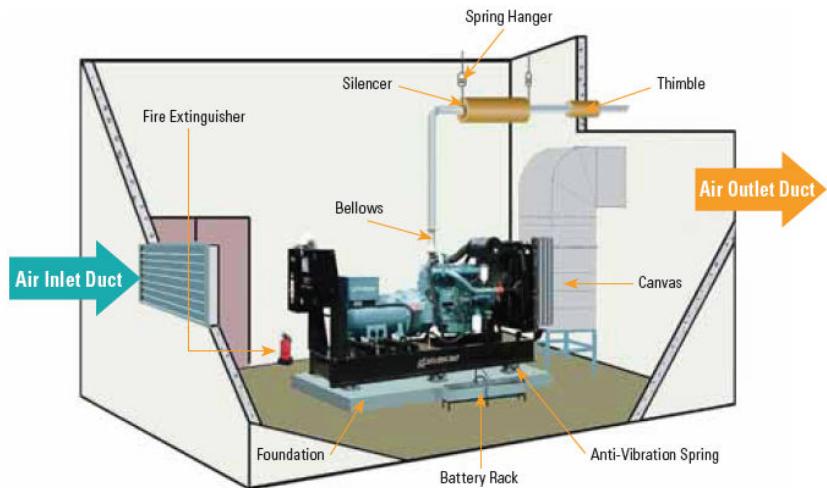


Diesel Generator Set

INSTALLATION DATA



Doosan Infracore Engine (SJ Series)

Model	Foundation (L x H, mm)		Anti-Vibration Spring Capa. (kg) x ea	Battery A x ea	Inlet Duct	Outlet Duct m ²
	Skid	Sound Proof				
SJ20Y	1960 x 960	2480 x 1250	200 x 4	100 x 1	0.093	0.077
SJ26Y	2020 x 960	2480 x 1250	200 x 4	100 x 1	0.093	0.077
SJ32Y	2100 x 1020	2560 x 1250	200 x 4	100 x 1	0.093	0.077
SJ60E	2260 x 1150	3540 x 1400	300 x 6	120 x 2	0.240	0.200
SJ85E	2860 x 1150	3700 x 1400	300 x 6	120 x 2	0.314	0.262
SJ115E	2860 x 1150	3700 x 1400	300 x 6	120 x 2	0.348	0.290
SJ170E	3160 x 1250	3940 x 1500	400 x 6	120 x 2	0.428	0.357
SJ200E	3160 x 1250	3940 x 1500	400 x 6	120 x 2	0.591	0.493
SJ275E	3580 x 1415	4600 x 1700	500 x 6	150 x 2	0.859	0.716
SJ300E	3580 x 1415	4600 x 1700	500 x 6	150 x 2	0.859	0.716
SJ320E	3100 x 1700	4560 x 1950	500 x 8	150 x 2	0.933	0.777
SJ360E	3100 x 1700	4560 x 1950	500 x 8	150 x 2	1.030	0.859
SJ400E	3100 x 1700	4560 x 1950	500 x 8	150 x 2	1.104	0.920
SJ430E	3100 x 1700	4560 x 1950	500 x 8	150 x 2	1.104	0.920
SJ500E	3500 x 1700	4808 x 1950	600 x 8	150 x 2	1.422	1.185
SJ515E	3500 x 1700	4808 x 1950	600 x 8	150 x 2	1.422	1.185
SJ600E	3700 x 1700	6060 x 1950	700 x 8	150 x 2	1.660	1.383
SJ625E	3700 x 1700	6060 x 1950	700 x 8	150 x 2	1.829	1.524
SJ650E	3915 x 1920	6300 x 2050	700 x 8	150 x 2	2.161	1.801

Specifications are subject to change without prior notice.



