

## Features:

- Excitation system: self-excited (AREP and PMG are optional)
- ATS (automatic transfer switch) receptacle
- Lockable battery isolator switch
- Stainless galvanized zinc plates with strong corrosion resistance
- Vibration isolators between the engine/alternator and base frame
- Integrated wiring design
- Base fuel tank for at least 8 hours running
- Equipped with an industrial muffler
- Engine oil pump
- 50 C radiator
- Top lifting and steel base frame with forklift holes
- Drainage for fuel tank
- Complete protection functions and safety labels
- IP54 (soundproof sets), IP56 (control system)
- Water jacket preheater, oil heater and double air cleaner, etc. are available.



### Output Ratings

Generating Set Model	Prime	Standby
<b>X800C6/S</b>	906kVA/725kW	997kVA/798kW

Ratings at 0.8 power factor.

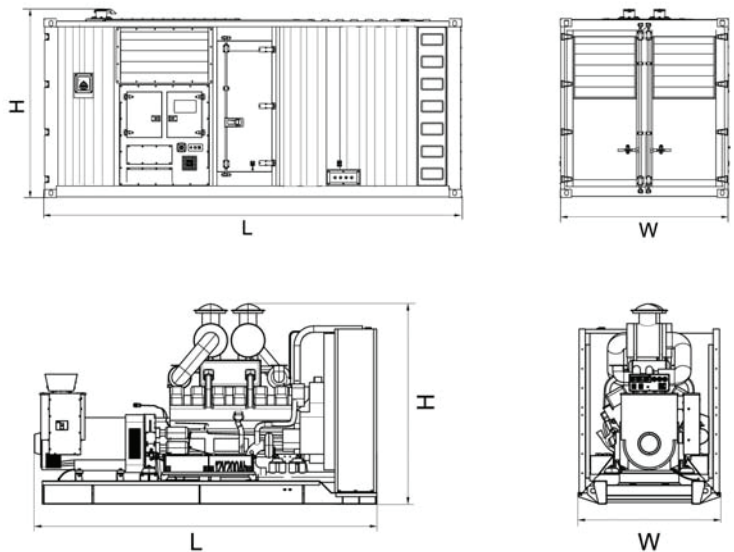
### Ratings and Performance Data

<b>Engine Make &amp; Model:</b>	KTA38-G2	
<b>Alternator Model:</b>	LVI634C	
<b>Alternator Brand:</b>	STAMFORD	
<b>Control System:</b>	PLC-8610 / PLC-7420	
<b>Noise Level@7m:</b>	73.9	
<b>Frequency &amp; Phase:</b>	60Hz & 3PH	
<b>Engine Speed: RPM</b>	1800	
<b>Structure Type:</b>	X800C6	A
	X800C6S	C
<b>Fuel Tank Capacity: L</b>	X800C6	1300
	X800C6S	1150
<b>Fuel Consumption: l/hr (100% Load)</b>	Prime	204
	Standby	225

### Dimensions and Weights

Generating Set Model	Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	Dry kg (lb)
<b>X800C6</b>	4330	1750	2537	7176
<b>X800C6S</b>	6058	2438	2725	12192

Dry = With Lube Oil      Wet = With Lube Oil and Coolant



Also available in the following voltages: 415/240V-380/220V-220/127V-200/115V;

ESP: Standby Power Standby duty, operation under variable load, without over load;

PRP: Prime Power-Continuous duty operation, under variable load 24/24h-10% over load permissible 1 hour/12 hours;

The data is only for your reference but not for use of sales.

M: Mechanical speed governor, E/ECU: Electronic speed governor;

NA: Naturally aspirated, TC: Turbocharged, TCA: Turbocharged and air-air aftercooled, TCW: Water-cooled Turbocharged;

The weights are approximate and without fuel.

