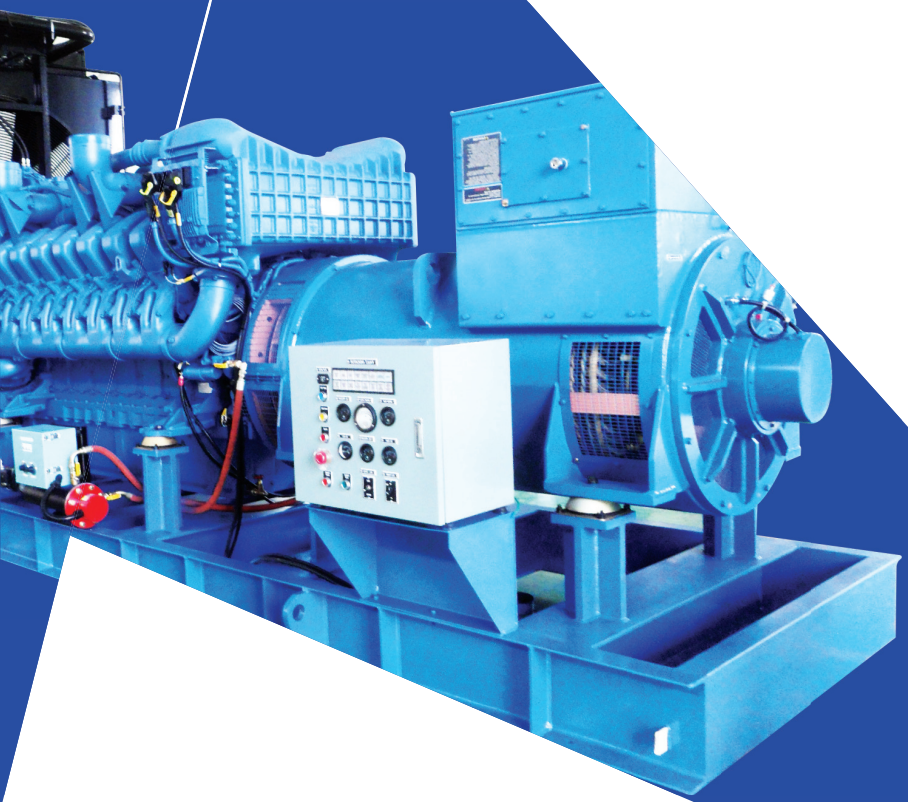
ENERGEN

Creative Value based management



ENERGEN

Creative Value based management

We are a manufacturer of generators who donate and service to live together in the beautiful world. This company was established by specialists who have worked in generator manufacturing more than 20 years. Our slogan is Creative Value based management and we do practice this in our life. We will do our best to be a leader of high efficiency low carbon generator development.

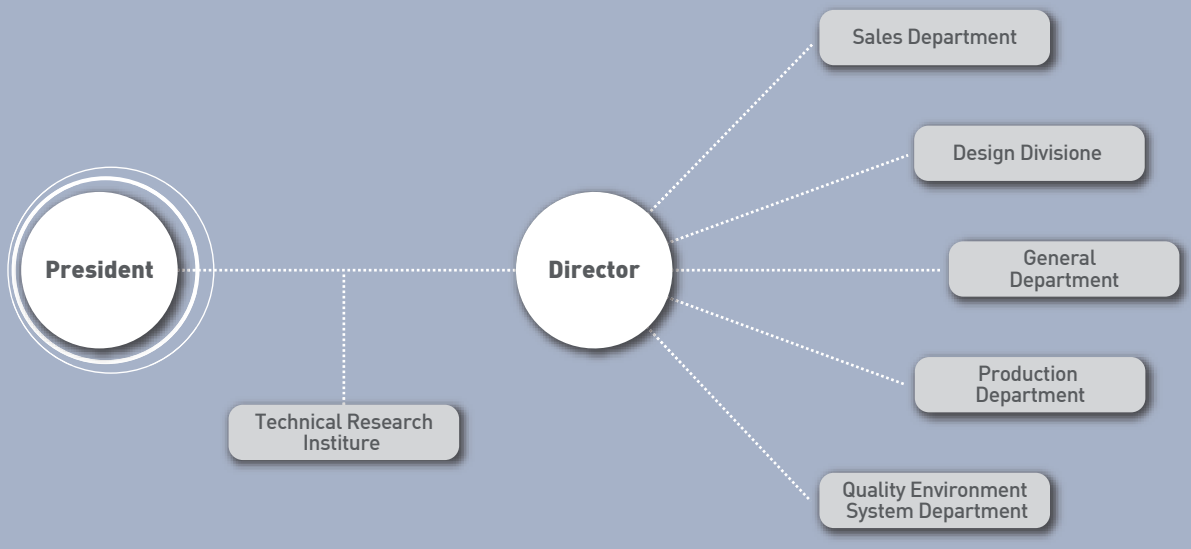
President ***Myung Ja Kim***

Company Profile

President	**MyungJa, Kim**
Established	**2011-06-09**
Business type	**Construction**
Business item	**Manufacturing OF Electric diesel engine generator set**
Address	**58, Hamansandan1-gil, Gunbuk-myeon, Haman-gun, Gyeongsangnam-do, Korea**
Plant Status	**The entire factory premises 6,600.5㎡, office 338.46㎡, plant 1,411.00㎡**
Tel / Fax	**82-55-912-9012 ~ 21 / 82-55-582-1254**
Capacity	**Diesel engine generator set / 500 sets**

Head office and factory pictures

Organization



Contents

THE BEST MACHINE

for the best product

Creative Value based management

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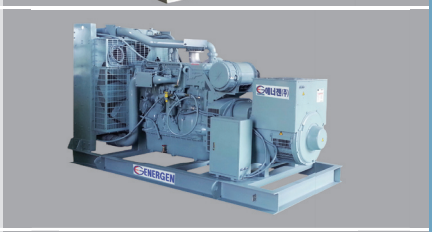
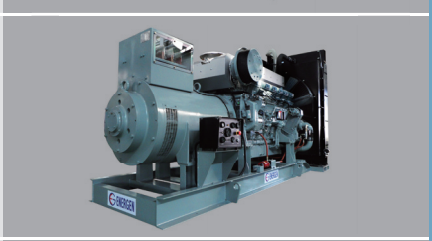
HYUNDAI ENGINE SERIES

