

GENERAL ENGINE DATA

Type	4-Cycle, Water Cooled	
Aspiration	Turbo-Charged, Air to Air Cooler	
Cylinder Arrangement	Inline	
No. of Cylinders	6	
Bore mm(in.)	170	(6.69)
Stroke mm(in.)	220	(8.66)
Displacement liter(in ³)	29.96	(1828)
Compression Ratio	14.0:1	
Dry Weight - Engine only - kg(lb)	2370	(5226)
- Radiator & Piping - kg(lb)	471	(1039)
Wet Weight - Engine only - kg(lb)	2515	(5546)
- Radiator & Piping - kg(lb)	557	(1228)

PERFORMANCE DATA

Steady State Speed Stability Band at any Constant Load		
Hydraulic (std.) or Electric Governor - %	±0.25 or better	
Maximum Overspeed Capacity - rpm	1750	
Moment of inertia of Rotating Components - kgf·m ² (lbf·ft ²)	41.74	(991)
(Includes Std. Flywheel)		
Cyclic Speed Variation with Flywheel at 1500rpm	1/97	
1200rpm	1/60	
1000rpm	1/43	

ENGINE MOUNTING

Maximum Bending Moment at Rear Face of Flywheel Housing - kgf·m(lbf·ft)	200	(1447)
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AIR INLET SYSTEM

Maximum Intake Air Restriction (Includes piping)		
With Clean Filter Element - mm H ₂ O (in. H ₂ O)	400	(15.7)
With Dirty Filter Element - mm H ₂ O (in. H ₂ O)	635	(25.0)

EXHAUST SYSTEM

Maximum Allowable Back Pressure - mm H ₂ O (in. H ₂ O)	600	(23.6)
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LUBRICATION SYSTEM

Oil Pressure at Idle - kgf/cm ² (psi)	2~3	(29~43)
at Rate Speed - kgf/cm ² (psi)	5~6.5	(71~93)
Maximum Oil Temperature - °C(°F)	110	(230)
Oil Capacity of Standard Pan High - liter (U.S.gal)	80	(21.1)
Low - liter (U.S.gal)	50	(13.2)
Total System Capacity (Includes Oil Filter) - liter (U.S.gal)	100	(26.4)
Maximum Angle of Installation (Std. Pan) Front Down	11.5°	
(Engine Only) Front Up	10°	
Side to	22.5°	

COOLING SYSTEM

Coolant Capacity - Engine only - liter (U.S.gal)	55	(14.5)
- Radiator & Piping - liter (U.S.gal)	86	(22.7)
Maximum External Friction Head at Engine Outlet - kgf/cm ² (psi)	0.35	(5.0)
Maximum Static Head of Coolant above Crankshaft Center - m(ft)	10	(32.8)
Maximum Outlet Pressure of Engine Water Pump - kgf/cm ² (psi)	2	(28.6)
Standard Thermostat (modulating) Range - °C(°F)	71~85	(160~185)
Maximum Coolant Temperature at Engine Outlet - °C(°F)	98	(208)
Minimum Coolant Expansion Space - % of System Capacity	10	
Maximum Cooling Air Temperature at Air to Air Cooler Inlet, TAA type - °C(°F)	40	(104)
Maximum Air Restriction on Discharge Side of Radiator and Fan - mm H ₂ O (in. H ₂ O)	10	(0.4)

FUEL SYSTEM

Fuel Injector	Mitsubishi PS6 Type x 1
Maximum Suction Head of Feed Pump - mm Hg (in. Hg)	75 (3.0)
Maximum Static Head of Return & Leak Pipe - mm Hg (in.Hg)	150 (5.9)

STARTING SYSTEM

Battery Charging Alternator - V-Ah	24-30
Starting Motor Capacity - V -kW	24-7.5
Maximum Allowable Resistance of Cranking Circuit - m Ω	2.5
Recommended Minimum Battery Capacity	
At 5° C (41° F) and above - Ah	200
Below 5° C (41° F) through - 5° C (23° F)	500

ENGINE RATING

All data represent net performance with standard accessories such as air cleaner, inlet /exhaust manifolds, fuel oil system, L.O. pump, etc. under the condition of 29.38 in. (746 mm) Hg barometric pressure, 85° F(29.4°C) ambient temperature and 0.38 in.(9.7mm) Hg vapor pressure.

ITEM	UNIT	STAND-BY POWER			PRIME POWER		
		50Hz			50Hz		
Engine Speed	rpm	1500			1500		
No. of Cylinders		6					
Bore	mm (in.)	170 (6.69)					
Stroke	mm (in.)	220 (8.66)					
Displacement	liter (in. ³)	29.96 (1828)					
Brake Horse power without Fan	HP (kW)	951 (710)			865 (645)		
Brake Mean Effective Pressure without Fan	kgf/cm ² (psi)	19.3 (274)			17.6 (250)		
Mean Piston Speed	m/s (ft/min)	11.0 (2165)			11.0 (2165)		
Maximum Regenerative Power Absorption Capacity without Fan	HP (kW)	86 (64)			86 (64)		
Intake Air flow	m ³ /min (CFM)	60 (2119)			54 (1907)		
Exhaust Gas Flow	m ³ /min (CFM)	159 (5614)			143 (5049)		
Coolant Flow	liter/min (U.S. GPM)	670 (177)			670 (177)		
Cooling Air Flow (Std. Fan)	m ³ /min (CFM)	726 (25635)			726 (25635)		
Fan Loss Horse Power (Std. Fan)	HP (kW)	27 (20)			27 (20)		
Radiated Heat to Ambient	kcal/hr (BTU/min)	45251 (2993)			40736 (2694)		
Heat Rejection to Coolant	kcal/hr (BTU/min)	196090 (12969)			176522 (11675)		
Heat Rejection to Air to Air Cooler	kcal/hr (BTU/min)	181006 (11971)			162943 (10777)		
Heat Rejection to Exhaust	kcal/hr (BTU/min)	476031 (31484)			422819 (27965)		
Noise Level (1 m height & distance) (excludes, Intake,Exhaust & Fan)	dB(A)	106			104		

The specifications are subject to change without notice.

APPLICATION : GENERATOR

Pub. No. T13-0353-E