7-9 Zinonos str.
104 31 Athens - Greece
Tel: (30) 210 52 34 655
Fax: (30) 210 52 34 625
E-mail: axi1@otenet.gr
www.axiocchos.gr

Diesel Generator Set

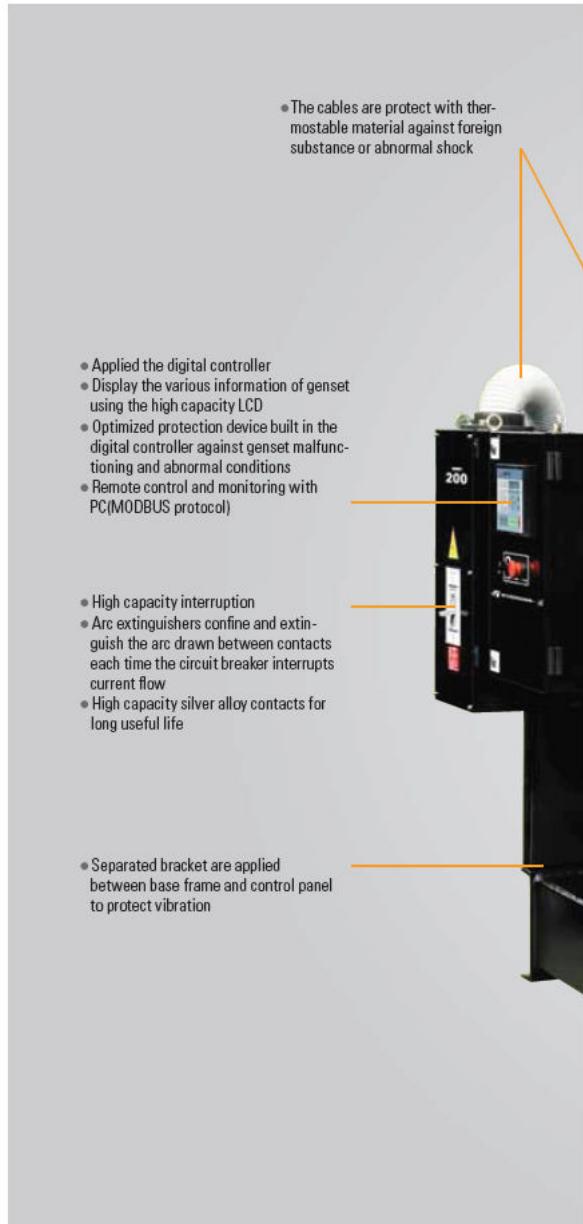
To achieve the excellent combustion and low fuel consumption, the state-of-the-art high-tech injection and charging system applied