CUMMINS ENGINE SERIES



MITSUBISHI ENGINE SERIES



CATERPILLAR ENGINE SERIES

MTU ENGINE SERIES

MARINE ENGINE SERIES

THE BEST MACHINE

for the best product

DIESEL GEN'SET OPTION

Parallel Panel

Operation Panel

Fuel Tank 2500L

Bonnet Generator

Enclosure

Enclosure Perspective view

Generator

Operation Panel

5MW ENGINE SERIES

Diesel E/G Generator set

It is a powerful and long-life products

Remote Radiate

It is a high-performance remote radiate for engine cooling

Control Panel set

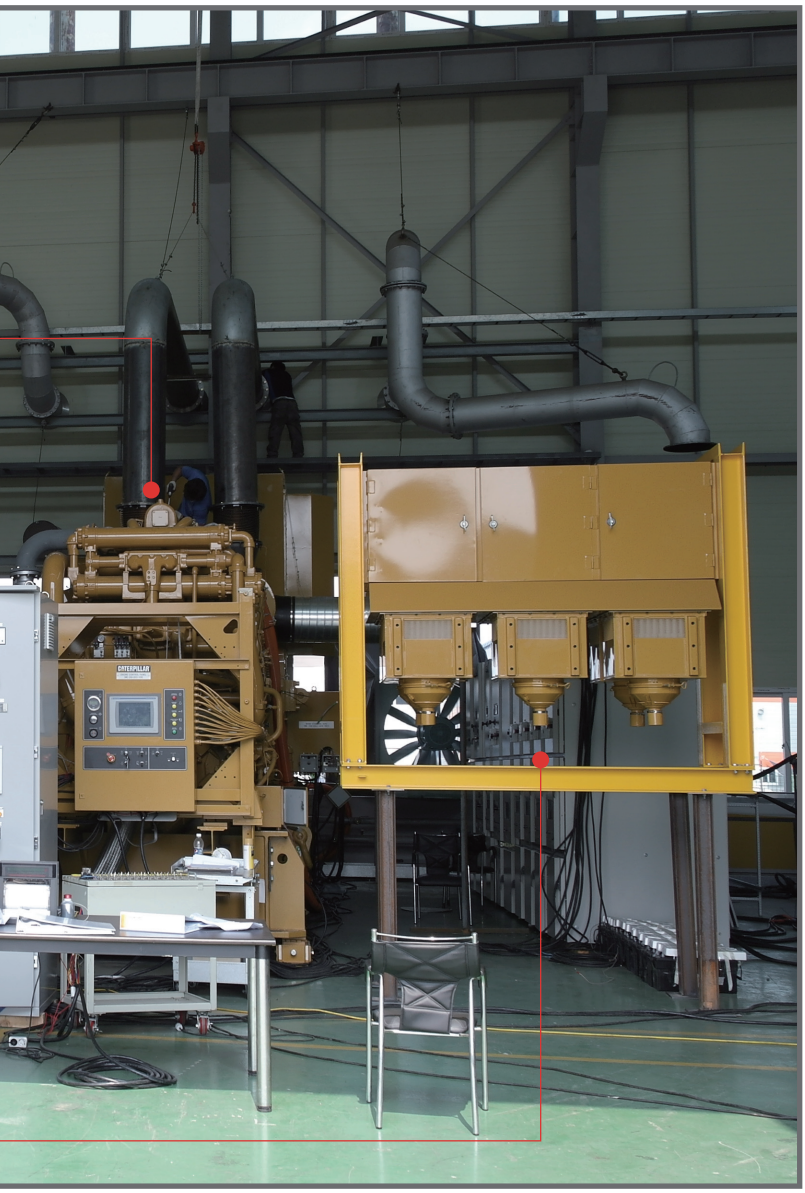
It is a Control system for D/G set

Air Tank & Compressor M/C

It is a Compressor & Air Tank system for E/G starting

Air Cleaner

It is air filter device for a combustion engine



Truck Carrying

It is for a land transport truck carrying scene

Crane Lifting

It is loaded on the truck using a crane

D/G set test scene

It is a test scene

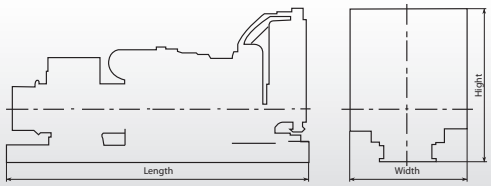
Fuel Tank

It is a fuel storage tank

Load Bank

It is the test device using electrical resistance

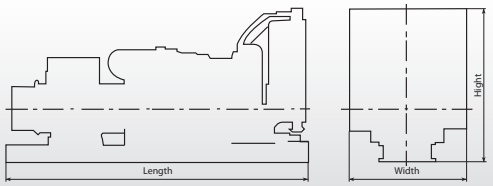
DOOSAN ENGINE SERIES



	SET MODEL	EG0060	EG0075	EG0090	EG0115	EG0130	EG0145	EG0175	EG0200	EG0230	EG0250	EG0275
GENERATOR	Stand-by (KW)	60/50	75/61	90/73	115/91	130/103	145/120	175/145	200/175	230/205	250/225	275/250
	Prime (KW)	54/45	68/54	81/65	104/88	118/100	131/110	159/133	181/155	209/184	227/200	250/215
	Voltage (V)	200/127, 380/220, 440/254,3300,6600										
	Frequency (Hz)	60/50										
	Revolution (RPM)	1800/1500										
	Phase/Wire	1Ø 2W, 1Ø3W, 3Ø3W, 3Ø4W										
	Power Factor(%)	80(LAGGING)										
	Excitation	Brushless Self Excitation Revolving Field										
	Insulation Class	F or H										
ENGINE	Manufactorer	Doosan										
	Model	DB58	D1146	D1146	D1146T	D1146T	DE12T	DE12T	P0861TI	P126TI-3	P126TI-3	P126TI
	Stand-by(PS)	96/80	143/116	143/116	202/160	202/160	270/226	270/226	303/270	375/343	375/343	405/370
	Prime(PS)	87/73	130/105	130/105	170/145	170/145	245/205	245/205	279/240	343/304	343/304	378/328
	Revolution (RPM)	1800/1500										
	No.of Cylinder	I-6										
	Bore X Stroke(mm)	102 X 118	111 X 139	111 X 139	111 X 139	111 X 139	123 X 155	123 X 155	111 X 139	123 X 155	123 X 155	123 X 155
	Displacement(L)	5.785	8.071	8.071	8.071	8.071	11.051	11.051	8.071	11.051	11.051	11.051
	Compression Ratio	17.5:1	17.5:1	17.5:1	16.8:1	16.8:1	17.1:1	17.1:1	16.4:1	17:1	17:1	17:1
	Engine Type	4 Cycle Water Cooled										
	Aspiration	NATURAL				TURBO CHARGED						
	Starting System	Starting Electric Motor by Battery										
	Governor	Mechanical Type							Electric Type			
	Fuel Consumption(L/Hr)	18.1/15.3	18.8/17.4	22.6/20.8	31.8/23.9	35.9/27	41/33.8	49/41	56.8/48.4	62.7/54.9	68.2/59.6	76.5/66.2
	Coolant Capacity(L)	12	14	14	14	14	19	19	14	19	19	19
	Lub.Oil Capacity(L)	19	15.5	15.5	15.5	15.5	23	23	15.5	23	23	23
DIM	Length(mm)	2327	2500	2500	2500	2500	2785	2785	2728	2994	2994	2994
	Width(mm)	830	830	830	830	830	920	920	950	1015	1015	1015
	Height(mm)	1208	1420	1420	1420	1420	1540	1540	1498	1686	1686	1686
	Weight(kg)	1300	1450	1450	1600	1600	1860	1860	2000	2350	2350	2400

To improve product quality, the spec mentioned above could be changed and fuel consumption may be changed according to an operation.

