

**DIESEL GENERATING SETS
SINGLE PHASE TYPE
(5.0-40kVA)**

Power Source Technology for the Future

Denyo[®]

DCA-LSX/ESX series



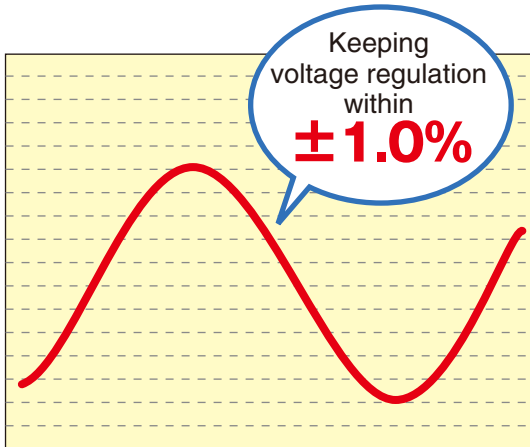
DCA-6LSX



DCA-40ESX

Denyo Co., Ltd.

Denyo's New Generator S Minimal Voltage Fluctuat and Wave Distortion.



Voltage Regulation Within $\pm 1.0\%$

Denyo's original high-performance Automatic Voltage Regulator (AVR) maintains superb stability output by keeping voltage regulation within $\pm 1.0\%$.



DCA-6LSX



DCA-10LSX

In-Built Convenience

A standard "Emergency Stop Device" will shut down the generator automatically when a malfunction is detected. In addition, an In-Built Breaker" protects the generator from overloads (the warning light for models less or equal DCA-15LSX will turn on when Low Oil Pressure, High Water Temperature and Insufficient charging are detected. The safety-monitoring-indicator used in models over DCA-18ESX will turn on when Low Fuel Level, Dust, Low Oil Pressure, High Water Temperature, and other Foreign Particles inside the unit is detected.)

And optional "Earth Leakage Relay" protects the user from electrocuted (models for DCA-6LSX, 15LSX, 18ESX).



DCA-18ESX



DCA-30ESX

Quiet Operation

Original sound-proofing technology reduces the noise level to under 65dB(7m). These generators are classified as super Low Noise Construction Machine according to the standards issued by the Japanese Ministry of Construction.

Minimal Waveform Distortion

Improved design of damper coil and generator keeps waveform distortion to negligible levels, even SCR and compact X-ray unit loads and as a back-up power supply for computer systems.

Low-Cost Operation

The design of 4-pole generator enables the use of economical low engine speeds within the range of 1,500 to 1,800 rpm. The efficient generator with 4-cycle diesel engine further reduces fuel consumptions.

ets Assure ion Rate



DCA-15LSX



DCA-40ESX

Breather System Engines

As the Breather System engine does not exhaust blow-by gas, inside of the generator is always clean.

Automatic Fuel Bleeding Devices

(Used in DCA-6LSX, 10LSX, 15LSX, 18ESX)

Just turn the starter switch on, it releases air from the fuel automatically. It will neither taint inside of the machines nor the operator's hands.

Option

Trailer/Caster (two wheel or four wheel type)

Trailers can be fitted to the generators to facilitate on-site movement.

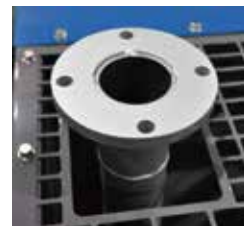


Two Wheel Type Trailer



Four Wheel Type Trailer

Mounting of muffler flange



Anti-Damage from Salt Water Specifications

This specification is designed for the unit which is used on the coast or off shore, and includes treatment to prevent insulation resistance from dropping and corrosion resistant treatment of the parts.



Keyed fuel tank cap



Keyed rear door



Exhaust gas tale pipe

*Some options may not be available depend on the models. Please confirm the details with a Denyo's sales person.