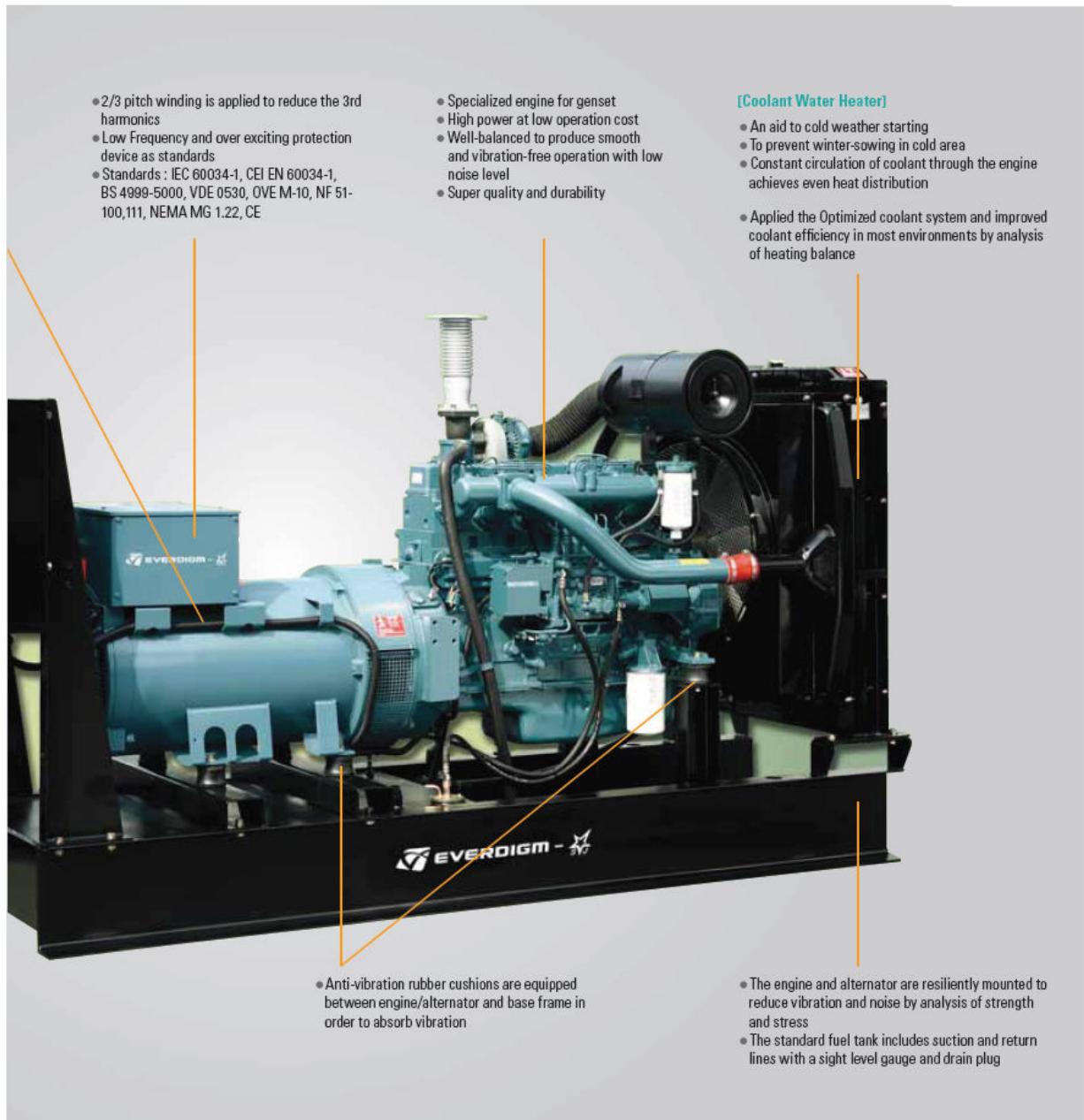
Easily accessible service and maintenance points contribute to the ease of service of the generator set

To improve the performance of products, high quality auxiliaries equipment applied

Arrangement device for easy operation

Economical operating and maintenance cost





- 2/3 pitch winding is applied to reduce the 3rd harmonics
- Low Frequency and over exciting protection device as standards
- Standards : IEC 60034-1, CEI EN 60034-1, BS 4999-5000, VDE 0530, OVE M-10, NF 51-100,111, NEMA MG 1.22, CE

- Specialized engine for genset
- High power at low operation cost
- Well-balanced to produce smooth and vibration-free operation with low noise level
- Super quality and durability

[Coolant Water Heater]

- An aid to cold weather starting
- To prevent winter-sowing in cold area
- Constant circulation of coolant through the engine achieves even heat distribution

- Applied the Optimized coolant system and improved coolant efficiency in most environments by analysis of heating balance

- Anti-vibration rubber cushions are equipped between engine/alternator and base frame in order to absorb vibration

- The engine and alternator are resiliently mounted to reduce vibration and noise by analysis of strength and stress
- The standard fuel tank includes suction and return lines with a sight level gauge and drain plug



Diesel Generator Set

We will supply our products as the customer's requirement through variety product line with rapid actions

>> Standard (Skid Type)



Applications : For Standby and Prime Power
Installation : Indoor

Apartment, Commercial Building, Factory, etc

>> Sound Proof Type



Applications : For Standby and Prime Power
Installation : Outdoor

Apartment, Commercial Building, Factory, Fish-farm, Gas Station Construction Area, etc

Restriction are for noise : Noise level is below 75dB[A] at 7m

>> Trailer Type

Applications : For Standby and Prime Power
Installation : Outdoor
Airport, Harbor, Road Construction Work, etc