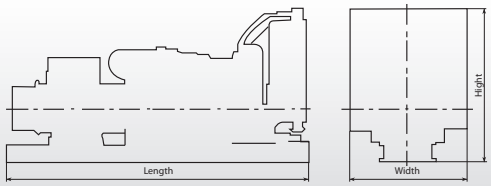
DOOSAN ENGINE SERIES



	SET MODEL	EG0300	EG0330	EG0360	EG0400	EG0450	EG0500	EG0550	EG0600	EG0660	EG0750
GENERATOR	Stand-by (KW)	300/255	330/280	360/320	400/360	450/-	500/460	550/-	600/500	660/560	750/-
	Prime (KW)	272/235	300/250	327/295	363/310	409/-	454/400	500/-	545/460	600/510	681/-
	Votage (V)	220/127, 380/220, 440/254. 3300, 6600									
	Frequency (Hz)	60/50									
	Revolution (RPM)	1800/1500									
	Phase/Wire	1Ø 2W, 1Ø3W, 3Ø3W, 3Ø4W									
	Power Factor(%)	80(LAGGING)									
	Excitation	Brushless Self Excitation Revolving Field									
	Insulation Class	F or H									
ENGINE	Manufactorer	Doosan									
	Model	P126TI-2	P158LE-2	P158LE-1	P158LE	P158LE-3	P180LE	P180LE-2	P222LE	P222LE-2	P222FE-2
	Stand-by(PS)	465/400	510/437	546/492	623/563	690/-	734/674	827/-	898/781	1000/883	1115/-
	Prime(PS)	418/360	470/399	498/444	547/494	625/-	676/602	761/-	803/723	912/803	998/-
	Revolution (RPM)	1800/1500									
	No.of Cylinder	I-6	V-8	V-8	V-8	V-8	V-10	V-10	V-12	V-12	V-12
	Bore X Stroke(mm)	123 X 155	128 X 142	128 X 142	128 X 142	128 X 142	128 X 142	128 X 142	128 X 142	128 X 142	128 X 142
	Displacement(L)	11.051	14.618	14.618	14.618	14.618	18.273	18.273	21.927	21.927	21.927
	Compression Ratio	17:1	15:1	15:1	15:1	14.6:1	15:1	14.6:1	15:1	14.6:1	14.3:1
	Engine Type	4Cycle Water Cooled									
	Aspiration	TURBO CHARGED									
	Starting System	Starting Electric Motor by Battery									
	Governor	Electric Type									
	Fuel Consumption	89.5/77.6	93.5/84.4	104/93.6	115.7/102.9	129.8	144.6/128.7	155.6	173.5/154.3	192.1/173.8	207
	Coolant Capacity(L)	19	20	20	20	20	21	21	23	23	23
	Lub.Oil Capacity(L)	23	28	28	28	28	35	35	40	40	40
DIM	Length(mm)	2994	2990	2990	2990	2990	3170	3170	3390	3390	3390
	Width(mm)	1015	1397	1397	1397	1397	1397	1397	1397	1397	1620
	Height(mm)	1686	1875	1875	1875	1875	1875	1875	1875	1875	2098
	Weight(kg)	2500	2800	3000	3200	3300	4000	4300	5000	5300	6300

To improve product quality, the spec mentioned above could be changed and fuel consumption may be changed according to an operation.

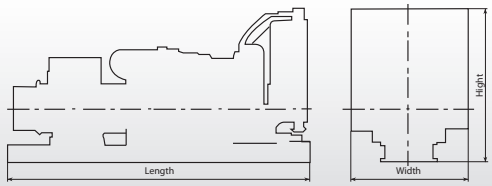
HYUNDAI ENGINE SERIES

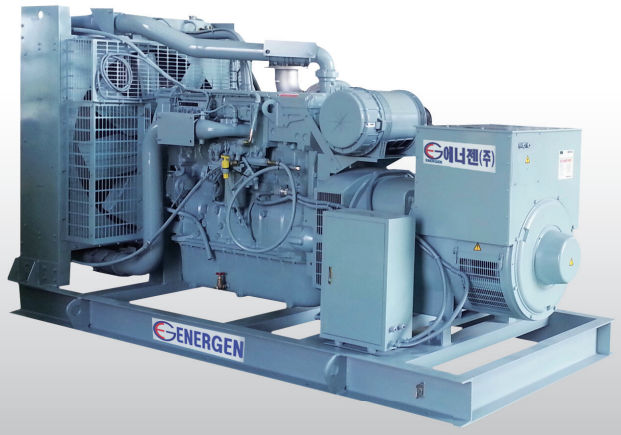


	SET MODEL	EG0020H	EG0026H	EG0040H	EG0050H	EG0070H	EG0085H	EG0115H	EG0165H	EG0200H	EG0230H	EG0275H	EG0300H	EG0320H
GENERATOR	Stand-by (KW)	20/16	26/-	40/33	50/37	80/61	85/72	115/99	165/150	200/175	230/210	275/241	300/267	320/-
	Prime (KW)	18/15	23/-	33/30	45/33	73/55	77/65	105/91	148/136	182/159	210/184	250/220	273/248	280/-
	Voltage (V)	200/127, 380/220, 440/254,3300,6600												
	Frequency (Hz)	60/50												
	Revolution (RPM)	1800/1500												
	Phase/Wire	1Ø 2W, 1Ø 3W, 3Ø3W, 3Ø4W												
	Power Factor(%)	80(LAGGING)												
	Excitation	Brushless Self Excitation Revolving Field												
	Insulation Class	F or H												
ENGINE	Manufactorer	HYUNDAI MOTOR COMPANY												
	Model	AG39	AG39	D4AF-G	D4AK-G	D4DA-G	D6BR-G1	D6BT-G2	D6AZ-G2	D6AZ-G1	D6AC-G1	D6CA-G3	D6CA-G2	D6CA-G1
	Stand-by(PS)	28/23	45/-	60/50	82/60	107/85	130/110	180/155	250/330	309/270	350/320	410/360	450/400	490/-
	Prime(PS)	25/21	42/-	54/45	74/54	95/75	117/99	162/140	225/207	278/243	315/288	400/360	440/400	440/-
	Revolution (RPM)	1800/1500												
	No.of Cylinder	I-4	I-4	I-4	I-4	I-4	I-6	I-6	I-6	I-6	I-6	I-6	I-6	I-6
	Bore X Stroke(mm)	91.1×100	91.1×100	100×105	104×105	104×115	118×115	118×115	130×140	130×140	130×140	133×155	133×155	133×155
	Displacement(L)	2.607	2.607	3.298	3.568	3.907	7.545	7.545	11.149	11.149	11.149	12.92	12.92	12.92
	Compression Ratio	22 : 1	22 : 1	16 : 1	17.5 : 1	16.5 : 1	17.5 : 1	16 : 1	16.5 : 1	16.5 : 1	16.5 : 1	17 : 1	17 : 1	17 : 1
	Engine Type	4Cycle Water Cooled												
	Aspiration	NATURAL			TURBO CHARGED		NATURAL	TURBO CHARGED						
	Starting System	Starting Electric Motor by Battery												
	Governor	Mechanical Type								Electric Type				
	Fuel Consumption(L/Hr)	6.5	10.3	12	15.6	20	27.4	34.5	46	58.7	64.3	73	81	89
	Coolant Capacity(L)	3.9	3.9	8.3	8.3	8.3	12.5	12.5	22	22	24	42	42	42
	Lub.Oil Capacity(L)	5.4	5.4	8.5	8.5	8.5	13	13	24	25	24	28	28	28
DIM	Length(mm)	1450	1450	1800	1800	1950	2435	2310	2500	2500	2600	2890	2910	2930
	Width(mm)	600	600	750	750	750	800	800	880	880	1080	1025	1025	1025
	Height(mm)	1100	1100	1200	1200	1200	1310	1517	1460	1460	1430	1573	1573	1573
	Weight(kg)	650	650	1050	1100	1300	1400	1510	2100	2200	2700	2800	3000	3100