## Engine model: KTA38-G2

### GENERAL ENGINE DATA

Type .....		4-Cycle; 60° Vee; 12-Cylinder Diesel	
Aspiration .....		Turbocharged and Aftercooled	
Bore x Stroke.....	— in x in (mm x mm)	6.25 x 6.25 (159 x 159)	
Displacement.....	— in <sup>3</sup> (liter)	2300 (37.8)	
Compression Ratio.....		14.5 : 1	
<b>Dry Weight</b>			
Fan to Flywheel Engine.....	— lb (kg)	8555	(3880)
Heat Exchanger Cooled Engine.....	— lb (kg)	8996	(4080)
<b>Wet Weight</b>			
Fan to Flywheel Engine.....	— lb (kg)	9065	(4111)
Heat Exchanger Cooled Engine.....	— lb (kg)	9667	(4384)
<b>Moment of Inertia of Rotating Components</b>			
• with FW 6001 Flywheel .....	— lb <sub>m</sub> • ft <sup>2</sup> (kg • m <sup>2</sup> )	248	(10.4)
• with FW 6011 Flywheel .....	— lb <sub>m</sub> • ft <sup>2</sup> (kg • m <sup>2</sup> )	493	(20.8)
Center of Gravity from Rear Face of Flywheel Housing (FH 6024).....	— in (mm)	38.6	(980)
Center of Gravity Above Crankshaft Centerline .....	— in (mm)	11.0	(279)
Maximum Static Loading at Rear Main Bearing.....	— lb (kg)	2000	(908)

### ENGINE MOUNTING

Maximum Bending Moment at Rear Face of Block .....	— lb • ft (N • m)	4500	(6100)
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### EXHAUST SYSTEM

Maximum Back Pressure.....	— in Hg (mm Hg)	3	(76)
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### AIR INDUCTION SYSTEM

<b>Maximum Intake Air Restriction</b>			
• with Dirty Filter Element.....	— in H <sub>2</sub> O (mm H <sub>2</sub> O)	25	(635)
• with Normal Duty Air Cleaner and Clean Filter Element.....	— in H <sub>2</sub> O (mm H <sub>2</sub> O)	10	(254)
• with Heavy Duty Air Cleaner and Clean Filter Element.....	— in H <sub>2</sub> O (mm H <sub>2</sub> O)	15	(381)

### COOLING SYSTEM

Coolant Capacity — Engine Only.....	— US gal (liter)	31.2	(118)
— with HX 6076 Heat Exchanger.....	— US gal (liter)	51.2	(194)
<b>Maximum Coolant Friction Head External to Engine</b>			
— 1800 rpm.....	— psi (kPa)	10	(69)
— 1500 rpm.....	— psi (kPa)	7	(48)
Maximum Static Head of Coolant Above Engine Crank Centerline.....	— ft (m)	60	(18.3)
Standard Thermostat (Modulating) Range.....	— °F (°C)	180 - 200	(82 - 93)
Minimum Pressure Cap .....	— psi (kPa)	10	(69)
Maximum Top Tank Temperature for Standby / Prime Power .....	— °F (°C)	220 / 212	(104 / 100)
Minimum Raw Water Flow @ 90°F to HX 6076 Heat Exchanger .....	— US gpm (liter / min)	108	(409)
Maximum Raw Water Inlet Pressure at HX 6076 Heat Exchanger .....	— psi (kPa)	50	(345)

### LUBRICATION SYSTEM

Oil Pressure @ Idle Speed.....	— psi (kPa)	20	(138)
@ Governed Speed .....	— psi (kPa)	45 - 65	(310 - 448)
Maximum Oil Temperature.....	— °F (°C)	250	(121)
Oil Capacity with OP 6023 Oil Pan : High - Low .....	— US gal (liter)	30 - 23	(114 - 87)
Total System Capacity (Including Bypass Filter).....	— US gal (liter)	35.7	(135)
Angularity of OP 6023 Oil Pan — Front Down .....			30°
— Front Up .....			30°
— Side to Side.....			30°



