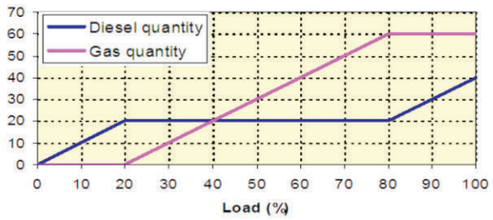
Dual Fuel Generator

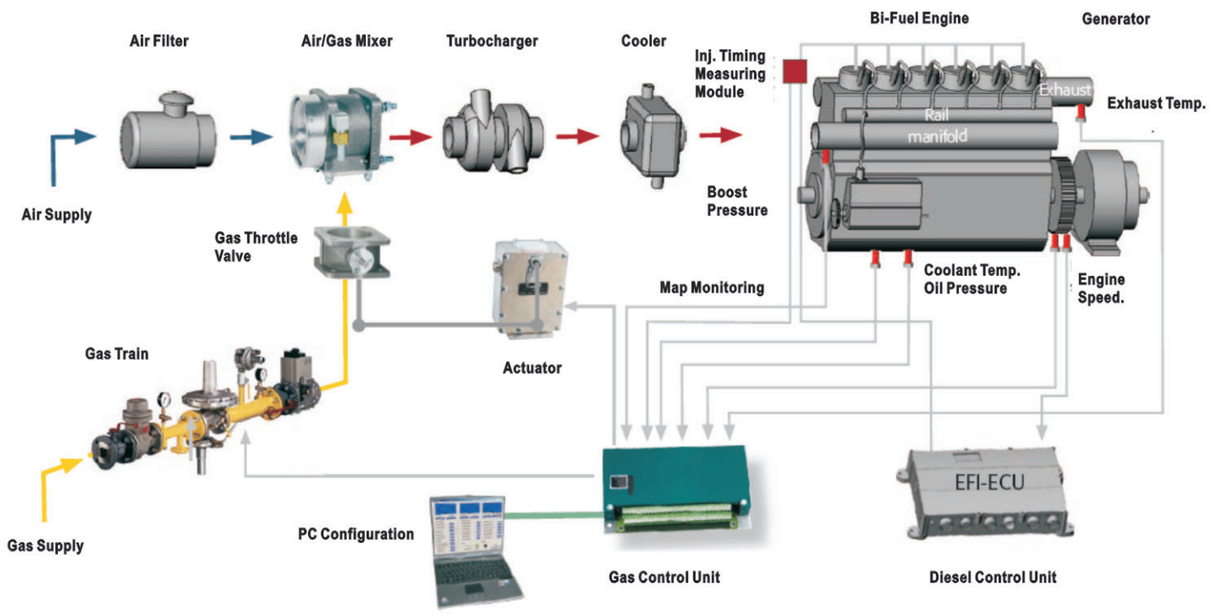
Features

. Adaptable to any third-party EFI control using PPN or Common Rail technology
. Speed control remains with diesel governor, therefore no significant loss in engine performance
. Bus interface (CAN or ModBus) to existing diesel governor
. Automatic gas quantity adaption, based on engine speed, diesel fuel quantity, charge air pressure and temperatures
. Gas auto shut-off in emergency case, automatic return to Dual Fuel in safe condition

Configuration

. Standard digital controllers
. Different sized actuators covering a wide torque range
. Magnetic speed pickup
. Pressure and temperature sensors (gas, air, cooling water, exhaust)
. Injection time measuring module for diesel EFI
. Gas mixer, gas throttle valve