Specifications

Item		Model	Sound-Proof Type												
			DCA-6LSX		DCA-10LSX		DCA-15LSX		DCA-18ESX		DCA-30ESX		DCA-40ESX		
Generator	Frequency	Hz	50	60	50	60	50	60	50	60	50	60	50	60	
	Output	kVA	5.0	6.0	8.0	10	13	15	14	18	24	30	33	40	
	Voltage	V	50Hz:100,200 60Hz:100,110,120,200,220,240						50Hz:100/200 ~ 110/220 60Hz:100/200 ~ 120/240						
	Rotating Speed	rpm	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	
	Power Factor		1.0												
	No. of Phase		Single Phase (2-wire type) *1						Single Phase (3-wire type)						
	Rating		Continuous												
	Excitation		Brushless (with AVR)												
	No. of Poles		4												
Diesel Engine	Model		KUBOTA D905-K3A		KUBOTA D1403-K3A		KUBOTA V2203-K3A		ISUZU AA-4LE2		ISUZU BB-4JG1T		ISUZU BB-4BG1T		
	Type		Inlined,Swirl Chambered						Inlined,Direct Injected		Inlined,Direct Injected Turbocharged				
	No. of Cylinders Bore,Stroke	mm	3-72×73.6		3-80×92.4		4-87×92.4		4-85×96		4-95.4×107		4-105×125		
	Piston Displacement	L	0.898		1.393		2.197		2.179		3.059		4.329		
	Rated Output	PS/rpm kW/min ⁻¹	8.7/1500	10.5/1800	13.9/1500	16.9/1800	23.0/1500	27.1/1800	26/1500	32/1800	46.5/1500	56/1800	65.1/1500	77.6/1800	
			6.4/1500	7.7/1800	10.2/1500	12.4/1800	17.0/1500	19.9/1800	19.1/1500	23.5/1800	34.2/1500	41.2/1800	47.9/1500	57.1/1800	
	Battery × Quantity		55B24L×1			80D26R×1						95D31R×1		120E41R×1	
	Fuel		ASTM No.2 Diesel Fuel, or Equivalent												
	Fuel Tank Capacity	L	36		62		62		70		100		125		
Fuel Consumption*2	L/h	1.5	1.8	2.3	2.9	3.4	3.9	3.0	3.9	5.6	7.3	7.3	9.1		
Dimensions,Weight,etc.	Length:L	mm	1230		1390		1540		1540		1900		2200		
	Width:W	mm	650		650		650		680		880		880		
	Height:H	mm	760		900		900		900		1250		1250		
	Dry Weight	kg	379		503		580		564		1040		1180		
	Sound Level	7mdB(A) ^{*3}	54	57	58	61	61	64	59	60	60	62	61	64	

*1 3-wire type is available as option. *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.



ISO 9001:2015 Certified
ISO 14001:2015



Colors of products would be different from printed ones of catalogues.
The Specifications given herein are subject to change without notice.

Denyo® The Denyo trademark is widely recognized as a brand, and is a registered trademark in 93 countries and 8 regions.

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

Denyo Co.,Ltd.

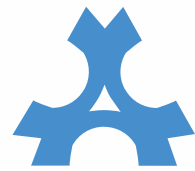
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Denyo

World of Opportunities



User-Friendly Design

All Denyo generators are compact and lightweight for fast and convenient deployment. Strong solid steel canopy is built to allow generators to be double stacked, saving valuable space.

Noise suppression is achieved using highly effective sound insulating materials and special vibration isolators to minimise vibrations during operation.



ADVANCED BRUSH-LESS GENERATOR

Designed for long-term use.

DESIGN: The patented brush-less generator is a rotating-field, self-ventilated, single-bearing, 4-pole synchronous alternator, complete with damper windings for minimal voltage deviations and to minimise effect on magnetic/radio waves.

EXCITER: Brush-less rotating exciter designed for maximum motor starting.

ROTOR: Dynamically balanced and aligned to the engine.

