

経歴 Rev.

0

ENGINE SPECIFICATIONS

Engine Model	Engine series 3CB1
	Model No. 3CB1-GZG01
Customer	EXPORT
Application	Generator
Drawing No.	C1-1022-004-0

Symbol	Date	Revision Record	Issue No.
0	: 2nd Oct. 2008	: For confirmation of prototype engine specifications.	:
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	:		
	:		

ISUZU MOTORS LIMITED
Powertrain Business Dept

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Engine Specifications

Model No. 3CB1-GZG01

Rev.

0

Engine Model	Model No. 3CB1-GZG01
Application	Generator
Approved exhaust emission cert.	EPA ARB-OR : Tier-4
Engine type	Four cycle, water cooled, In-line, In-direct injection type
No. of cylinders-bore x stroke	3 - 76.0 mm x 82.0 mm
Total piston displacement	1.116 L
Compression ratio	23.5 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	: 9.0 kW / 1500 min ⁻¹ : 10.7 kW / 1800 min ⁻¹
Continuous rating	: 8.2 kW / 1500 min ⁻¹ : 9.8 kW / 1800 min ⁻¹
Fuel consumption at rated.	: 260 g/kw.h or less
No load max. speed	: 1900 ± 25 min ⁻¹
Low idle speed	: 1500 ± 25 min ⁻¹
Type of fuel	: Diesel fuel only (JPN:JIS-NO.2, US:ASTM-2D, EU:EN590)
Engine dry weight	: Approx. 117 kg
Dimensions	: L 574.0 x W 455.0 x H 586.0 (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	Bosch in-Line
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 : 3.5 L min : 1.9 L
Oil pressure(reference)	3.5 kgf/cm ² at rated output 1.3 kgf/cm ² at low idle

Cooling system

Heat exchanger	None
Coolant pressure	max. 0.9 kgf/cm ²
Cooling fan	Dia.335 - 6 blades - Pusher, crank pulley/fan pulley = 100/100
Cooling water	0.9 L (engine only)