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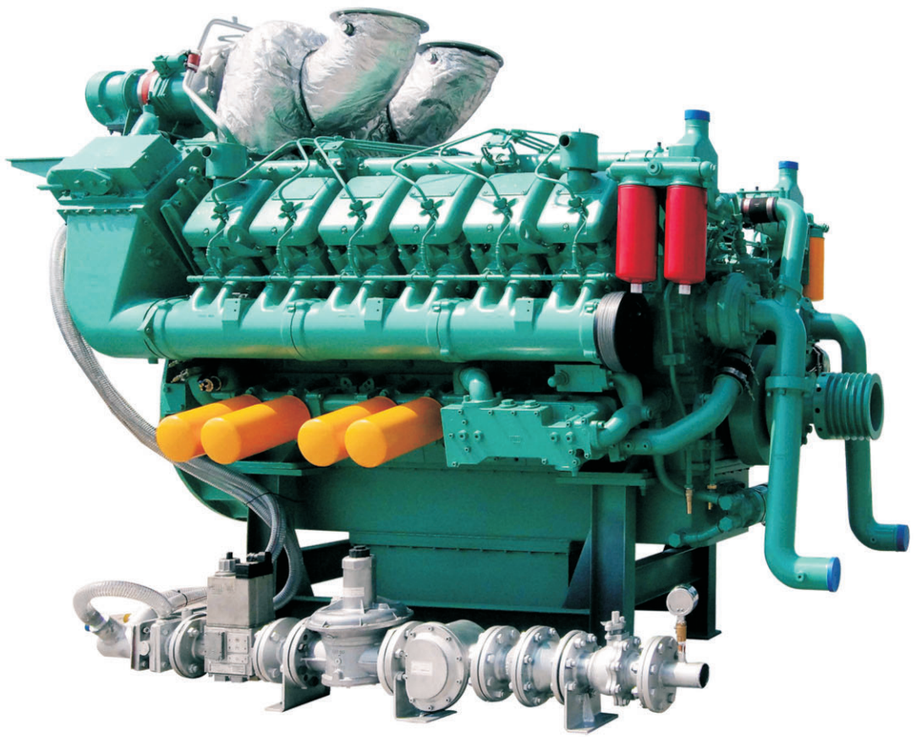

50Hz 1500rpm Up to 2750kVA

60Hz 1200rpm Up to 2500kVA

30% Diesel & 70% Gas

es Dual Fuel Generator

50Hz 1500rpm, 900kVA-2750kVA

30% Diesel 70% Gas

Genset Model		HDGM1100	HDGM1375	HDGM1650	HDGM2200	HDGM2750
Engine Model		QTA2160BG1	QTA3240BG1	QTA3240BG3	QTA4320BG1	QTA5400BG1
Rating Speed	rpm	1500	1500	1500	1500	1500
Frequency	Hz	50	50	50	50	50
Generator Continuous Output (COP)	kW	720	900	1100	1500	1800
Generator Prime Output (PRP)	kW	800	1000	1200	1600	2000
Generator Standby Output (LTP)	kW	880	1100	1320	1760	2200
Power Factor		0.8	0.8	0.8	0.8	0.8
Gas Engine Parameter						
Engine Continuous Output (COP)	kW	800	964	1178	1637	1865
Engine Prime Output (PRP)	kW	877	1088	1309	1740	2166
Engine Standby Output (LTP)	kW	961	1193	1435	1908	2374
Configuration		8 Vee	12 Vee	12 Vee	16 Vee	20 Vee
Displacement	l	35.4	53.1	53.1	70.8	88.5
Bore	mm	170	170	170	170	170
Stroke	mm	195	195	195	195	195
Compression Ratio		13.5:1	13.5:1	13.5:1	13.5:1	13.5:1
Piston Speed	m/s	9.75	9.75	9.75	9.75	9.75
Number of Flywheel Teeth		218	218	218	218	218
Flywheel House Size		SAE00-18	SAE00-21	SAE00-21	SAE00-21	SAE00-21
System Parameter						
Oil Capacity	l	160	180	180	240	300
Max. Allowed Oil Temperature	° C	110	110	110	110	110
Oil Pressure Warning	kPa	300	300	300	300	300
Oil Pressure Shutdown	kPa	200	200	200	200	200
Coolant Capacity for Engine	l	70	100	100	140	200
Max. Coolant Warning Temperature	° C	93	93	93	93	93
Max. Coolant Shutdown Temperature	° C	97	97	97	97	97
Flow of Coolant pump	m3/h	48/45	48/45	48/45	80/75	80/75
Max. Exhaust Temperature	° C	545	520	575	530	510
Exhaust Flow	m3/min	225	269	323	481	560
Exhaust Flange Diameter	mm	250	2*250	2*250	2*250	2*250
Charging Alternator Capacity	A	55	55	55	55	55
Starting Voltage	V	24	24	24	24	24
Fuel & Gas Consumption (PRP)						
Fuel Consumption at 75% of PRP	l/h	46	57	69	91	107
Gas Consumption at 75% of PRP	m3/h	122	152	184	246	286
Fuel Consumption at 100% of PRP	l/h	61	76	92	122	143
Gas Consumption at 100% of PRP	m3/h	163	203	245	328	382
Generator Parameter-MeccAlte						
Generator Model		ECO43-1LN/4	ECO43-2LN/4	ECO46-1S/4	ECO46-1L/4	ECO46-2L/4
Generator Prime Output	kW	880	1040	1200	1680	2000
Generator Efficiency @ 0.8PF		95.8%	96.0%	96.2%	96.6%	96.8%
Genset Dimension						
Length	mm	4600	5200	5200	5600	* 5600
Width	mm	2190	2190	2190	2190	* 1800
Height	mm	2300	2580	2580	2800	* 2400
Genset Weight	kg	7650	10500	11500	13500	18500

