

経歴 Rev.

0

## ENGINE SPECIFICATIONS

Engine Model	Engine series 3CB1(Stage 3A / Tier-4)
	Model No. 3CB1-CZP02
Customer	EXPORT
Application	General power
Drawing No.	C1-1022-001-0

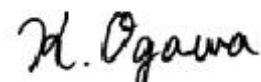
Symbol	Date	Revision Record	Issue No.
0	: 23 <sup>th</sup> April 2008	: For confirmation of prototype engine specifications.	:
	:	:	:
	:	:	:
	:	:	:

ISUZU MOTORS LIMITED  
Powertrain Business Dept.

Manager



Prepared



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**Engine Specifications**

Model No. 3CB1-CZP02

Rev.

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Engine Model	Model No. 3CB1-CZP02
Application	General power
Approved exhaust emission cert.	EPA, ARB-OR : Tier-4, Stage-3A
Engine type	Four cycle, water cooled, In-line, Indirect injection type
No. of cylinders-bore x stroke	3 - 76.0 mm x 82.0 mm
Total piston displacement	1.116 L
Compression ratio	23.4 to 1

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**Engine performance Rating**

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

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Rated Output	: 18.7 kW / 3200 min <sup>-1</sup>
Maximum Torque	: 63.5 Nm / approx. 2300 min <sup>-1</sup>
Fuel consumption at rated.	: 292 g/kw.h
No load max. speed	: 3400±25 min <sup>-1</sup>
Low idle speed	: 900±25 min <sup>-1</sup>
Type of fuel	: Diesel fuel only ( JPN:JIS-NO.2, US:ASTM-2D, EU:EN590 )
Engine dry weight	: Approx. 101 kg
Dimensions	: L 545.0 x W 450.0 x H 586.0 ( With cooling fan )
Firing order	: 1 - 3 - 2 - 1
Rotating direction	: Clockwise viewed from cooling fan

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## Engine Specifications

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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 CC, SAE grade 10W30
Lubricating pump	Trochoid pump type
Oil filter	Paper element
Oil capacity	max : 3.4 L min : 1.8 L
Oil pressure(reference)	3.5 kgf/cm <sup>2</sup> at rated output

## Cooling system

Heat exchanger	None
Coolant pressure	max. 0.9 kgf/cm <sup>2</sup>
Cooling fan	Dia. 335 - 7 - puller, crank pulley/fan pulley = 110/100
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 20

