



# ALTURDYNE

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## 20 - 80 KW ROTARY ENGINE GENERATOR SETS

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ALTURDYNE assembles the rotary engine coupled with a variety of generators for lightweight, rugged, reliable and cost-effective power generation. The generator set with electric start rotary engine is exceptionally quiet, vibration free, has low emissions and long life. It is well suited for use where minimum size and light weight are desirable.

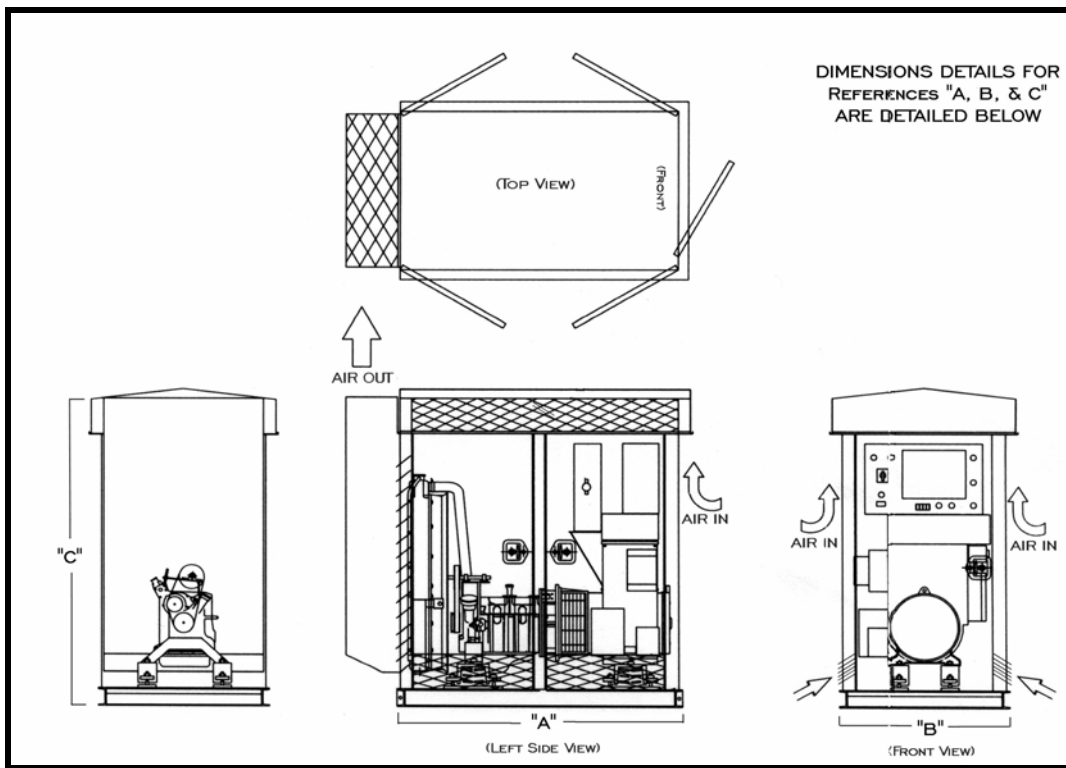
Available configurations include DC or 50/60 and 400 Hz AC, at various voltages. Alturdyne can provide control systems and packaging to meet specific requirements.



Rotary generator sets are easy to install and much lighter weight than reciprocating units. They don't require vibration isolation. They can operate on multi-grade gasoline, alcohol, natural gas or propane. Little maintenance attention is required for maximum reliability. Lube oil consumption is very low. Starting is fully automatic and controlled so the unit can produce power within seconds. Rotary combustion engines are clean-burning, emit no visible smoke, and meet published emissions requirements. Rotary combustion engines do not require excessive auxiliary heating for reliable starting in extreme temperatures. The rotary engine possesses a higher rotating moment of inertia than reciprocating units, so that better dynamic response to load changes is achieved.

Alturdyne is experienced in power generation design. The rotary engine generator sets constitute another element in our unique line of gas, diesel and turbine power packages. We will enjoy discussing your potential applications for this versatile power system.

The Alturdyne A650 series engine is a family of Wankel-type rotary internal combustion engines for application as prime mover for pumps, generators, compressors, and auxiliary power units. Single rotor as well as two, three and four-rotor units are available along with options enabling the A650 series to use a variety of fuels. The engine's simple construction with few moving parts and all rotary internal motion yields virtually vibration-free operation. Ratings shown are based on natural gas fuel for continuous duty use. Higher ratings using other fuels and engine speeds are available.



Rotary Generator Set

DIMENSIONS DETAILS FOR REFERENCES "A, B, & C" ARE DETAILED BELOW

### SPECIFICATIONS:

RATINGS - Based on natural gas fuel		20 KW	40 KW	60 KW	80 KW
# of Rotors		1	2	3	4
Engine Model		A650	Mazda 13-B	Mazda 20-B	A2600
Displacement	cu in / cc	40 / 650	79 / 1300	119 / 1944	158 / 2592
Horsepower	3600 rpm	60	78	117	156
Fuel Consumption (Gasoline)	gals/hr	3.6	7.2	10.8	14.4
Fuel Consumption (NG) - 1000 BTU/cu ft	cu ft/hr	406	812	1218	1624
Fuel Consumption (LPG) - 2500 BTU	cu ft/hr	173	346	519	692
Oil Consumption (24 hrs)	qt	0.5	1	1.5	2.0
Oil Sump Capacity	gal	2.5	5	7.50	10
Engine Jacket Water Capacity	gal	1	2	3	4
Radiator Capacity	gals	5	7	10	17
Water Pump Flow	gpm	34	34	34	36
Exhaust Gas Temp (Stack)	°F	1500	1500	1500	1500
Exhaust Outlet Diameter, External	in	2	2.50	2.75	4.0
Engine Heat Rejection	BTUM	1953	3905	5858	7810
Airflow, Radiator	cfm	4500	9000	13000	18000
Air Flow, Heat Exchanger	cfm	1000	2000	3000	4000
Combustion Airflow	cfm	70	140	210	280
Genset Radiated Heat	BTUM	265	530	795	1060
Electrical System Voltage		12	12	12	12
Recommended Battery (0°F/-18°C) (12V) (CCA)		95	95	95	95

### DIMENSIONS & WEIGHT

"A" Length, Overall (Unenclosed / Enclosed)	in	21.5 / 34	26.5 / 63	29 / 80	34.4 / 100
"B" Width, Overall (Unenclosed / Enclosed)	in	22 / 36	36 / 46	36 / 46	36 / 46
"C" Height, Overall (Unenclosed / Enclosed)	in	16 / 62	26 / 72	36 / 72	46 / 90
Weight, Dry (Unenclosed / Enclosed)	lb	650 / 850	800 / 1000	950 / 1200	1100 / 1300

**Note:** Add 25% to the above ratings for Turbocharged units  
 Acoustic level data available per configuration  
 Emission estimates available per configuration

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