Easily Move to not prepare power system area



>> Bonnet Type



Applications : For Standby and Prime Power
Installation : Outdoor
Stony Mountain, Mine, Construction Work, etc

>> Gas Genset



Applications : For Prime Power
Installation : Indoor
Apartment, Commercial Building, Factory, etc



Diesel Generator Set

We shall digital controller the genset shall be Equipped digital controller as a standard

>> Mounted Control Panel



Main Feature

- Digital controller
- Easy operation and control
- Maintenance free
- kW/kWh/PF meter as standds(Compare to analogue panel)

>> Self-Standing Control Panel



- Optimized wiring to prevent wrong connection
- Offering economical solution with compact sizes
- Built in the various protection device

Protective Function

Protection		Function	Engine Stop	MCB Trip	Alarm LED	Error Message
Heavy Fault (Shut Down)	Alarm LED ON, Display Error Message (S: xxxxxxx)	Low Oil Pressure, High Coolant Temp, Fail to Start, Over Speed, Emergency Stop, Over Voltage	X	X	X	X
	Engine Stop, MCB Trip	Over Current, Under Voltage, OCGR(option)	N/A	X	X	X
Light Fault (Warning)	Alarm LED ON, Display Error Message (W: xxxxxxx)	Failure MCB, Failure Charging, Over Load, Low Coolant Temp, LFO Level(option) Battery Low/High Voltage	N/A	N/A	X	X

>> ATS(Automatic Transfer Switch) Control Panel

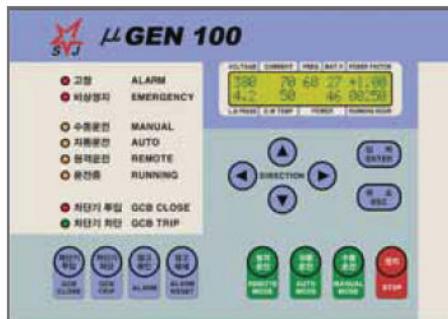


- Manual or automatic operation
- Minimum switching repercuSSION of coil change by the unique latch mechanism
- One-coil-change system
- Superior contacting capacity
- Latch condition is visible with transfer position indicator
- Control switches located on the front of the door for ease of operation
- Excellent breaking capacity designed for large arc extinguishing chamber sufficient enough to interrupt a large amount of electric current

Diesel Generator Set

A Special Manufacturer of Digital Generator Set

>> μGEN 100(Mu GEN 100, for Island Operation)



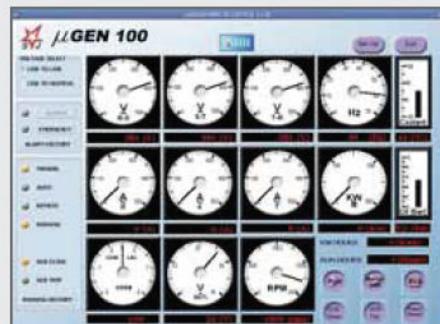
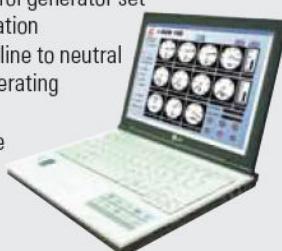
Main Function

- Auto sequencing of genset
- Manual / Automatic / Remote operation
- Power monitoring with LED and LCD (2 line, 20 character)
- Alarm level : Heavy fault, light fault(Display LCD)
- Remote control and monitoring with PC(MODBUS Protocol)
- Backlight-panel lighting with time delay off
- Totally sealed front panel against noise
- Point-to-point wiring

>> PC Monitoring and Control System

Monitoring & Control with computer

- Monitoring and control generator set
- Communication situation
- Select line to line or line to neutral
- Event of alarm or operating
- Emergency stop
- Indicate of LED State



Display

- Frequency (Hz)
- Engine speed (rpm)
- Three phase line to line and line to neutral voltage (Vac)
- Three phase current (A)
- Active power [kW], kW hour(kWH)
- Power factor (P.F.)
- Running hours (Hrs)
- Oil pressure (bar)
- Coolant water temperature (°C)
- Battery voltage(Vdc)