To improve product quality, the spec mentioned above could be changed and fuel consumption may be changed according to an operation.

CUMMINS ENGINE SERIES

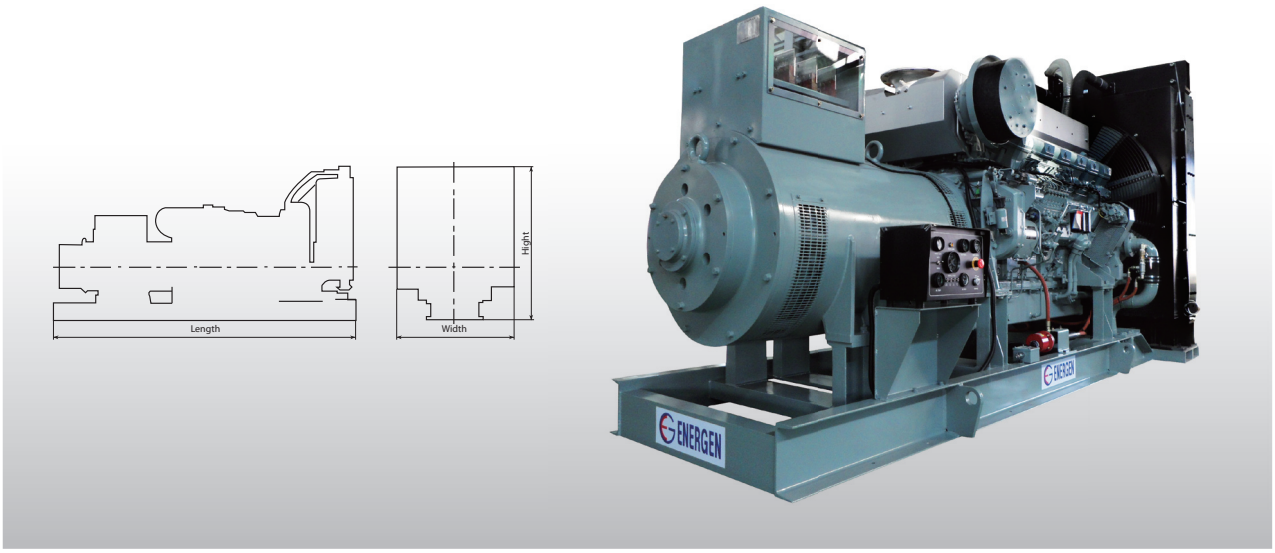




	SET MODEL	EG0800-C	EG0900-C	EG1000-C	EG1250-C	EG1500-C	EG1750-C	EG2000-C	EG2250C	EG2640-C
GENERATOR	Stand-by (KW)	800/705	900/800	1000/907	1250/1171	1500/-	1750/-	2000/-	2250/-	2640/-
	Prime (KW)	727/641	818/699	909/825	1136/1065	1363/-	1590/-	1818/-	- / -	2375/-
	Voltage (V)	220/127, 380/220, 440/254,3300,6600								
	Frequency (Hz)	60/50								
	Revolution (RPM)	1800/1500								
	Phase/Wire	1Ø 2W, 1Ø3W, 3Ø3W, 3Ø4W								
	Power Factor(%)	80(LAGGING)								
	Excitation	Brushless Self Excitation Revolving Field								
	Insulation Class	F or H								
ENGINE	Manufactorer	CUMMINS								
	Model	QSK23-G3	QST30-G3	QST30-G4	KTA50-G3	KTA50-G9	QSK60-G5	QSK60-G6	QSK60-G9	QSK78-G6
	Stand-by(HP)	1200/1030	1350/1200	1490/1300	1850/1742	2220/-	2922/-	2922/-	3251/-	3375/2700
	Prime(HP)	1085/940	1220/1080	1350/1180	1645/1541	1855/-	2647/-	2647/-	- / -	3044/2435
	Revolution (RPM)	1800/1500								
	No.of Cylinder	I-6	V-12	V-12	V-16	V-16	V-16	V-16	V-16	V-16
	Bore X Stroke(mm)	170×170	140×165	140×165	159×159	159×159	159×190	159×190	159×190	170×190
	Displacement(L)	23.15	30.5	30.5	50.3	50.3	60.2	60.2	60.2	77.6
	Compression Ratio	16 : 1	14 : 1	14 : 1	13.9 : 1	13.9 : 1	14.5 : 1	14.5 : 1	14.5 : 1	15.3 : 1
	Engine Type	4Cycle Water Cooled								
	Aspiration	Turbo charged and Air-to air intercooled			Turbo charged and Air to-water intercooled					
	Starting System	Starting Electric Motor by Battery								
	Governor	Electronic								
	Fuel Consumption(L/Hr)	212/178	224/204	267/224	330/293	392	443	521	569	652
	Coolant Capacity(L)	96.5	201	203	351	521	454	454	454	729
	Lub.Oil Capacity(L)	135	132.5	132.5	120	204	280	280	280	295
DIM	Length(mm)	4180	4297	4453	5112	5690	6175	6175	6175	7900
	Width(mm)	1879	1480	1752	1960	2033	2494	2494	2494	2494
	Height(mm)	2052	2139	2332	2237	2756	3116	3116	3116	3437
	Weight(kg)	7100	7100	7100	11200	11362	15891	15891	15781	19710

To improve product quality, the spec mentioned above could be changed and fuel consumption may be changed according to an operation.

