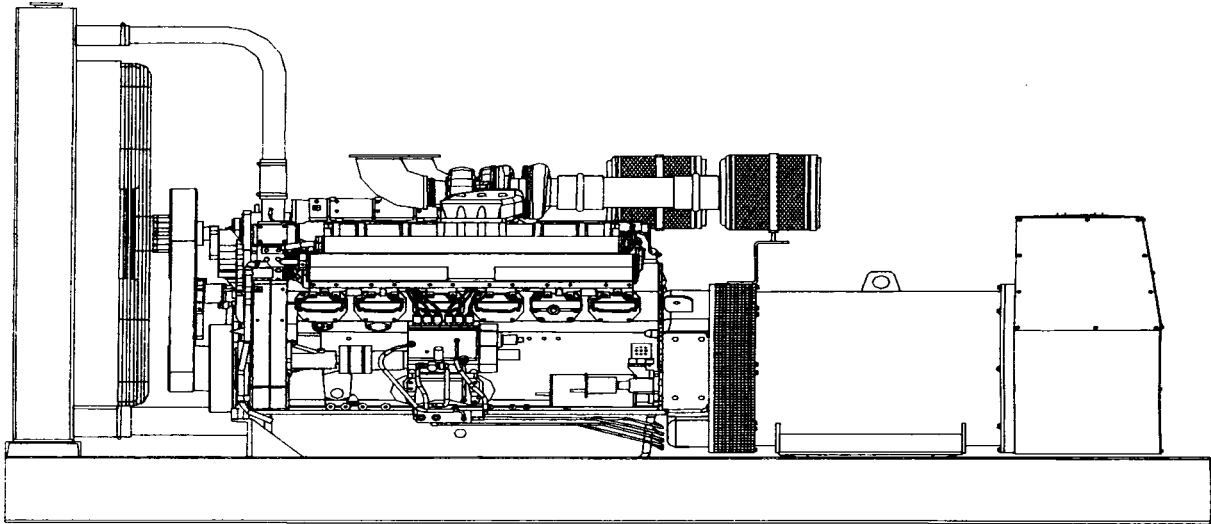




ALTURDYNE



Diesel Generator Sets | 60 to 2000kW / 60 Hz Liquid Cooled, Four-Cycle | 50 Hz: (.83) x 60 Hz Ratings



DESCRIPTION: Alturdyne Basic Model ARDO-XXX (kW rating)-060-H* - 2001 RATINGS

Package Configuration

- Basic package consists of diesel engine coupled to generator and assembled on structural steel skid with unit mounted radiator and pusher fan, control panel and accessories. Electronic governor is standard along with flex fuel lines and fuel/water separator and base isolation pads.
- The Alturdyne designed/manufactured engine and generator control panel is unit mounted and contains ammeter, voltmeter, AM/VM select switch, frequency meter, voltage adjust rheostat, oil pressure gauge, water temperature gauge, three-position mode switch, panel lights, cyclor crank with safeties for overspeed, low oil pressure, high water temperature and overcrank. Customer connections and remote alarms are located on isolated terminal strip.
- Generator leads terminate in an oversize box or at back of circuit breaker located in adjacent NEMA 1 box.

Engine

- All engines are inline or vee-type, multicylinder diesels with direct injection and have replaceable wet liners. Units are either naturally aspirated (NA), turbocharged (T), turbocharged with air aftercooling (TA) or turbocharged with water aftercooling (TW). Inline (I) injection pumps are used. Emissions and acoustics are low. Accessories include fuel pump, primary and secondary fuel filters, lube

oil pump and cooler, lube oil filter, water pump, exhaust manifold, jacket water heater, stainless flex exhaust coupling, insulation blankets, DC starter and battery charging alternator.

Generator

- Generators are four pole, brushless broad range machines with a single permanently lubricated, double shielded radial ball bearing and flywheel disc drive coupling. The revolving field design contains a direct drive exciter and stator windings are 2/3 pitch with vacuum epoxy impregnation. Design is to NEMA and International Standards and insulation is either Class F or H. Generators feature a TIF of <50, low radio interference, a wave form deviation of <5%, harmonic content of 3% max and a voltage regulation of 1% with standard static regulator.

