

GENERAL ENGINE DATA

Type	4-Cycle, Water Cooled	
Aspiration	Turbo-Charged, Air to Air Cooler	
Cylinder Arrangement	60°V	
No. of Cylinders	16	
Bore mm(in.)	170	(6.69)
Stroke mm(in.)	180	(7.09)
Displacement liter(in ³)	65.37	(3989)
Compression Ratio	14.0:1	
Dry Weight - Engine only - kg(lb)	6443	(14207)
- Radiator & Piping - kg(lb)	1874	(4132)
Wet Weight - Engine only - kg(lb)	6820	(15038)
- Radiator & Piping - kg(lb)	2117	(4668)

PERFORMANCE DATA

Steady State Speed Stability Band at any Constant Load		
Electric Governor - %	±0.25 or better	
Maximum Overspeed Capacity - rpm	2100	
Moment of inertia of Rotating Components - kg·m ² (lb·ft ²)	80.83	(1918)
(Includes Std. Flywheel)		
Cyclic Speed Variation with Flywheel at 1500rpm	1/170	

ENGINE MOUNTING

Maximum Bending Moment at Rear Face of Flywheel Housing - kg·m(lb·ft)	450	(3256)
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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)	200	(52.8)
Low - liter (U.S. gal)	140	(37.0)
Total System Capacity (Includes Oil Filter) - liter (U.S. gal)	230	(60.8)
Maximum Angle of Installation (Std. Pan) Front Down	5°	
(Engine Only) Front Up	5°	
Side to Side	22.5°	

COOLING SYSTEM

Coolant Capacity - Engine - liter (U.S. gal)	170	(44.9)
- Radiator & Piping - liter (U.S. gal)	243	(64.2)
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)	40	(1.6)

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FUEL SYSTEM

Fuel Injector	Mitsubishi PS8 Type × 2
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	24-7.5×2
Maximum Allowable Resistance of Cranking Circuit - mΩ	1.5
Recommended Minimum Battery Capacity:	
At 5°C(41°F) and above - Ah	300
Below 5°C(41°F) through - 5°C(23°F)	600

The specifications are subject to change without notice

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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 100kPa(29.6inHg) barometric pressure, 77°F(25°C) ambient temperature and 30% relative humidity.

ITEM	UNIT	STAND-BY POWER	PRIME POWER	CONTINUOUS C	CONTINUOUS D
		50Hz	50Hz	50Hz	50Hz
Engine Speed	rpm	1500	1500	1500	1500
No. of Cylinders		16			
Bore	mm (in.)	170 (6.69)			
Stroke	mm (in.)	180 (7.09)			
Displacement	liter (in. ³)	65.37 (3989)			
Brake Horse power without Fan	HP (kW)	2599 (1939)	2363 (1763)	1783 (1330)	1582 (1180)
Brake Mean Effective Pressure without Fan	kgf/cm ² (psi)	24.2 (344)	22.0 (313)	16.6 (236)	14.7 (209)
Mean Piston Speed	m/s (ft/min)	9.0 (1772)	9.0 (1772)	9.0 (1772)	9.0 (1772)
Maximum Regenerative Power Absorption Capacity without Fan	HP (kW)	188 (140)	188 (140)	188 (140)	188 (140)
Intake Air flow	m ³ /min (CFM)	164 (5791)	148 (5226)	110 (3884)	98 (3460)
Exhaust Gas Flow	m ³ /min (CFM)	434 (15325)	390 (13771)	290 (10240)	258 (9110)
Coolant Flow	liter/min (U.S. GPM)	1650 (436)	1650 (436)	1650 (436)	1650 (436)
Coolant Flow to Intercooler (TK only)	liter/min (U.S. GPM)	—	—	—	—
Cooling Air Flow (Std. Fan)	m ³ /min (CFM)	2500 (88275)	2500 (88275)	2500 (88275)	2500 (88275)
Fan Loss Horse Power (Std. Fan)	HP (kW)	59 (44)	59 (44)	59 (44)	59 (44)
Radiated Heat to Ambient	kcal/hr (BTU/min)	123518 (8169)	111133 (7350)	82542 (5459)	73474 (4859)
Heat Rejection to Coolant	kcal/hr (BTU/min)	535247 (35401)	481575 (31851)	357681 (23657)	318389 (21058)
Heat Rejection to Air to Air Cooler	kcal/hr (BTU/min)	494074 (32677)	444531 (29401)	330167 (21837)	293898 (19438)
Heat Rejection to Exhaust	kcal/hr (BTU/min)	1297231 (85797)	1151536 (76161)	837425 (55386)	748786 (49524)
Noise Level (1 m height & distance) (excludes, Intake,Exhaust & Fan)	dB(A)	112	109		

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