## Alternator model: LVI634C

CONTROL SYSTEM SER.3	SEPARATELY EXCITED BY P.M.G.		
A.V.R.	MX341	MX321	
VOLTAGE REGULATION	± 1.0 %	± 0.5 %	With 4% Engine Governing
SUSTAINED SHORT CIRCUIT	REFER TO SHORT CIRCUIT DECREMENT CURVES (page 7)		

INSULATION SYSTEM	CLASS H
PROTECTION	IP23
RATED POWER FACTOR	0.8
STATOR WINDING	DOUBLE LAYER LAP
WINDING PITCH	TWO THIRDS
WINDING LEADS	6
STATOR WDG. RESISTANCE (L-L)	0.0034 Ohms PER PHASE AT 22°C STAR CONNECTED
ROTOR WDG. RESISTANCE	1.66 Ohms at 22°C
R.F.I. SUPPRESSION	BS EN 61000-6-2 & BS EN 61000-6-4, VDE 0875G, VDE 0875N. refer to factory for others
WAVEFORM DISTORTION	NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0%
MAXIMUM OVERSPEED	2250 Rev/Min
BEARING DRIVE END	BALL. 6228 (ISO)
BEARING NON-DRIVE END	BALL. 6319 (ISO)

	1 BEARING	2 BEARING
WEIGHT COMP. GENERATOR	2076 kg	2120 kg
WEIGHT WOUND STATOR	907 kg	907 kg
WEIGHT WOUND ROTOR	788 kg	744 kg
WR <sup>2</sup> INERTIA	17.652 kgm <sup>2</sup>	17.1086 kgm <sup>2</sup>
SHIPPING WEIGHTS in a crate	2173 kg	2200 kg
PACKING CRATE SIZE	183 x 92 x 140 (cm)	183 x 92 x 140 (cm)

	50 Hz				60 Hz			
TELEPHONE INTERFERENCE	THF<2%				TIF<50			
COOLING AIR	2.18 m <sup>3</sup> /sec 4619 cfm				2.63 m <sup>3</sup> /sec 5573 cfm			
VOLTAGE STAR (Y)	380/220	400/231	415/240	440/254	416/240	440/254	460/266	480/277
KVA BASE RATING FOR REACTANCE VALUES	760	800	800	725	865	916	958	1000
X <sub>d</sub> DIR. AXIS SYNCHRONOUS	2.69	2.56	2.38	1.92	3.07	2.91	2.79	2.67
X' <sub>d</sub> DIR. AXIS TRANSIENT	0.15	0.14	0.13	0.11	0.17	0.16	0.16	0.15
X'' <sub>d</sub> DIR. AXIS SUBTRANSIENT	0.11	0.10	0.10	0.08	0.12	0.12	0.11	0.11
X <sub>q</sub> QUAD. AXIS REACTANCE	2.24	2.13	1.98	1.60	2.56	2.42	2.32	2.22
X'' <sub>q</sub> QUAD. AXIS SUBTRANSIENT	0.27	0.25	0.24	0.19	0.30	0.28	0.27	0.26
X <sub>L</sub> LEAKAGE REACTANCE	0.08	0.08	0.07	0.06	0.09	0.09	0.08	0.08
X <sub>2</sub> NEGATIVE SEQUENCE	0.19	0.18	0.17	0.13	0.22	0.21	0.20	0.19
X <sub>0</sub> ZERO SEQUENCE	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.03

REACTANCES ARE SATURATED

VALUES ARE PER UNIT AT RATING AND VOLTAGE INDICATED

T' <sub>d</sub> TRANSIENT TIME CONST.	0.099 s
T'' <sub>d</sub> SUB-TRANSTIME CONST.	0.013 s
T' <sub>do</sub> O.C. FIELD TIME CONST.	2.95 s
T <sub>a</sub> ARMATURE TIME CONST.	0.034 s
SHORT CIRCUIT RATIO	1/X <sub>d</sub>