

ULTRA SOUNDPROOF DIESEL GENERATING SET



DCA-100USI3



53dB(A)
7m-1500rpm



We are particular about low noise and pursue the silence of DCA-US series.

DCA-100USI3 employs the low noise engine, additional silencer and specially-designed canopy to achieve extreme silence.



Quality and Endurance for commercial use

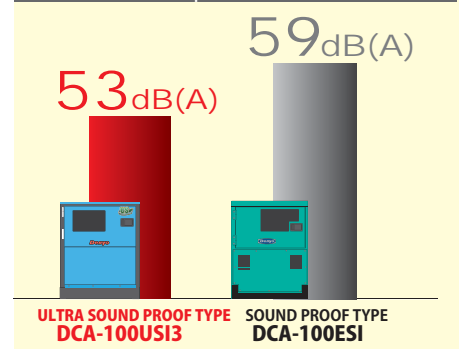
This high quality generator for commercial uses stronger windings, compared to other products. Due to the low noise level it qualifies especially for loads from inverters or electric devices like computers etc. Excellent starting performance due to the low transient reactance and the unique excitation system.



"DCA-100USI3" is compliant with Stage III of Japanese exhaust gas regulations by the MLIT Japan.

In line with Japan's exhaust gas reduction regulations, DCA-100USI3 is equipped with super-high-tech clean engine systems, including common-rail type fuel injectors, which inject fuel at the optimum pressure for the load by raising the fuel pressure, as well as Cooled Exhaust Gas Recirculation (EGR)², which is a technology that reduces NOx generation by returning some of the exhaust gas to the air supply line. A cooler is also installed in the exhaust returning line to cool down exhaust gases.

Noise comparison (7m/no load)

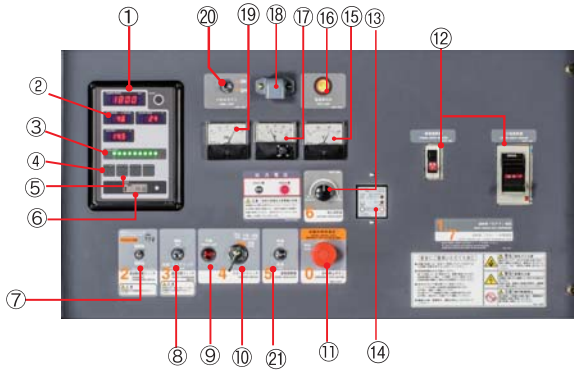


High Performance

- The innovative excitation system* fitted on DCA-100USI3 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.



FULLY APPOINTED CONTROL PANELS FOR EASE OF USE AND MONITORING GENERATOR PERFORMANCE.

- | | |
|--|------------------------------------|
| ① Indicator (Engine Speed) | ⑫ Circuit Breaker(1-Phase,3-Phase) |
| ② Indicator (Water Temp., Oil Pressure, Battery charging voltage.) | ⑬ Voltage Regulator |
| ③ Fuel Level Indicator | ⑭ Earth Leakage Relay (*Option) |
| ④ Warning Lamp (Oil Pressure) | ⑮ Voltmeter |
| ⑤ Warning Lamp (Water Temperature) | ⑯ Pilot Lamp |
| ⑥ Hour Meter | ⑰ AC Ammeter |
| ⑦ Frequency Change Over Switch | ⑱ Panel Light |
| ⑧ Speed Change Over Switch | ⑲ Frequency Meter |
| ⑨ Preheat Lamp | ⑳ Panel Light Switch |
| ⑩ Starter Switch | ㉑ Speed Regulator |
| ⑪ Emergency Stop Button | |

Consideration for Safety

- Provision of Various Protective Devices and Warning Lamps
- 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 shut down the unit, as well as a warning lamp.
- Emergency stop button.

SPECIFICATION TABLE

MODEL		DCA-100USI3	
AC Generator		UNIT	
Frequency	Hz	50	60
Output Rating	Continuous	80	100
	Standby	88	110
No. of Phases	3-Phase, 4-Wire		
Rated Voltage	V	190-220V*1 (380-440V)	200-240V (380-480V)
Power Factor	0.8(Lagging)		
Voltage Regulation	%	Within ±0.5	
Excitation	Brushless ,rotating exciter(With A.V.R)		
Insulation	Class F		
Engine			
Model	Isuzu BI-4HK1X		
Type	Direct Injected, Turbocharged, cooled EGR		
Output Rating	Ps/rpm	131.3/1500	156.2/1800
	kW/min ⁻¹	96.5/1500	114.8/1800
No. of Cylinders-Bore xStroke	4-115x125		
Piston Displacement	5.193		
Fuel	ASTM No. 2 Diesel Fuel or Equivalent		
Fuel Consumption	L/h ²	13.6	17.4
Lube Oil Sump Capacity	23.0		
Coolant Capacity	27.0		
Battery xQuantity	170F51 x 1		
Fuel Tank Capacity	L	225	
		Dimensions	
		Length mm	2900
		Width mm	1240
		Height mm	1500
		Dry Weight kg	2040
		Sound Power Level	
		7m dB(A) ^{*3}	53 57

*1 The rated output downs 10% when you set up frequency and voltage at 50Hz/220V.

*2 Fuel consumption is based on operation at 75% load.

*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.

The specifications given herein are subject to change without notice.

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