Standard Supply Scope:

. Googol Dual Fuel engine with alternator, 400V, 1500rpm, 50Hz
. Governor System: Governor controller, Throttle, Sensor,
. Gas Low Heat Value: ⩾ 36MJ/Nm3
. Mark * size with no radiator
. Air/Gas Mix System: Air/gas mixer, Controller, Pressure sensor
. Gas Train:Ball Valve, Gas filter, Gas Regulator, Gas Control Valve
. Maximum Gas Proportion: 70%

60Hz 1200rpm, 750kVA-2500kVA

30% Diesel 70% Gas

Genset Model		HDGM1000/6	HDGM1375/6	HDGM2063/6	HDGM2500/6
Engine Model		QTA2160BSG2	QTA3240BSG2	QTA4320BSG2	QTA5400BSG2
Rating Speed	rpm	1200	1200	1200	1200
Frequency	Hz	60	60	60	60
Generator Continuous Output (COP)	kW/kVA	600 /750	900 /1125	1200 /1500	1600 /2000
Generator Prime Output (PRP)	kW/kVA	720 /900	1000 /1250	1500 /1875	1800 /2250
Generator Standby Output (LTP)	kW/kVA	800 /1000	1100 /1375	1650/2063	2000 /2500
Power Factor		0.8	0.8	0.8	0.8
Gas Engine Parameter					
Engine Continuous Output (COP)	kW	672	964	1244	1687
Engine Prime Output (PRP)	kW	804	1093	1626	1963
Engine Standby Output (LTP)	kW	880	1199	1783	2172
Configuration		8 Vee	12 Vee	16 Vee	20 Vee
Displacement	l	35.4	53.1	70.8	88.5
Bore	mm	170	170	170	170
Stroke	mm	195	195	195	195
Compression Ratio		13.5:1	13.5:1	13.5:1	13.5:1
Piston Speed	m/s	7.8	7.8	7.8	7.8
Number of Flywheel Teeth		218	218	218	218
Flywheel House Size		SAE00-18	SAE00-21	SAE00-21	SAE00-21
System Parameter					
Oil Capacity	l	160	180	240	300
Max. Allowed Oil Temperature	° C	110	110	110	110
Oil Pressure Warning	kPa	300	300	300	300
Oil Pressure Shutdown	kPa	200	200	200	200
Coolant Capacity for Engine	l	70	100	140	200
Max. Coolant Warning Temperature	° C	93	93	93	93
Max. Coolant Shutdown Temperature	° C	97	97	97	97
Flow of Coolant pump	m3/h	38/36	38/36	64/60	64/60
Max. Exhaust Temperature	° C	500	480	500	530
Exhaust Flow	m3/min	196	297	428	504
Exhaust Flange Diameter	mm	250	2*250	2*250	2*250
Charging Alternator Capacity	A	55	55	55	55
Starting Voltage	V	24	24	24	24
Fuel & Gas Consumption (PRP)					
Fuel Consumption at 75% of PRP	l/h	48	55	85	94
Gas Consumption at 75% of PRP	m3/h	120	149	228	253
Fuel Consumption at 100% of PRP	l/h	62	74	115	126
Gas Consumption at 100% of PRP	m3/h	159	198	308	337
Generator Parameter-Marathon					
Generator Model		MX-750-6	MX-1000-6	MX-1500-6	MX-1800-6
Generator Prime Output	kW	750	1000	1500	1800
Generator Efficiency @ 0.8PF		95.3%	95.4%	95.5%	96.3%
Genset Dimension					
Length	mm	4600	5200	5600	* 5600
Width	mm	2190	2190	2190	* 1800
Height	mm	2300	2580	2800	* 2400
Genset Weight	kg	7650	10500	13500	18500

Standard Supply Scope:

. Googol Dual Fuel engine with alternator, 480V, 1200rpm, 60Hz
. Governor System: Governor controller, Throttle, Sensor,
. Gas Low Heat Value: ⩾ 36MJ/Nm3
. Mark * size with no radiator
. Air/Gas Mix System: Air/gas mixer, Controller, Pressure sensor
. Gas Train: Ball Valve, Gas filter, Gas Regulator, Gas Control Valve
. Maximum Gas Proportion: 70%