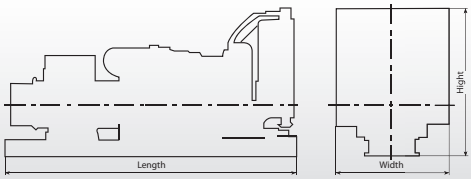
MITSUBISHI ENGINE SERIES

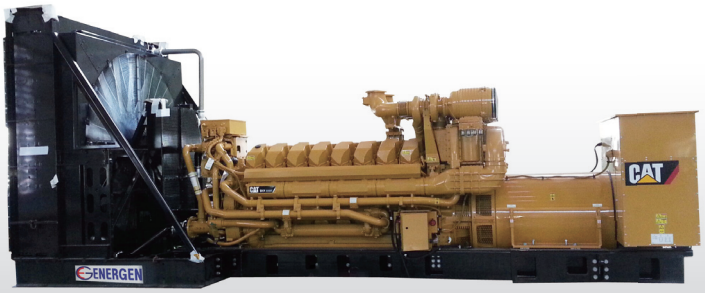


	SET MODEL	EG0800-MI	EG0900-MI	EG1000-MI	EG1250-MI	EG1500-MI	EG1750-MI	EG2000-MI
GENERATOR	Stand-by (KW)	800/705	900/800	1000/907	1250/1171	1500/1290	1750/1500	2000/1800
	Prime (KW)	727/641	818/699	909/825	1136/1065	1363/1100	1590/1350	1818/1636
	Voltage (V)	220/127, 380/220, 440/254,3300,6600						
	Frequency (Hz)	60/50						
	Revolution (RPM)	1800/1500						
	Phase/Wire	1Ø 2W, 1Ø 3W, 3Ø3W, 3Ø4W						
	Power Factor(%)	80(LAGGING)						
	Excitation	Brushless Self Excitation Revolving Field						
	Insulation Class	F or H						
ENGINE	Manufactorer	MITSUBISHI						
	Model	S12A2-PTA	S12A2-PTA2	S12H-PTA	S12R-PTA	S16R-PTA	S16R-PTA2	S16R-PTAA2
	Stand-by(HP)	1146/970	1273/1126	1448/1314	1791/1595	2279/2131	2547/2359	2822/2540
	Prime(HP)	980/880	1158/1024	1314/1193	1528/1448	2064/1944	2312/2145	2540/2258
	Revolution (RPM)	1800/1500						
	No.of Cylinder	V-12	V-12	V-12	V-12	V-16	V-16	V-16
	Bore X Stroke(mm)	150×160	150×175	150×175	170×180	170×180	170×180	170×180
	Displacement(L)	33.93	33.93	37.11	49.03	65.37	65.37	65.37
	Compression Ratio	14.5 : 1	15.3 : 1	14 : 1	14 : 1	14 : 1	13.5 : 1	13.5 : 1
	Engine Type	4Cycle Water Cooled						
	Aspiration	Turbo charged with Aftercooler						Turbo charged with air-to-air
	Starting System	Starting Electric Motor by Battery						
	Governor	Electric Type						
	Fuel Consumption(L/Hr)	190/165.6	224.7/192.7	241/216	282/260.6	386/347.6	435.2/398.7	469/403.8
	Coolant Capacity(L)	215	215	244	335	350	445	400
	Lub.Oil Capacity(L)	120	120	200	180	230	230	230
DIM	Length(mm)	3720	4350	4350	4500	5600	5600	5750
	Width(mm)	1620	1660	1740	1860	1820	2670	2430
	Height(mm)	2142	2250	2369	2617	2832	2910	3376
	Weight(kg)	6750	8450	9950	11000	12700	15150	16500

To improve product quality, the spec mentioned above could be changed and fuel consumption may be changed according to an operation.

CATERPILLAR ENGINE SERIES

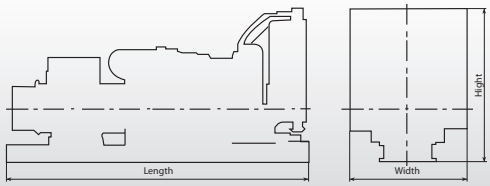




	SET MODEL	EG0800-R	EG0900-R	EG1000-R	EG1250-R	EG1500-R	EG1750-R	EG2000-R	EG2250-R	EG3000-R
GENERATOR	Stand-by (KW)	800	900	1000	1250	1500	1750	2000	2250	3000
	Prime (KW)	727	818	909	1136	1363	1590	1818	2000	2725
	Voltage (V)	220/127, 380/220, 440/254,3300,6600								
	Frequency (Hz)	60								
	Revolution (RPM)	1800								
	Phase/Wire	1Ø 2W, 1Ø3W, 3Ø3W, 3Ø4W								
	Power Factor(%)	80(LAGGING)								
	Excitation	Brushless Self Excitation Revolving Field								
	Insulation Class	F or H								
ENGINE	Manufactorer	CATERPILLAR								
	Model	3412STA	C32ATAAC	C32ATAAC	3512TA	3512BTA	3516TA	3516BTA	3516BTA	C175
	Stand-by(HP)	1180	1337	1482	1801	2168	2518	2876	3210	4423
	Prime(HP)	1071	1220	1380	1661	1967	2304	2628	2876	4034
	Revolution (RPM)	1800								
	No.of Cylinder	V-12	V-12	V-12	V-12	V-12	V-16	V-16	V-16	V-16
	Bore X Stroke(mm)	137.2×152.4	145×162	145×162	170×190	170×190	170×190	170×190	170×190	175×220
	Displacement(L)	27.03	32.1	32.1	51.8	51.8	69	69	69	84.7
	Compression Ratio	16.5 : 1	15 : 1	15 : 1	13 : 1	13 : 1	14 : 1	13.5 : 1	13.5 : 1	15.3 : 1
	Engine Type	4Cycle Water Cooled								
	Aspiration	Turbo charged with Aftercooler								
	Starting System	Starting Electric Motor by Battery								
	Governor	Mechanical Centrifugal Type								
	Fuel Consumption(L/Hr)	216.6	246.9	274.3	355	411	470	519	589	794
	Coolant Capacity(L)	190	190	190	380	380	459	509	530	720
	Lub.Oil Capacity(L)	68	68	68	320	320	417	417	417	540
DIM	Length(mm)	4485	4767	4767	5173	5128	6086	6444	6510	7600
	Width(mm)	1741	2024	2024	2094	2286	2286	2588	2848	3000
	Height(mm)	1986	2223	2223	2367	2332	2331	3051	3295	3400
	Weight(kg)	7500	9000	9000	12500	13500	15500	16500	17000	26000

To improve product quality, the spec mentioned above could be changed and fuel consumption may be changed according to an operation.