COOLING: Direct-drive centrifugal ventilating fan to prevent generator damage due to high temperature.



HIGH PERFORMANCE

Stable and durable even in heavy motor load fluctuations. Provides optimum support on work sites.

TEMPERATURE RISE: 100°C temperature rise at 40°C ambient (JEC 114)

INSULATION: Class F & H

VOLTAGE REGULATION: Within $\pm 1.5\%$

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

VOLTAGE WAVEFORM: Deviation Factor of open-circuit terminal voltage does not exceed 0.06 Telephone Influence Factor (TIF) is less than 50

ELECTROMAGNETIC INTERFERENCE LEVEL: Attenuated to meet most commercial requirements

INSULATION RESISTANCE: Higher than 3 mega-ohms, measured between armature windings and earth, field control circuit and earth



ECONOMICAL PERFORMANCE

Significantly reduces running costs and downtime.

Diesel engine designed to support low fuel consumption. Uninterrupted generator operation for up to 12 hours under full load.

Large door for access to engine and external drain plugs for oil, fuel and water gives ease in performing routine maintenance. For major engine overhauls, the canopy (bonnet) can be simply unbolted.



AUTO-PROTECTION

Protects the user against electric shock and the generator against accidents.

Warning lamp and an in-built emergency system to detect faults such as low oil pressure, high water temperature and charging failure. Emergency shut-down in the event of AC overload through circuit breaker.



UNSURPASSED FLEXIBILITY

Easy to operate by anyone, anytime and anywhere.

TRUE HEAVY-DUTY PERFORMANCE

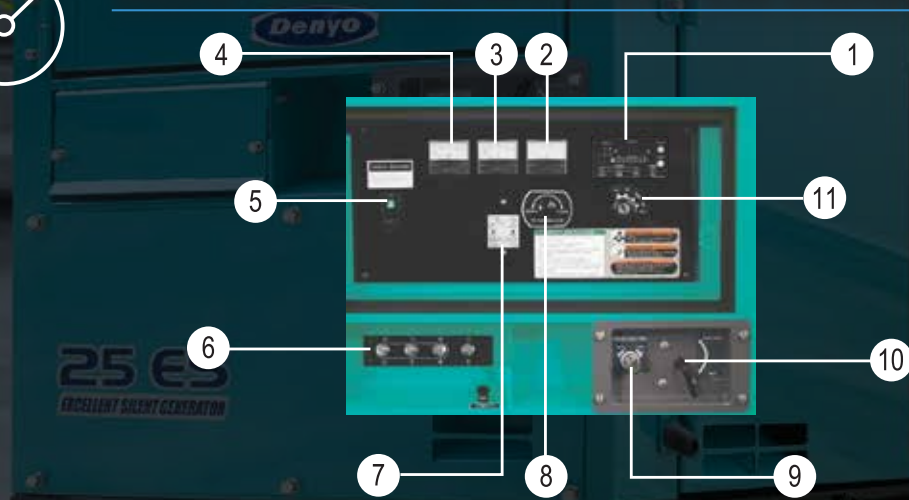
Capable of supplying power for a wide range of applications and in harsh, demanding environment.

50Hz/60Hz OPERATION

Can be operated at either 50Hz or 60Hz by simply adjusting the engine speed using the throttle control knob.



MONITORING GENERATOR PERFORMANCE



DCA-13ESK-DA

- ① Engine Monitor (Fuel Level Indicator, Hour Meter, Warning Lamp, Preheat Lamp)
- ② AC Voltmeter ③ AC Ammeter ④ Frequency Meter ⑤ Circuit Breaker
- ⑥ Output Terminal ⑦ Earth Leakage Relay (Option) ⑧ Voltage Regulator
- ⑨ Frequency Adjust Screw ⑩ Throttle Lever ⑪ Starter Switch

