

#### Applicable Standards

All SD series generators are designed and manufactured according to the general global standard [ Example: JEM-1354, KSC-4001, MIL-STD-705B, VDE-0530, NEMA MG1-22, IEC 34, CSA C22 2-100, AS1359 etc. ]

#### Standard Conditions for use

- The ambient temperature: 5 °C - 40 °C
- The use altitude: Less than 1,000 m sea level

#### Note:

In case of over 40°C of the ambient temperature, the output reduces 4% at + 5°C.

#### General Specification

- Phase : 3 phase 4 wires
- Voltage : 380(190)V, 400(200)V, 416(208)V, 440(220)V, 460(230)V, 480(240)V  
[ Other voltages are available if required. ]
- Frequency : 60Hz, 50Hz
- Number of poles : 4P [ Low noise type ]
- Power factor : 0.8 [ lag ]
- Insulation type : H
- Protection type : IP23

#### Performance

- Voltage Fluctuation :  $\pm 1\%$   
In case of balanced-load, 100 % of full load, power factor 0.8, the velocity fluctuation -2% - +5%, the output voltage change can be maintained within 1 %.
- Transient Voltage Change : 15% ~ 20%  
The output voltage declined 15% - 20 % by applying 100 % of full load on power factor 0.8, and the declining output voltage recovers in 3 % of the rated voltage value within 0.2 - 0.3 seconds.
- Manual Voltage Adjusting :  $\pm 5\%$  [ The voltage can be controlled using the trimmer of AVR ]
- Wave Form : Less than 5 % [ THF ]
- Radio Interference : A degree as much as the level G based on the general VDE-0875 standard.
- Single Phase Operation : Capacity for the continuous-running is approx. 10 % of 3-phase load.
- Engine Starter : The starter capacity of the engine is more than 1HP/1kVA.



#### Caution about the safety

To use a machine safely, always read an instruction manual well before use. With the un-safe handling, it sometimes becomes an unexpected accident.

#### Sole Distributor

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IKEGAI DIESEL Ltd.

DIESEL ENGINE  
GENERATOR SETS  
SD SERIES

## Diesel Engine Generator Sets

DIESEL ENGINE  
GENERATOR SETS  
SD SERIES

# SD series



Soundproof Cabinet

Diesel Engine Generator Set



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# IKEGAI DIESEL Ltd., Japan

Kyowa & Co., Ltd., Japan

**Overview**

Ikegai Diesel Ltd has provided "Ikegai Diesel Engine Generator Set " to customers in wide industrial fields since the development in 1975. In this time, we have developed **New Diesel Engine Generator Set "SD series "** by the tie-up with Sam Yang Electrical Engineering Co., Ltd. The diesel engine generator set **"SD series"** with higher cost performance under the long experience in the diesel engine of Ikegai Diesel Ltd. and the generator know-how on Japanese advanced technology.

It provides the finest diesel generator set which SDesigned and manufactured in the severe quality control system to have been manufactured, also fits the wide range of the global standard,. Ikegai Diesel Ltd. and our service shops provide the customs with wide range of support for installation, inspection, maintenance and check services.

The **"SD series "** is the products that can meet the various requests from the customers, and is the most competitive generator set for the application of the manufacturing, the commercial, the construction, telecommunication, the mining industry and the marine fields.

**Features**

- **The strongly solid structure**
- **The compact and light-weight design**
- **The long durability and standing performance**
- **Wide range of use environment**
- **Simple maintenance**