Control Function

- Fail to start
- Adjustable starting attempt/starting time
- Emergency stop
- Adjustable pre-glow/cooldown time
- Control main circuit breaker
- Check state of LCD/LED
- Adjustable mains power live/failure sensing time

LED Indicator

- Alarm
- Manual mode
- Remote mode
- MCB close
- Emergency stop
- Auto mode
- Running
- MCB trip

Diesel Generator Set

Applied the optimal algorithm in the digital controller

>> AGC(Automatic Genset Controller, For Parallel Operation)



Main Function

- Parallel operation between generator set
- Parallel operation with main power
 - Base load mode (Apply fixed load)
 - Peak shaving mode (Apply peak load)
 - Load take over mode
(Instead of mains power if power failure notify)

Function in Accordance with Operating Mode

ITEM	Island Mode			Parallel Mode	
	Manual	Semi-Auto	Automatic	Semi-Auto	Automatic
Start / Stop	Manual	Automatic	Automatic	Manual	Automatic
Load Operation	Manual	Automatic	Automatic	Manual	Automatic
Parallel Operation	N/A	N/A	N/A	Automatic	Automatic
Load Dependent Start / Stop	N/A	N/A	N/A	Manual	Automatic
Priority Selection according to running hours	N/A	N/A	N/A	Manual	Automatic



Note 1. MCB : Main Circuit Breaker, OCGR: Over Current Ground Relay, LFO: Low Fuel Oil Level

2. "X": Applied, "N/A": Not Applicable

Protective Function

Protection		Function	Engine Stop	MCB Trip	Alarm LED	Error Message
Heavy Fault (Shut Down)	Alarm LED ON, Display Error Message, Engine Stop, MCB Trip	Low Oil Pressure, High Coolant Temp, Fail to Start, Over Speed, Emergency Stop, Over Voltage	X	X	X	X
		Over Current, Under Voltage, Reverse Power OCGR(option)	N/A	X	X	X
		High Frequency 2, Over Voltage 2, Over Current 2, Over Load 2, Unbalance Voltage / Current				
Light Fault (Warning)	Alarm LED ON, Display Error Message	Failure MCB, Failure Charging, Low Coolant Temp, Battery Low/High Voltage, Low Fuel Oil Level(option), Failure Synchronization, Over Load 1, High Frequency 1, Over Voltage 1, Over Current 1	N/A	N/A	X	X

Note 1. MCB : Main Circuit Breaker, OCGR: Over Current Ground Relay, LFO: Low Fuel Oil Level

2. "X": Applied, "N/A": Not Applicable

Diesel Generator Set

PRODUCT LINE-UP



Kukje Engine (SJK Series)

Model	Generator Set Power				Diesel Engine			Dimension & Weight					
	Standby		Prime		Rating Under Standard Conditions(hp)		Engine Model	Aspiration	Governor	SKID		SOUND PROOF	
	Prime	kW	kVA	Prime	kW	kVA				LxWxH (mm)	kg	LxWxH (mm)	kg
SJ20K	20	25	15	19	25	21	A2300	NA	Mechanical	1,570 x 620 x 1,370	610	2,000 x 720 x 1,400	930
SJ26K	26	33	20	25	36	25	A2300T	TA	Mechanical	1,570 x 620 x 1,370	640	2,000 x 720 x 1,400	960

Hyundai Engine (SJY Series)

Model	60Hz (1800rpm)				50Hz (1500rpm)				Diesel Engine		
	Prime		Standby		Prime		Standby				
	kW	kVA	kW	kVA	kW	kVA	kW	kVA	Model	Aspiration	Governor
SJ20Y	18	23	20	25	15	18	16	20	D4BBG1	NA	
SJ26Y	24	30	26	33	19	24	20	26	D4BBG2	NA(60Hz) TC(50Hz)	
SJ32Y	29	36	32	40	N/A	N/A	N/A	N/A	D4BBG5	TC	Mechanical

Note 1. N/A : Not Applicable, NA : Natural Aspiration, TC : Turbo Charged

Doosan Infracore Engine (SJE Series)