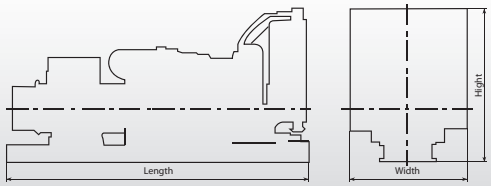
MTU ENGINE SERIES



	SET MODEL	EG0700-U	EG0800-U	EG0900-U	EG1000-U	EG1200-U	EG1500-U
GENERATOR	Stand-by (KW)	700/560	800/680	900/800	1000/880	1200/1000	1500/1450
	Prime (KW)	640/510	730/620	820/720	910/800	1080/900	1363/1300
	Voltage (V)	220/127, 380/220, 440/254,3300,6600					
	Frequency (Hz)	60/50					
	Revolution (RPM)	1800/1500					
	Phase/Wire	1Ø 2W, 1Ø3W, 3Ø3W, 3Ø4W					
	Power Factor(%)	80(LAGGING)					
	Excitation	Brushless Self Excitation Revolving Field					
	Insulation Class	F or H					
ENGINE	Manufactorer	MTU					
	Model	12V2000G45/25	12V2000G85/65	16V2000G45/25	16V2000G85/65	18V2000G85/65	12V4000G43/23
	Stand-by(HP)	1046/852	1194/1026	1354/1194	1495/1307	1757/1475	2328/2112
	Prime(HP)	952/778	1026/932	1227/1086	1354/1194	1597/1341	2038/1904
	Revolution (RPM)	1800/1500					
	No.of Cylinder	V-12	V-12	V-16	V-16	V-18	V-12
	Bore X Stroke(mm)	130×150	130×150	130×150	130×150	130×150	170×210
	Displacement(L)	23.88	23.88	31.84	31.84	35.82	57.24
	Compression Ratio	14 : 1	16 : 1	16 : 1	16 : 1	16 : 1	16.5 : 1
	Engine Type	4Cycle Water Cooled					
	Aspiration	Turbo charged and Air-to-air intercooled				Turbo charged and Air-to-water intercooled	
	Starting System	Starting Electric Motor by Battery					
	Govemor	Electric Type					
	Fuel Consumption(L/Hr)	196/155	217/180	240/207	264/227	315/262	405/345
	Coolant Capacity(L)	170	170	210	210	520	520
	Lub.Oil Capacity(L)	77	77	102	102	130	260
DIM	Length(mm)	3900	3900	4270	4370	4420	4980
	Width(mm)	1580	1480	1760	1770	2010	2430
	Height(mm)	1860	2096	2292	2250	2700	2950
	Weight(kg)	5500	7600	9300	9700	11500	13000

To improve product quality, the spec mentioned above could be changed and fuel consumption may be changed according to an operation.

MTU ENGINE SERIES



	SET MODEL	EG1750-U	EG2000-U	EG2300-U	EG2500-U	EG2800-U	EG3300-U
GENERATOR	Stand-by (KW)	1750/1600	2000/1800	2300/2000	2500/2250	2800/2490	3300/2690
	Prime (KW)	1590/1450	1818/1650	2100/1800	2300/2000	2500/2250	2840/2440
	Voltage (V)	220/127, 380/220, 440/254,3300,6600					
	Frequency (Hz)	60/50					
	Revolution (RPM)	1800/1500					
	Phase/Wire	1Ø 2W, 1Ø 3W, 3Ø3W, 3Ø4W					
	Power Factor (%)	80(LAGGING)					
	Excitation	Brushless Self Excitation Revolving Field					
	Insulation Class	F or H					
ENGINE	Manufactorer	MTU					
	Model	12V4000G83/63	16V4000G43/23	16V4000G83/63	20V4000G43/23	40V4000G83/63	20V4000G83/63
	Stand-by (HP)	2561/2347	3058/2635	3353/2930	3674/3245	4036/3581	4680/3822
	Prime (HP)	2328/2112	2709/2411	3058/2635	3339/2950	3674/3245	4036/3473
	Revolution (RPM)	1800/1500					
	No.of Cylinder	V-12	V-16	V-16	V-20	V-20	V-20
	Bore X Stroke (mm)	170×210	170×210	170×210	170×210	170×210	170×210
	Displacement (L)	57.24	76.32	76.32	95.4	95.4	95.4
	Compression Ratio	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1
	Engine Type	4Cycle Water Cooled					
	Aspiration	Turbo charged and Air-to-air intercooled					
	Starting System	Starting Electric Motor by Battery					
	Governor	Electric Type					
	Fuel Consumption(L/Hr)	451/394	532/433	605/438	634/549	711/602	875/647
	Coolant Capacity(L)	520	580	580	580	580	580
	Lub.Oil Capacity(L)	260	300	300	390	390	390
DIM	Length(mm)	5350	6500	6720	7636	7600	8100
	Width(mm)	2200	2900	2900	2900	4638	2900
	Height(mm)	2750	2835	2887	2887	3100	3100
	Weight(kg)	15300	16180	19000	23800	24500	26500

To improve product quality, the spec mentioned above could be changed and fuel consumption may be changed according to an operation.