Air cleaner

None

Breather system

Closed type

Starting aid system

Glow plug

Starter

12V - 1.1kW

Generator

12V - 40A

Allowable inclination angle

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

Fuel injection timing

FID 17 deg

Engine color

Black

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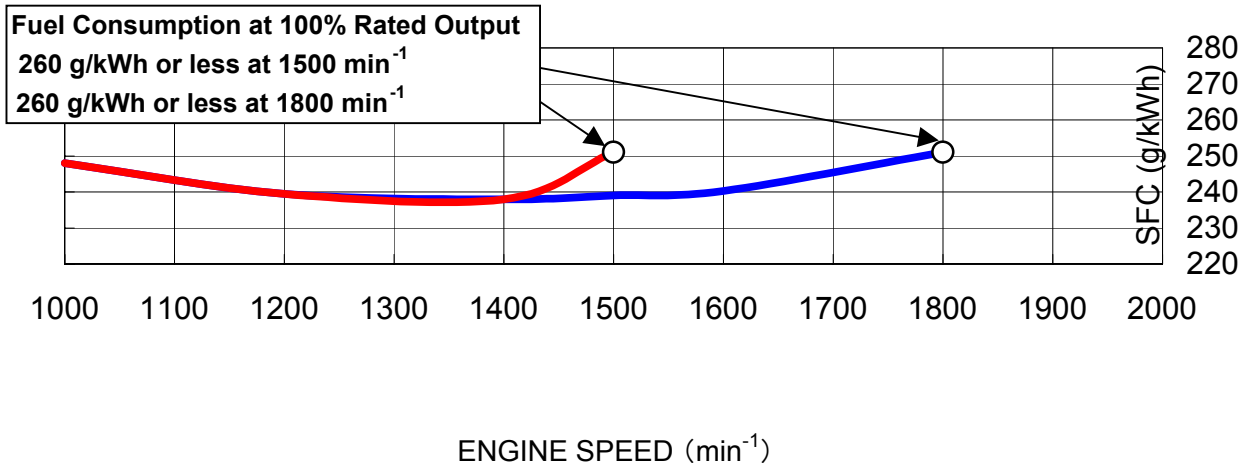
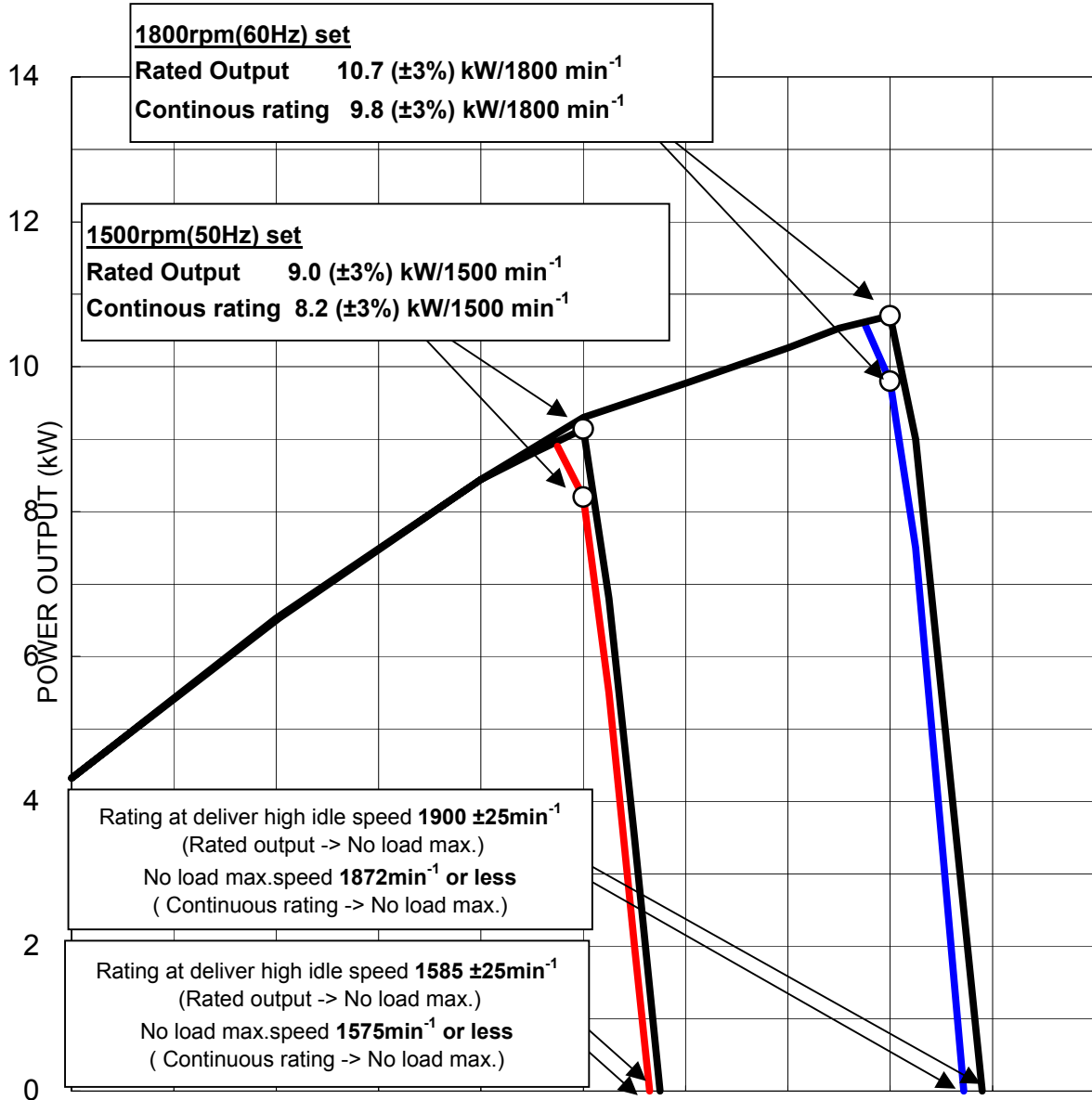
Loose parts

No.	Parts No.	Item	Qty	Remarks
1	Z29942-07760	LABEL, FUEL OIL CAUTION	1	
2	586400-6330	GASKET,SILENCER	1	
3	586400-0240	PUMP, FUEL FEED	1	
4	586400-8170	SEPARATOR ASM,WATER	1	
5	586400-0550	DIODE	1	
6	586400-0560	RELAY,GLOW	1	
7	586400-8120	TIMER,GLOW	1	
8	586400-2190	TIMER	1	



3CB1-GZG01 PERFORMANCE CURVE

Conditions	Rating
Atmospheric conditions	Standard: JIS D0006 (NET) Standard: SAE 1349 (NET)
Break-in time	0.1hr
Fan speed ratio (Crank/Fan)	100/100=1.0
Cooling fan	With(φ335-Pusher:NF)
Air cleaner	With (5 inch)
Alternator	With
Exh. silencer	With



Engine specifications Revision chart

Customer : EXPORT

Engine Model : 3CB1-GZG01

Application : Generator

Rev. No.	IS No.	Date	Page	Item	Previous	Current	Description (Reason of change)
0	IS-08-158-0	2nd Oct. '08		For confirmation of prototype engine specifications			



**3CB1-GZG01(Interim Tier-4)
ENGINE PERFORMANCE CURVE**

CONDITIONS	RATING
Atmospheric conditons	Standard: JIS D0006
	Standard: SAE 1349 NET
Fan speed ratio	100/100=1.0
Cooling fan	With (φ335-6-Pusher)
Air cleaner	With (5 inch)
Alternator	With (No load)
Exh. Silencer	With (Isuzu standard)