Optional Equipment

- * Special voltages up to 600 volts and DC.
The following codes are used:
G - 120/240 single phase
P - 120/208 three phase
R - 277/480 three phase
S - 346/600 three phase
E - 220/380 three phase
X - Special (4,160)
- PMG is available along with 3 phase sensing which includes a parallel module and

overvoltage protection with engine relief load acceptance. Additional RF protection is available.

- Special array of temperature rise (80°C and 130°C) generators available meeting NEMA MG1-22.84 standards.
- Custom designed control systems - Special metering - Bussing - Switch gear - Remote annunciator.
- Circuit breaker is an insulated case mounted in a NEMA 1 Box. (except the 4160 V) air breakers are an option.
- Cooling: Remote radiator/hotwell tank - heat exchangers.
- Fuel Systems: Pumps - Valves - Tanks (single and double wall, separate or skid mounted) - switches - water separators.
- Batteries: Lead acid - Lead calcium - Nickel cadmium - Heated boxes - Trickle chargers.
- Enclosures: Weather resistant - Thermal insulated - Sound attenuated - Spring isolation.
- Mechanical governing, AIRSEP vents.
- Prime power ratings.
- Radiator load banks.
- Spares.
- Loose ship kits.

SPECIFICATIONS: 60-2000KW - DIESEL GENERATOR SET - LIQUID COOLED - FOUR CYCLE - CUMMINS ENGINES - 2001 RATINGS

RATINGS (Standby) *	60KW	100KW	250KW	400KW	500KW	750KW	1000KW	1250KW	1500KW	1750KW	2000KW	
Engine Model	4BT3.9G-4	6BT5.9G-6	LTA10G-1	NTA855-G5	KTA19-G4	QST30-G1	QST30-G5	KTA50-G3	KTTA50-G2	QSK60-G6	QSK60-G6	
Cylinders	4	6	6	6	6	V-12	V-12	V-16	V-16	V-16	V-16	
Displacement cu in/l	238/3.9	360/5.9	610/10	855/14	1150/18.8	1860/30.5	1860/30.5	3067/50.3	3067/50.3	3673/60.2	3673/60.2	
Aspiration	T	T	TA	TA	TA		TA	TA	TTA	TA		
Horsepower @ 1800 RPM	102	166	380	605	755	1135	1490	1850	2220	2922	2922	
BMEP (1800 rpm Standby) psi	171	191	269	311	280	269	352	262	313	307	351	
Fuel Consumption (Full Load) gal/hr	12.6	7.5	1618	29.1	35.2	54.7	68	80.8	95	117	137	
Oil Sump Capacity qt	11.5	17.3		40	48	40.7	40.7	177	177	296	296	
Engine & Radiator Capacity gal	5.5	615	13.0	15.3	24	53	170	102	102	130	151	
Water Pump Flow gal/min	45	38	97	130	196	235	270	535	535	360	510	
Aftercooler Circuit Flow gal/min							85			360	135	
Heat Rejection to Coolant BTUM	2450	4315	8360	15125	16350	27860	20880	46250	55500	30065	36300	
Heat Rejection to Aftercooler Circuit BTUM							15420			28960	35500	
Radiator Airflow cfm	4900	5300	13320	19700	27200	34000	58014	68000	68000	61000	74908	
Exhaust Temp °F	925	1060	965	995	939	895	975	987	870	850	850	
Exhaust Gas Flow cfm	505	800	1825	3780	3945	6160	7775	9620	10505	13040	15150	
Genset Radiated Heat BTUM	1070	1646	3240	5580	6100	9590	7460	14040	16930	14200	20312	
Exhaust Outlet Size in	3"	3"	4"	6"	8"	2 x 8"	2 x 8"	2 x 6"	16"	2 x 12"	2 x 12"	
Electrical System volts	12	12/24	12/24	24	24	24	24	24	24	24	24	

DIMENSIONS AND WEIGHT **

Length in	76	92	134	124	160	172	180	222	230	230	240	
Width in	30	30	50	50	60	69	78	75	77	98	98	
Height in	47	48	64	70	78	92	103	99	104	120	120	
Weight lb	1720	2650	6090	7480	10300	17600	16202	23210	24000	32000	32600	

* Contact factory for derating information.

** Dimensions listed are for reference purposes only.
Certified drawings are provided on placement of order.

NOTE: Maximum radiator discharge back pressure = 0.5 inches or 12.7 mm. water column.
Materials and specifications may change without notification.

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