Model	60Hz (1800rpm)				50Hz (1500rpm)				Diesel Engine		
	Prime		Standby		Prime		Standby				
	kW	kVA	kW	kVA	kW	kVA	kW	kVA	Model	Aspiration	Governor
SJ60E	55	69	60	75	48	60	52	65	DB58	NA	Mechanical
SJ85E	77	96	85	106	64	80	70	88	D1146	NA	Mechanical
SJ115E	105	131	115	144	92	115	101	126	D1146T	TC	Mechanical
SJ170E	155	194	170	213	132	165	145	181	P086TI-1	TI	Electric
SJ200E	182	228	200	250	160	200	176	220	P086TI	TI	Electric
SJ275E	250	313	275	344	220	275	242	303	P126TI	TI	Electric
SJ300E	274	343	300	375	237	296	264	330	P126TI-II	TI	Electric
SJ320E	290	363	320	400	256	320	282	353	P158LE-2	TI	Electric
SJ360E	327	409	360	450	288	360	320	400	P158LE-1	TI	Electric
SJ400E	364	455	400	500	320	400	370	463	P158LE	TI	Electric
SJ430E	393	491	430	538	359	449	395	494	P158LE-S	TI	Electric
SJ500E	452	565	500	625	400	500	440	550	P180LE	TI	Electric
SJ515E	473	591	515	644	412	515	453	566	P180LE-S	TI	Electric
SJ600E	541	676	600	750	480	600	528	660	P222LE	TI	Electric
SJ625E	572	715	625	781	505	631	554	693	P222LE-S	TI	Electric
SJ650E	604	755	650	813	522	653	562	703	P222FE	TI	Electric

Note 1. NA : Natural Aspiration, TC : Turbo Charged, TI : Turbo Charged + Intercooler

Gas Generator (SGD Series)

Model	Prime Power				Gas Engine			Fuel Consumption (Nm ³ /H, 75% Load)		Dimension (Self-Standing Control Panel)	
	60Hz(1800rpm)		50Hz(1500rpm)		Engine Model	Aspiration	Governor	1800rpm	1500rpm	Dimension LxWxH (mm)	Weight (kg)
	kW	kVA	kW	kVA							
SG135D	135	169	110	138	GE08TI	TI	Electric	29.9	243	2,684 x 1,151 x 1,763	2,300
SG175D	175	219	155	194	GE12TI	TI	Electric	41.1	34.3	2,800 x 1,151 x 1,763	2,700
SG235D	235	294	200	250	GV158TI	TI	Electric	57.6	48.2	2,823 x 1,244 x 1,850	3,400
SG300D	300	375	255	319	GV180TI	TI	Electric	71.7	57.4	3,100 x 1,380 x 2,050	3,900
SG370D	370	463	310	388	GV222TI	TI	Electric	89.4	73.4	3,400 x 1,620 x 2,050	4,320

Note 1. the dimension / weight data are base on Self-Standing Control Panel

2. TI : Turbo Charged + Intercooler

3. Usefuel : LNG (Liquefied Natural Gas)



Containerized Generator Set (CGD Series)

Model	60Hz (1800rpm)				50Hz (1500rpm)				Diesel Engine		
	Prime		Standby		Prime		Standby				
	kW	kVA	kW	kVA	kW	kVA	kW	kVA	Model	Aspiration	Governor
CG1000D	904	1,130	1,000	1,250	800	1,000	880	1,010	P180LE x 2	TI	Electric
CG1030D	946	1,182	1,030	1,288	824	1,030	906	1,132	P180LE-S x 2	TI	Electric
CG1200D	1,082	1,352	1,200	1,500	960	1,200	1,056	1,320	P222LE x 2	TI	Electric
CG1250D	1,144	1,430	1,250	1,562	1,010	1,262	1,108	1,386	P222LE-S x 2	TI	Electric
CG1300D	1,208	1,510	1,300	1,626	1,044	1,306	1,124	1,406	P222FE x 2	TI	Electric

Diesel Generator Set INSTALLATION DATA

Hyundai Engine (SJY Series)