**Specification**

MODEL		SD 60	SD 90	SD 130	SD175	SD 200	SD 250	SD 300	SD 330	SD 360	SD 400	SD 450	SD 500	SD 550	SD 610	SD 660	SD 750																		
GENERATOR	FREQUENCY	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60																		
	OUTPUT	STANDBY	KVA	60	75	94	113	138	163	181	219	220	250	288	313	346	375	355	412	406	450	463	500	500	563	550	652	619	688	660	763	712	825	787	937
			KW	48	60	75	90	110	130	145	175	176	200	230	250	277	300	284	330	325	360	370	400	400	450	440	500	495	550	528	610	570	660	630	750
		PRIME	KVA	55	69	85	103	125	148	165	199	200	228	250	288	306	338	325	375	363	409	400	455	456	513	500	556	563	625	600	694	648	750	721	852
			KW	44	55	68	82	100	118	132	159	160	182	200	230	245	270	260	300	290	327	320	364	365	410	400	445	450	500	480	555	518	600	577	682
	VOLTAGE	V	208/120, 220/127, 380/220, 416/240, 440/254, 3300, 6600																																
	PHASE & WIRE		3P 4W																																
POWER FACTOR		0.8 (lag)																																	
NO. OF POLE		4																																	
INSULATION		H																																	
ENGINE	MODEL	DB58		D1146		D1146T		DE12T		P086TI		126TI-3		P126TI- II		P158LE-2		P158LE-1		P158LE		P158LE-SIII		P180LE		P180LE-1 II		P222LE		P222LE - II		P222FE - II			
	MAKER	Doosan		Doosan		Doosan		Doosan		Doosan		Doosan		Doosan		Doosan		Doosan		Doosan		Doosan		Doosan		Doosan		Doosan		Doosan		Doosan			
	OUTPUT	PS	81	96	118	145	152	205	229	274	274	307	348	380	406	472	443	498	499	554	571	611	610	687	684	745	761	862	792	911	898	1014	989	1130	
	REVOLUTION	Min <sup>-1</sup>	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	
	FUEL CONSUMPTION	L/Hr	15.3	18.1	20.8	26.6	27.0	35.9	41.0	49.0	48.4	56.8	59.6	68.2	79.5	82.5	84.4	93.5	93.6	104	102.9	115.7	110.0	129.8	128.7	144.6	140.1	155.6	154.3	173.5	173.8	192.1	185	207	
	NO. OF CYLINDER		6						6						V8						V10						V12								
	GOVERNOR		MECHANICAL												ELECTRIC																				
COOLING SYSTEM		RADIATOR & WATER COOLED												RADIATOR, WATER COOLED or HEAT EXCHANGER																					
SET	OUTSIDE DIMENSION (mm)	L	2312		2500		2500		2750		2750		2995		2995		2990		2990		2990		3990		3390		3390		3390		3390		3390		
		W	830		830		830		890		950		1015		1015		1390		1390		1390		1390		1390		1390		1390		1390		1397		
		H	1310		1260		1260		1500		1570		1590		1590		1875		1875		1875		1875		1875		1875		1875		2075		2075		
	WEIGHT	Kg	1150		1550		1630		2250		2400		2500		2900		3000		3150		3300		3700		4000		4700		5000		5200		5500		

Note: Outside Dimension & Weight may change according to Option selection and improvements in quality.

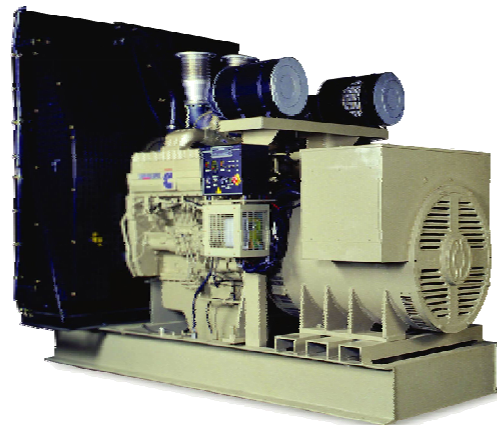
**Control panel**

- Voltmeter
- Ammeter
- Frequency Meter
- Hours-of-Operation Recorder
- Coolant Temperature Gauge
- Lubricating oil pressure gauge
- Battery Charging Voltmeter
- Voltage Adjusting VR
- Voltage (Current) Select Switch
- Auto-Stop-Manual Select Switch
- MCCB (Main Power/Heater)
- Status Display / Alarm-Display LED :

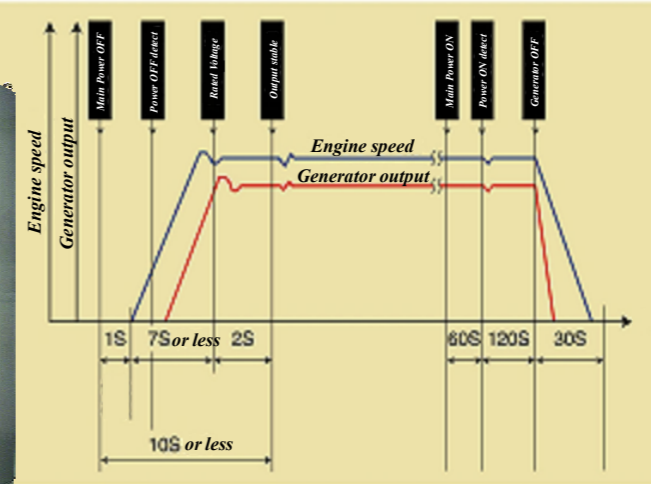


**Front View of Control Panel**

Control source indicator, Main power indicator, Low hydraulic pressure, Emergency-stop indicator, High water temperature, Emergency-stop indicator, Acceleration degree emergency-stop indicator, Start congestion indicator



**Time Chart (10 seconds start up type)**



Example Please contact us for Electric Power Vehicle Mount

**Standard accessories**

- MCCB (Main Circuit Breaker) \*\*
- Fuel Tank
- Battery
- Battery Charger
- Coolant Water Pre-Heater
- Radiator
- Bonnet Type Control panel
- Silencer
- Standard Tools
- Standard Spare Parts
- \*\* Modes for 3300/6600V output do not include MCCB.

**Options**

- Parallel Operation System
- Soundproof Cabinet