

経歴 Rev.

0

ENGINE SPECIFICATIONS

Engine Model	Engine series	3CE1(Stage 3A / Interim Tier4)
	Model No.	3CE1-BGZG1
Customer		EXPORT
Application		Generator
Drawing No.		C1-1024-005-0

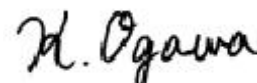
Symbol	Date	Revision Record	Issue No.
0	: 24 th April 2008	: For confirmation of prototype engine specifications.	:
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ISUZU MOTORS LIMITED
Powertrain Business Dept.

Manager



Prepared



Engine Specifications

Model No. 3CE1-BGZG1

Rev.

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Engine Model	Model No. 3CE1-BGZG1
Application	Generator
Approved exhaust emission cert.	EPA, ARB-OR Tier-3 (Intermediate Tier4)
Engine type	Four cycle, water cooled, In-line, direct injection type
No. of cylinders-bore x stroke	3 - 88.0 mm x 90.0 mm
Total piston displacement	1.642 L
Compression ratio	20 to 1

Engine performance

Rating

Test conditions	Standard atmospheric condition
Conforming standard JPN;JIS D0006-1 US;SAEJ1349 EU;ISO15550	With AC generator and cooling fan With air cleaner and exh. silencer

Rated Output	: 13.6 kW / 1500 min ⁻¹ : 16.3 kW / 1800 min ⁻¹
Continuous rating	: 12.3 kW / 1500 min ⁻¹ : 14.8 kW / 1800 min ⁻¹
Fuel consumption at rated.	: 249 g/kw.h
No load max. speed	: 1895±25 min ⁻¹
Low idle speed	: 1200±25 min ⁻¹
Type of fuel	: Diesel fuel only (JPN:JIS-NO.2, US:ASTM-2D, EU:EN590)
Engine dry weight	: Approx. 158 kg
Dimensions	: L 619.0 x W 528.0 x H 682.0 (With cooling fan)
Firing order	: 1 - 3 - 2 - 1
Rotating direction	: Clockwise viewed from cooling fan

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Fuel system

Fuel injection pump	Distributor type
Fuel injection nozzle	Hole type
Fuel filter	Paper element type
Governor type	Centrifugal-all speed governor

Lubrication system

Lubricating system	Forced feed type
Oil grade	API class CD, SAE grade 10W30
Lubricating pump	Trochoid pump type
Oil filter	Paper element
Oil capacity	max : 6.7 L min : 3.9 L
Oil pressure(reference)	4.0 kgf/cm ² at rated output 0.6 kgf/cm ² at low idle

Cooling system

Heat exchanger	None
Coolant pressure	max. 0.9 kgf/cm ²
Cooling fan	Dia.360 - 6 blades - Pusher, crank pulley/fan pulley = 120/90
Cooling water	2.0 L (engine only)

Air cleaner

None

Breather system

Closed type

Starting aid system

Glow plug

Starter

12V - 1.4kW

Generator

12V - 40A

Allowable inclination angle

Longitudinal : 30(25), Lateral : 30(25)
intermitted, (continuous)

Fuel injection timing

BTDC 2 (±0.5)