Model	Fuel Consumption (l /Hr, 75% Load)		Fuel Tank Capacity (l, Mounted Type)		Dimension & Weight			
	60Hz		50Hz		Skid		Sound Proof	
	L x W x H (mm)	kg	L x W x H (mm)	kg	L x W x H (mm)	kg	L x W x H (mm)	kg
SJ20Y	5.4	38	64	120	1,667 x 660 x 1,241	665	2,180 x 950 x 1,255	1,200
SJ26Y	7.7	5.1	64	120	1,667 x 660 x 1,241	685	2,180 x 950 x 1,255	1,220
SJ32Y	8.8	N/A	75	120	1,810 x 720 x 1,230	710	2,260 x 950 x 1,450	1,300

Doosan Infracore Engine (SJE Series)

Model	Fuel Consumption (l /Hr, 75% Load)		Fuel Tank Capacity (l, Mounted Type)		Dimension & Weight			
	60Hz		50Hz		Skid		Sound Proof	
	L x W x H (mm)	kg	L x W x H (mm)	kg	L x W x H (mm)	kg	L x W x H (mm)	kg
SJ60E	12.2	10.5	150	250	2360 x 850 x 1385	1320	3240 x 1100 x 1680	2060
SJ85E	19.0	15.9	150	300	2560 x 850 x 1385	1810	3400 x 1100 x 1710	2420
SJ115E	24.9	19.5	150	300	2560 x 850 x 1595	1810	3400 x 1100 x 1710	2490
SJ170E	37.7	31.7	160	300	2860 x 950 x 1615	2350	3640 x 1200 x 1810	3125
SJ200E	37.7	31.7	160	300	2860 x 950 x 1615	2350	3640 x 1200 x 1810	3125
SJ275E	52.3	43.6	220	300	3280 x 1115 x 1635	2670	4300 x 1400 x 1950	3730
SJ300E	56.0	47.0	220	300	3280 x 1115 x 1635	2670	4300 x 1400 x 1950	3730
SJ320E	60.6	52.6	275	500	2800 x 1400 x 1820	2620	4260 x 1650 x 2250	4505
SJ360E	67.5	58.4	275	500	2800 x 1400 x 1820	2680	4260 x 1650 x 2250	4695
SJ400E	74.7	65.1	275	500	2800 x 1400 x 1820	2930	4260 x 1650 x 2250	5010
SJ430E	82.1	74.0	275	500	2800 x 1400 x 1820	2930	4260 x 1650 x 2250	5010
SJ500E	93.4	81.3	275	500	3200 x 1400 x 1820	3400	4508 x 1650 x 2250	6025
SJ515E	97.4	81.2	275	500	3200 x 1400 x 1820	3400	4508 x 1650 x 2250	6025
SJ600E	112.0	97.6	275	500	3400 x 1400 x 1850	4100	5760 x 1650 x 2400	6200
SJ625E	112.3	99.8	275	500	3400 x 1400 x 1850	4100	5760 x 1650 x 2400	6200
SJ650E	127.6	109.8	275	500	3615 x 1620 x 2050	4350	6000 x 1750 x 2400	6750

Note 1. N/A: Not Applicable

2. the dimension / weight data are base on mounted control panel, except for more than SJ625

Containerized Generator Set (CGD Series)

Model	Fuel Consumption (l /Hr, 75% Load)		Fuel Tank Capacity (l, Mounted Type)		Dimensions & Weight (L x W x H, mm)				Container(ISO) Hi-Cube or Standard
	60Hz	50Hz	Skid	Sound Proof	L x W x H (mm)	kg	L x W x H (mm)	kg	
CG1000D	186.8	162.6		2000	12195 x 2440 x 2890				40ft
CG1030D	194.8	162.4		2000	12195 x 2440 x 2890				40ft
CG1200D	224.0	195.2		2000	12195 x 2440 x 2890				40ft
CG1250D	224.6	199.6		2000	12195 x 2440 x 2890				40ft
CG1300D	255.2	219.6		2000	12195 x 2440 x 2890				40ft