Basic Engine	16V-149				16V-149T			
Basic engine model	9163-7005				9163-7305			
Engine type	Two Cycle				Two Cycle			
No. of cylinders	16				16			
Bore & stroke—in (mm)	5.75 x 5.75 (146.05 x 146.05)				5.75 x 5.75 (146.05 x 146.05)			
Displacement—cu in (litres)	2389 (39.18)				2389 (39.18)			
Application	Standby				Standby			
Frequency @ rpm	60 Hz @ 1800		50 Hz @ 1500		60 Hz @ 1800		50 Hz @ 1500	
Rated Power, less fan—BHP (kW)*	1025	(765)	880	(656)	1515	(1130)	1310	(977)
kW Rating max. @ P.F. 1.0**	725		620		1070		925	
Generator efficiency (assumed)—%	95		95		95		95	
Compression ratio	17 to 1		17 to 1		17 to 1		17 to 1	
Piston speed—ft/min (m/sec)	1725	(8.76)	1438	(7.31)	1725	(8.76)	1438	(7.31)
No. of main bearings	10		10		10		10	
Approx. net weight dry—lbs (kg)***	17130	(7770)	17130	(7770)	18280	(8292)	18280	(8292)
Air and exhaust system:								
Combustion air requirements—cfm (m^3/min)	3155	(89)	2620	(74)	4800	(136)	3800	(108)
Max. air intake restriction—in H_2O (kPa)	25	(6.22)	18	(4.48)	20	(4.98)	13	(3.24)
Exhaust gas temp. @ Rated BHP— °F (°C)								
Engine manifold dry	910	(487.8)	915	(490.6)	880	(471.1)	930	(498.9)
Exhaust gas flow @ Rated BHP—cfm (m^3/min)								
Engine manifold dry	7931	(225)	6610	(187)	11802	(334)	9692	(274)
Max. exhaust back press. allowable—in. Hg (kPa)	3.6	(12.19)	2.5	(8.47)	2.2	(7.45)	1.5	(5.08)
Exhaust outlet I.D.—in (mm)								
Engine manifold dry	5.00	(127.00)	5.00	(127.00)	9.88	(250.95)	9.88	(250.95)
Recommended stack single outlet—minimum	10	(254)	10	(254)	12	(304.80)	12	(304.80)
Cooling system:								
Basic engine water capacity—gal (litres)	44	(166.56)	44	(166.56)	44	(166.56)	44	(166.56)
Jacket water flow —gpm (litres/min)	495	(1873.77)	416	(1574.73)	495	(1873.77)	416	(1574.73)
Jacket water temp., normal operation— °F (°C)	170-185	(76.7-85.0)	170-185	(76.7-85.0)	170-185	(76.7-85.0)	170-185	(76.7-85.0)
Heat rejection to jacket water @ Rated BHP—Btu/min (W)								
Exhaust manifold dry	33825	(594788)	29040	(510647)	42420	(745924)	37204	(654205)
Engine heat radiated @ Rated BHP—Btu/min (W)								
Engine manifold dry	7737	(136057)	6665	(117193)	8970	(157731)	7960	(139971)
Max. static head @ water pump inlet—ft H_2O (kPa)	30	(89.58)	30	(89.58)	30	(89.58)	30	(89.58)
Max. heat exchanger raw water press.—psi (kPa)	60	(413.70)	60	(413.70)	60	(413.70)	60	(413.70)
Generator heat radiated to room @ Rated BHP—Btu/min (W)†	2175	(38246)	1860	(32707)	3210	(56445)	2775	(48796)
Fuel system:								
Fuel pump max. suction, clean system—in Hg (kPa)	6	(20.32)	6	(20.32)	6	(20.32)	6	(20.32)
Fuel quantity pumped—gph (litres/hr)	250	(946.35)	250	(946.35)	250	(946.35)	250	(946.35)
Lubrication system:								
Oil pan capacity—qts (litres)†††	160	(151.42)	160	(151.42)	160	(151.42)	160	(151.42)
Starting system:								
Electric motors—quantity‡	2		2		2		2	
Voltage††††	24		24		24		24	
Battery recommended capacity, per starter—amp/hr	205 [2]		205 [2]		205 [2]		205 [2]	
Engine rolling current @ 32°F (0.0°C) per starter—amps	760		760		760		760	

*Nominal basic engine horsepower rating at 85°F (29.4°C) and 29.00 in Hg (98.19 kPa) Barometer-Dry.
**Maximum kW rating at assumed generator efficiency.
***Radiator-cooled set.
†Generator heat radiated to room @ P.F. 1.0 and assumed generator efficiency.
††Engine standard option fan. †††Engine standard option oil pan. ††††Engine standard option starting motor.
‡One starter required above 70° F (21° C).