SPECIFICATION TABLE

MODEL	SINGLE PHASE TYPE						THREE PHASE TYPE					
	DCA-10ESX-DA	DCA-18ESX-DA	DCA-25SPX-DA		DCA-13ESK-DA	DCA-15ESK-DA	DCA-25ESK-DA	DCA-35SPK-DA				

■ ALTERNATOR

Frequency (Hz)	50	60	50	60	50	60	50	60	50	60	50	60	50	60	
Output Rating (KVA)	Continuous	8	10	14	18	20	25	10.5	13	12.5	15	20	25	30	35
	Standby	8.8	10.8	15	19	22	27.5	11.5	14	13.5	16.5	22	27.5	31.5	36.8
No. of Phases	Single-Phase, 2 – Wire						3 – Phase, 4 – Wire								
Rated Voltage (V)	50Hz: 200/220 60Hz: 200/240						50Hz: 190~220 or 380~440 60Hz: 190~240 or 380~480								
Power Factor	1.0						0.8								
Voltage Regulation (%)	Within ± 1.0						Within ± 1.5								
Excitation	Brushless, Rotating Exciter (whit A.V.R.)														
Insulation	Class H				Class F		Class H				Class F				

■ ENGINE

Make & Model	Kubota D1403-KA	Kubota V2203-KB		Kubota V3300-EB		Kubota D1403-KA	Kubota D1703-KB		Kubota V2203-KB		Kubota V3300-EB				
Type	Inlined, Swirl Chamber Type														
Output Rating	PS/rpm ⁻¹	13.9/1500	16.9/1800	25.0/1500	32.2/1800	38.5/1500	44.1/1800	13.9/1500	16.9/1800	16.9/1500	20.0/1800	25.0/1500	32.2/1800	38.5/1500	44.1/1800
	KW/min ⁻¹	10.2/1500	12.4/1800	18.4/1500	23.7/1800	28.3/1500	32.4/1800	10.2/1500	12.4/1800	12.4/1500	14.7/1800	18.4/1500	23.7/1800	28.3/1500	32.4/1800
No. of Cylinders-Bore X Stroke (mm)	3 – 80 X 92.4		4 – 87 X 92.4		4 – 98 X 110		3 – 80 X 92.4		3 – 87 X 92.4		4 – 87 X 92.4		4 – 98 X 110		
Piston Displacement (L)	1.393		2.197		3.318		1.393		1.647		2.197		3.318		
Fuel	ASTM No. 2 Diesel Fuel or Equivalent														
Fuel Consumption (L/h)	2.3	2.9	3.6	4.6	5.1	6.3	2.4	2.9	2.8	3.4	3.9	4.9	5.8	6.9	
Lube Oil Sump Capacity (L)	5.6		7.6		13.2		5.6		7.6		13.2				
Coolant Capacity (L)	6.4		7.9		9.0		6.4		7.9		10.5				
Battery Capacity (V-Ah)	12 – 60 X 1pc				12 – 95 X 1pc		12 – 60 X 1pc				12 – 95 X 1pc				
Fuel Tank Capacity (L)	62				82		62				82				

■ UNIT

Dimensions(mm)	Length	1390	1540	1900	1390	1390	1540	1900
	Width	650	650	860	650	650	650	860
	Height	900	900	990	900	900	900	990
Dry Weight	kg	503	591	890	503	516	591	890

■ SOUND LEVEL

7m/dB (A) 1500/1800rpm (min ⁻¹)	60	62	61	65	60	63	59	61	60	63	61	65	60	63
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- Continuous output rating applies to operation under standard conditions as per JIS B8014.
- Standby output rating applies to intermittent or emergency operation for approximately 1 hour as per JIS B8014.
- Fuel consumption is based on operation at 75% load.
- Sound level reflects high-speed no-load and is calculated by averaging the measurement at four points, each 7 metres from the source.
- Colour of products may differ from printed catalogues.
- Specifications given are subject to change without notice.

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