Creative Value based management

Marine Auxiliary Diesel Generator set specification

SCGA Series

	SET MODEL		SCGA-105	SCGA-165	SCGA-225	SCGA-275	SCGA-460	SCGA-500	SCGA-890	SCGA-165	SCGA-960	SCGA-1196	SCGA-1700
GENERATOR	Voltage	60 Hz Volts	450										
		50 Hz Volts	390										
	Type		Horizontal, Self exciting, brushless, Single bearing , IP23										
	Peole-phase & wire-power factor		4 Poles-3phases & 4 wire- 0.8 lagging										
	Insulation/ temp.rise		H class / F class										
	Voltage regulation		± 1 %										
	Voltage adjusting		± 6 %										
ENGINE	Model		6BT5.9D(M)	6CTA8.3D(M)	QSM11D(M)		K19D(M)	QSK19D(M)	K38D(M)	QSK38D(M)	K50D(M)	QSK50D(M)	QSK60D(M)
	Type		4 stroke cycle direct injection, heat exchager type or keel cooling type										
	Aspiration		T : Turbocharged . TA : Turbocharged and aftercooled										
	Engine speed		60Hz : 1800 rpmmm , 50Hz 1500 rpm										
	Cylinder arrangement		Inline, 6 cylinder						60°vee 12 cylinder		60°vee 16 cylinder		
	Piston bore x stroke(mm)		102 X 120	114 X 135	125 X 147		159 X 159				159 X 159		159 X 190
	Displacement(L)		5.9	8.3	11		19		38		50		60
	Recommended fuel oil		No.2 or a fuel corrosponding to No.2 D.O of ASTM D-975(ISO8217 : DMX, DMA or BSMA100 L Class M1)										
	Fuel consumption (L/H)	60Hz	28	46	65.4	78.6	120	142.3	226.7	266.5	290.7	342.3	461.4
		50Hz	25	40	N/A	65	107	111.1	206.3	247	244.5	330.5	372
	Recommended lube oil		API service grade CE or CF-4 class SAE 15W-40										
	Lube oil capacity(L)		11.4 ~14	15.1~18.9	30.3~34.1		32~38	64.2~72	87~114	140~167	121~151	174~204	230~261
	Available starting devices		Elec battery or compressed Air										
	IMO		Not required	Tier ll									
DIM	Length(mm)		1,935	2,295	2,330	2,330	3,179	3,350	4,200	4,500	4,600	4,650	5,528
	Width(mm)		1,016	1,068	1,241	1,241	1,320	1,574	1,600	1,800	1,800	1,800	2,186
	Height(mm)		1,292	1,284	1,322	1,322	1,969	1,680	1,933	2,100	2,650	2,700	2,842
	Weight(kg)		1,510	1,710	2,355	2,655	4,235	4,300	8,000	9,500	12,000	13,000	16,000
OUT PUT	Generator (Kw)	60Hz	105	180	250	300	460	530	925	990	1,226	1,226	1,800
		80Hz	85	N/A	N/A	250	403	410	835	935	1,042	1,155	1,500
	Engine(HP)	1800RPM	150	270	355	425	680	755	1,300	1,400	1,730	1,800	2,547
		1500RPM	130	N/A	N/A	355	600	580	1,180	1,320	1,530	1,630	2,095

NOTE

- All engine and generator outputs are based on ISO 3046 and ISO 8528
- A 10% overload capability is availavle for a period of 1 hour within a 12 hour period of operation Total operating time at the 10% overload power shall not exceed 25 hours per year.
- Generator set dimension and weight are based on heat exchanger cooling type engine adn generator
- the data given in this table are subject to changed without notice for purpose of product improvement
- dimension & weight are for only reference and can be changed according to using application

Marine Emergency Diesel Generator set specification

SCGE Series

Mechanical fuel system Engine Application List

	SET MODEL			SCGE-100	SCGE-125	SCGE-165	SCGE-220	SCGE-255	SCGE-315	SCGE-350	SCGE-420	SCGE-460	SCGE-460
GENERATOR	Voltage	60 Hz	Volts	450									
		50 Hz	Volts	390									
	Type			Horizontal, Self exciting, brushless, Single bearing , IP23									
	Peole-phase & wire-power factor			4 Poles-3phases & 4 wire- 0.8 lagging									
	Insulation/ temp.rise			H class / F class									
	Voltage regulation			± 1 %									
	Voltage adjusting			± 6 %									
ENGINE	Model			6BT5.9D(M)	6CTA8.3D(M)	6CTA8.3D(M)	NT855D(M)		NTA855D(M)	KTA19D(M)			K19D(M)
	Type			4 stroke cycle direct injection, water cooled with radiator and blower fan diesel engine									
	Aspiration			T : Turbocharged . TA : Turbocharged and aftercooled									
	Governor type			Mechanical governor			EFC(electronic Fuel control) governor or woodward PSG(Mechanical) governor						
	Engine speed			60Hz : 1800 rpmmm , 50Hz 1500 rpm									
	Cylinder arrangement			Inline, 6 cylinder						Inline, 6 cylinder			
	Piston bore x stroke(mm)			102 X 120	114 X 135		140 X 152			159 X 159			
	Displacement(L)			5.9	8.3		14			19			
	Recommended fuel oil			No.2 D.O or a fuel corrosponding to No.2 D.O of ASTM D-975(ISO8217 : DMX, DMA or BSMA100 : Class M1)									
	Fuel consumption (L/H)	60Hz		28	34	46	64	74	87	98	111	120	120
		50Hz		25	30	40	51	69	N/A	83	97	107	107
	Recommended lube oil			API service grade CE or CF-4 class SAE 15W-40									
	Lube oil capacity(L)			11.4 ~14	15.1 ~ 18.9		32 ~ 38			32 ~ 38			
	Available starting devices			Elec battery or compressed Air									
	IMO			Tier I			NON-IMO			NON-IMO	Tier I	NON-IMO	Tier II
DIM	Length(mm)			2,510	2,650	2,750	3,180	3,180	3,280	3,320	3,430	3,430	3,430
	Width(mm)			1,200	1,240	1,240	1,390	1,390	1,390	1,635	1,635	1,635	1,635
	Height(mm)			1,500	1,600	1,600	1,880	1,880	1,880	1,860	2,140	2,140	2,140
	Weight(kg)			1,400	1,710	1,820	2,770	2,900	3,250	4,100	5,550	5,550	5,550
OUT PUT	Generator (Kw)	60Hz		100	125	168	220	257	319	350	420	463	463
		50Hz		86	100	148	184	249	270	300	370	411	411
	Engine(HP)	1800RPM		150	188	252	340	395	480	525	620	680	680
		1500RPM		130	164	219	280	350	410	450	540	600	600

NOTE

- All engine and generator outputs are based on ISO 3046 and ISO 8528
- A 10% overload capability is availavle for a period of 1 hour within a 12 hour period of operation Total operating time at the 10% overload power shall not exceed 25 hours per year.
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Creative Value based management

Marine Emergency Diesel Generator set specification

SCGE Series

Mechanical fuel system Engine Application List

	SET MODEL		SCGE-550	SCGE-690	SCGE-730	SCGE-835	SCGE-925	SCGE-890	SCGE-1130	SCGE-1196
GENERATOR	Voltage	60 Hz Volts	450							
		50 Hz Volts	390							
	Type		Horizontal, Self exciting, brushless, Single bearing , IP23							
	Peole-phase & wire-power factor		4 Poles-3phases & 4 wire- 0.8 lagging							
	Insulation/ temp.rise		H class / F class							
	Voltage regulation		± 1 %							
	Voltage adjusting		± 6 %							
ENGINE	Model		VTA280(M)	KTA38D(M)				K38D(M)	KTA50D(M)	K50D(M)
	Type		4 stroke cycle direct injection, water cooled with radiator and blower fan diesel engine							
	Aspiration		T : Turbocharged . TA : Turbocharged and aftercooled							
	Governor type		EFC(electronic Fuel control) governor or woodward PSG(Mechanical) governor							
	Engine speed		60Hz : 1800 rpmmm , 50Hz 1500 rpm							
	Cylinder arrangement		40°vee12cylinder	60°vee12cylinder					60°vee16cylinder	
	Piston bore x stroke(mm)		140 X 152	159 X 159						
	Displacement(L)		28	38					50	
	Recommended fuel oil		No.2 D.O or a fuel corrosponding to No.2 D.O of ASTM D-975(ISO8217 : DMX, DMA or BSMA100 : Class M1)							
	Fuel consumption (L/H)	60Hz	154	195	204	218	245	226.7	282	290.7
		50Hz	140	160	167	215	N/A	206.3	254	244.5
	Recommended lube oil		API service grade CE or CF-4 class SAE 15W-40							
	Lube oil capacity(L)		60~68	87~114					121~151	
	Available starting devices		Elec battery or compressed Air							
	IMO		Tier I	NON-IMO				Tier II	NON-IMO	Tier II
DIM	Length(mm)		3,900	5,100	5,100	5,170	5,200	5,440	5,260	5,600
	Width(mm)		1,700	1,900	1,900	1,900	1,900	1,900	1,900	1,900
	Height(mm)		2,450	2,650	2,650	2,650	2,650	2,650	2,650	2,650
	Weight(kg)		5,800	7,950	8,100	8,350	8,550	9,000	11,000	12,000
OUT PUT	Generator (Kw)	60Hz	550	694	733	836	928	890	1,130	1,196
		50Hz	517	579	607	748	819	819	1,025	1,060
	Engine(HP)	1800RPM	815	1,030	1,085	1,220	1,350	1,300	1,635	1,730
		1500RPM	750	850	890	1,080	1,180	1,180	1,470	1,530