Engine color

Black

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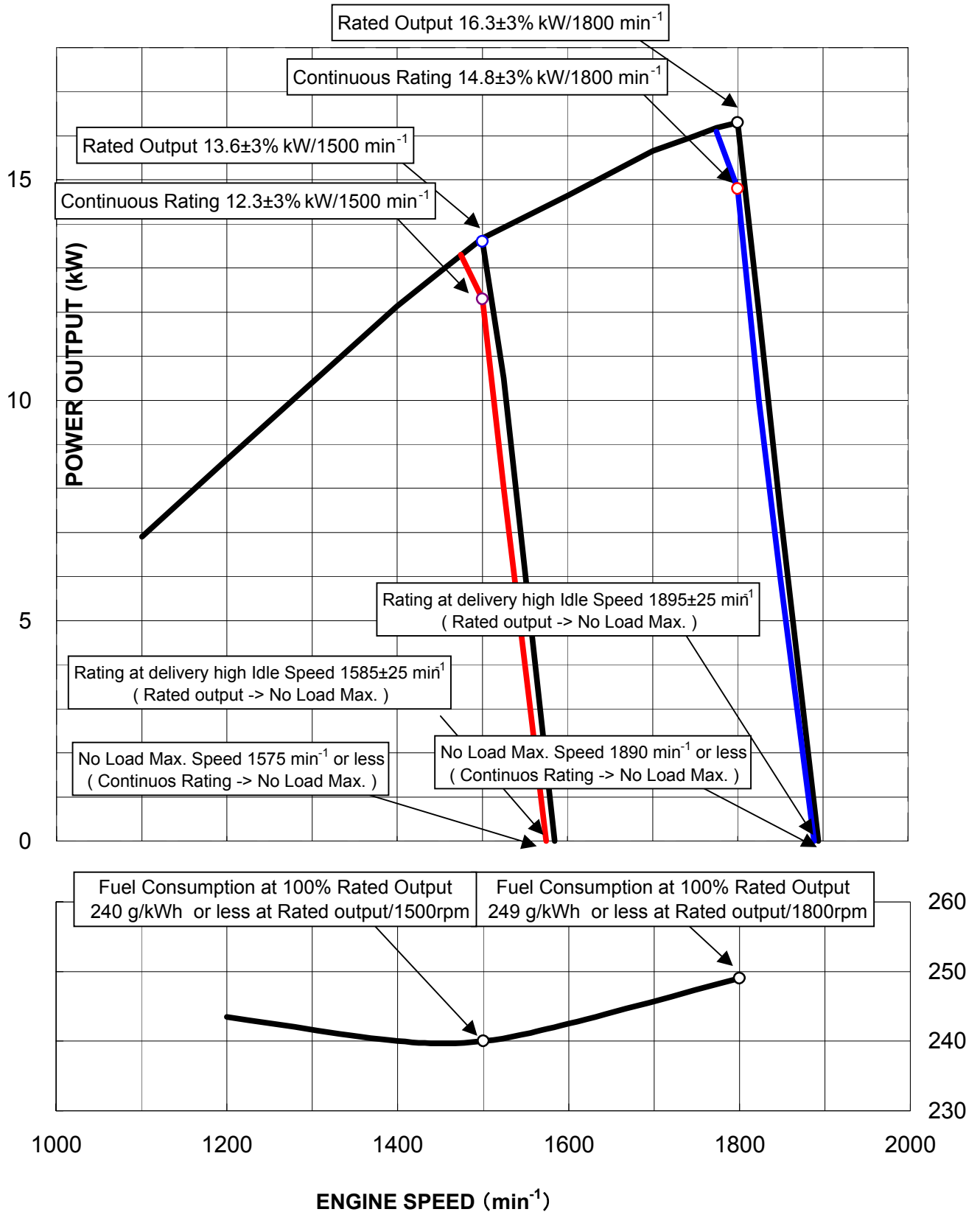
Loose parts

No.	Parts No.	Item	Qty	Remarks
1	Z14110-07760	LABEL, FUEL OIL CAUT	1	
2	586400-1420	Gasket, silencer	1	
3	586400-0560	Relay assy, glow	1	
4	586400-2190	Timer 1 sec	1	
5	586400-1240	Timer, glow plug	1	
6	586400-0550	Diode	1	
7	586400-0240	Pump, feed pump	1	
8	586400-0830	Water separator	1	



**3CE1-BGZG1(Interim Tier-4)
ENGINE PERFORMANCE CURVE**

CONDITIONS	RATING
Atmospheric conditons	Standard: JIS D0006 Standard: SAE 1349 NET
Fan speed ratio	120/90=1.333
Cooling fan	With (φ360-6-Pusher)
Air cleaner	With (5 inch)
Alternator	With (No load)
Exh. Silencer	With (Isuzu standard)



Engine specifications Revision chart

Customer : EXPORT

Engine Model : 3CE1-BGZG1

Application : Generator

Rev. No.	IS No.	Date	Page	Item	Previous	Current	Description (Reason of change)
0	IS-08-053-0	24th April '08		For confirmation of prototype engine specifications			