharged, Aftercooled	
Rated Speed	min <sup>-1</sup>	1500/1800	
Rated Output	kW(PS)	396(538)/435(591)	
No. of Cylinders-Bore ×Stroke	mm	6-137×171	
Displacement	L	15.2	
Fuel	Diesel Fuel(ASTM No.2 or equivalent)		
Fuel Tank Capacity	L	490	
Lube Oil Capacity	L	58	
Coolant Capacity	L	62	
Battery × Quantity	12V-160Ah × 2		
Dimensions and Weight			
Dimensions	Length	mm	4950
	Width	mm	1500
	Height	mm	2100
Dry Weight		kg	5850
Sound Level			
7m dB(A) 1500/1800 rpm(min <sup>-1</sup> )			72/76 <sup>*3</sup>

\* 1 190-220/190-240V type is available as option.

\* 2 If ambient temperature is higher than  $45^{\circ}\text{C}$ , Power output derate will occur.

\* 3 Sound level reflects high-speed no-load operation and is calculated by averaging the measurements at four points, each 7 meters from the source.

- In line with our policy of continuous development, we reserve the right to change specification without notice.
- Always follow the Operation Manual when storing, transporting, and operating the machine.

Direct inquiries to the nearest Denyo distributor or to Denyo Co., Ltd.

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