NOTE

- All engine and generator outputs are based on ISO 3046 and ISO 8528
- A 10% overload capability is availavle for a period of 1 hour within a 12 hour period of operation Total operating time at the 10% overload power shall not exceed 25 hours per year.
- Generator set dimension and weight are based on heat exchanger cooling type engine adn generator
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Marine Emergency Diesel Generator set specification

SCGE Series

Electric fuel system Engine Application List

	SET MODEL			SCGE-225	SCGE-275	SCGE-500	SCGE-960	SCGE-1200	SCGE-1700
GENERATOR	Voltage	60 Hz	Volts	450					
		50 Hz	Volts	390					
	Type			Horizontal, Self exciting, brushless, Single bearing , IP23					
	Peole-phase & wire-power factor			4 Poles-3phases & 4 wire- 0.8 lagging					
	Insulation/ temp.rise			H class / F class					
	Voltage regulation			± 1 %					
	Voltage adjusting			± 6 %					
ENGINE	Model			QSM11D(M)		QSK19D(M)	QSK38D(M)	QSK50D(M)	QSK60D(M)
	Type			4 stroke cycle direct injection, water cooled with radiator and blower fan diesel engine					
	Aspiration			TA : Turbocharged and aftercooled					
	Governor type			ECM(Electronic Control Module)					
	Engine speed			60Hz : 1800 rpmmm , 50Hz : 1500 rpm					
	Cylinder arrangement			Inline, 6 cylinder			60°vee12cylinder	60°vee16cylinder	60°vee16cylinder
	Piston bore x stroke(mm)			140 X 152		159 X 159	159 X 159	159 X 159	159 X 190
	Displacement(L)			11		19	38	50	60
	Recommended fuel oil			No.2 D.0 or a fuel corrosponding to No.2 D.O of ASTM D-975(ISO8217 : DMX, DMA or BSMA100 : Class M1)					
	Fuel consumption (L/H)	60Hz		65.4	78.6	142.3	266.5	342.3	461.4
		50Hz		N/A	65	111.1	247	330.5	372
	Recommended lube oil			API service grade CE or CF-4 class SAE 15W-40					
	Lube oil capacity(L)			30.3 ~ 34.1		64.2 ~ 72	140 ~ 167	174 ~ 204	230 ~ 261
	Available starting devices			Elec battery or compressed Air					
	IMO availbility			Tier II					
DIM	Length(mm)			3,660	3,660	3,710	5,400	5,700	5,937
	Width(mm)			1,310	1,310	1,900	2,000	2,000	2,250
	Height(mm)			1,850	1,850	2,380	2,700	2,700	2,716
	Weight(kg)			2,872	3,000	5,340	12,000	13,000	14,914
OUT PUT	Generator (Kw)	60Hz		225	275	500	960	1,240	1,700
		50Hz		N/A	225	375	900	1,110	1,450
	Engine(HP)	1800RPM		355	425	755	1,400	1,800	2,547
		1500RPM		N/A	355	580	1,320	1,630	2,095

NOTE

- All engine and generator outputs are based on ISO 3046 and ISO 8528
- A 10% overload capability is availavle for a period of 1 hour within a 12 hour period of operation Total operating time at the 10% overload power shall not exceed 25 hours per year.
- Generator set dimension and weight are based on heat exchanger cooling type engine adn generator
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Certificate

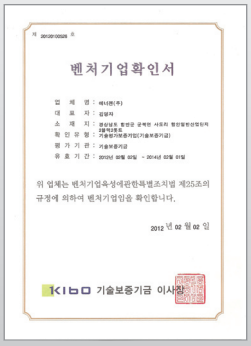
- Certificate for Business Registration
- Certificate of Factory Registration
- Certificate of Venture Company
- Certificate of ISO9001 by ICR
- Certificate of ISO14001 by ICR
- Trading business unique numbering
- Technical Research Institute
- Diesel generators produce a certificate
- Certificate of Promising Small & Medium Enterprise Appointment


사업자등록증(영문)

사업자등록증(한글)


공장등록증

벤처기업



벤처기업

iso9001(영문)

인증서ISO9001(한글)

iso14001(영문)

INQUIRY

Name		TEL/Phone	
E-mail			

Equipment		Q´TY	
Buyer / User		End user	
Place of installation			
Delivery date	(YY). (MM). (DD).	Quotation date	. . .
Requirements	☐ Drawings ☐ Specifications ☐ Yes ☐ No		

Specification

Output	☐ Standby	☐ Prime	☐ Continuous	Capacity (KAV/ KW)
Voltage	(V)	Frequency	(Hz)	ph-w (ph- w)
Engine Type	☐ Maker standard		☐ Other ( )	
	☐ Open-skid bed type			
	☐ Sound proof bonnet type		Noise level	below dB at m
	☐ Sound proof Container type			
Location	☐ Indoor	☐ Outdoor	☐ Other ( )	
Ambient Temp	℃ ~ ℃	Altitude	☐ below 1000m	☐ Other (m)
Fuel tank	☐ Internal	☐ Maker standard (l)		☐ Other (l)
	☐ External	☐ 490 l	☐ 990 l	☐ Other (l)
Use	☐ Emergency	☐ Commercial	h/day	day/year
Circuit breaker	☐ ELCB	☐ MCCB	☐ ACB	☐ Continuous operation
Operation Panel	☐ Local	☐ Remote		

Other Requests

Once you complete the inquiry above, please send it via E-mail or Fax.
● Use the copy. E-mail : energen21@naver.com Fax : 82-55-582-1254

ENERGEN

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