## Engine color

Black

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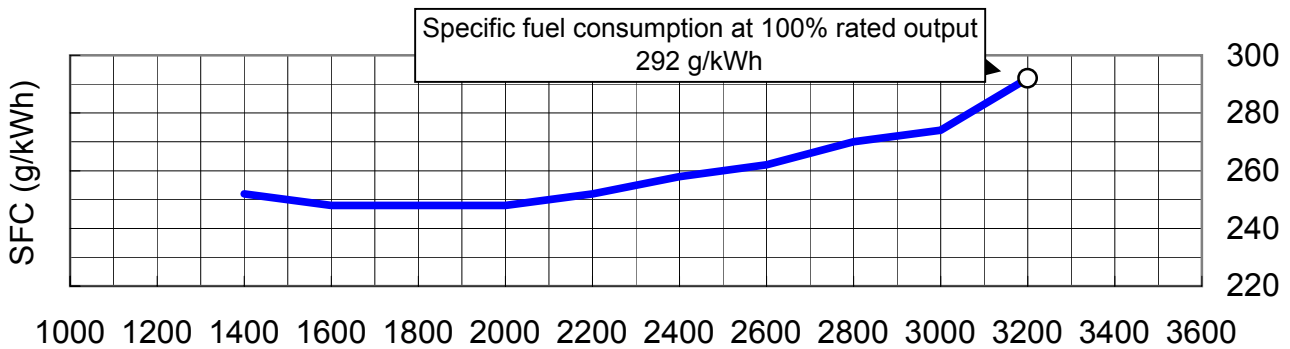
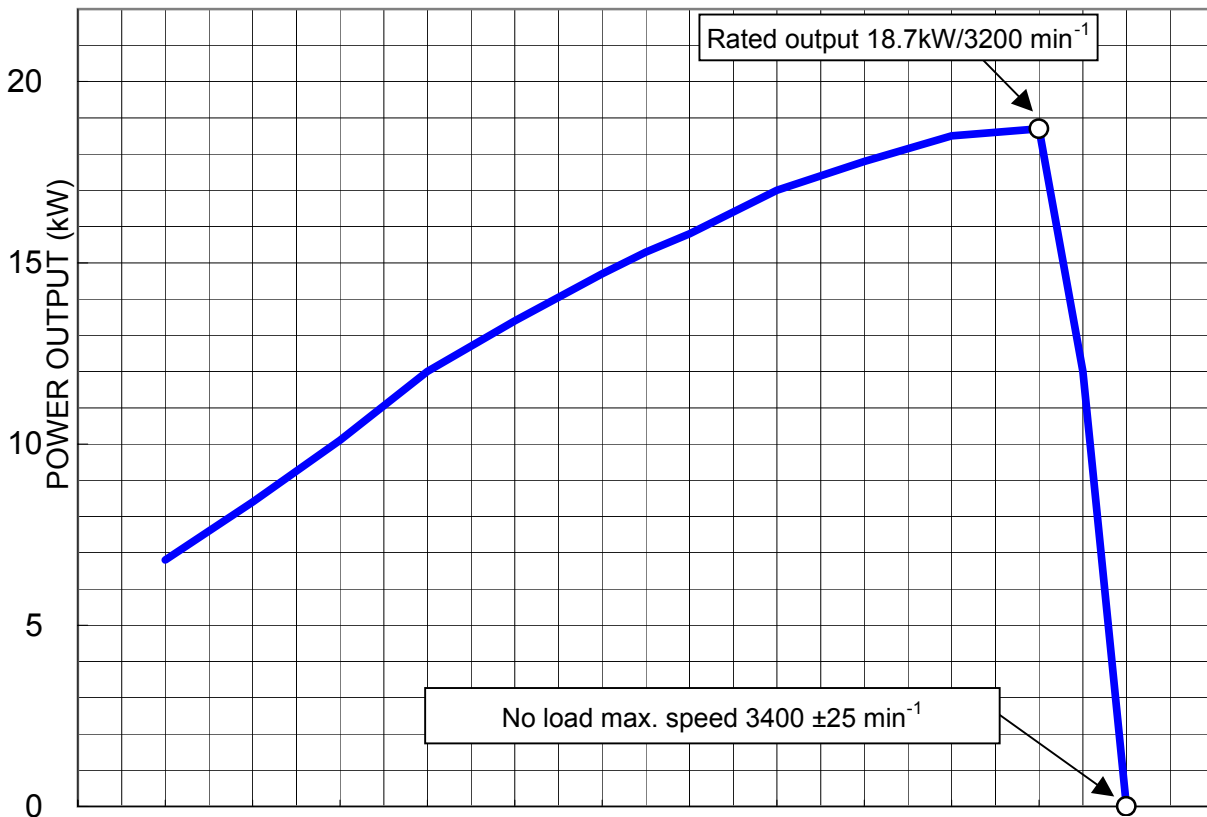
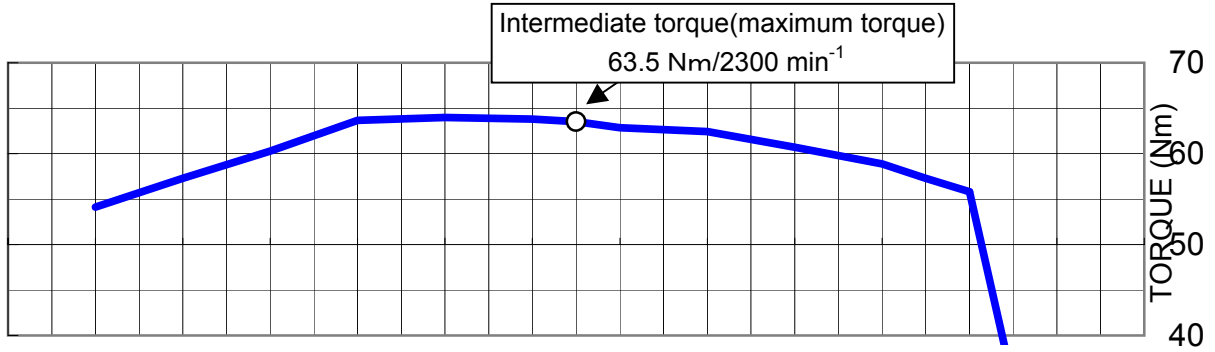
## Loose parts

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 assy, water	1	
5	586400-0550	Diode	1	
6	586400-0560	Relay assy, glow	1	
7	586400-8120	Timer, glow	1	
8	586400-2190	Timer, section 1	1	

**ISUZU**

**3CB1-CZP02 (Tier-4/Stage-3A)  
Engine performance curve**

Conditions	Rating
Atomospheric conditions	Standard: JIS D0006 NET Standard: SAE 1349 NET
Fan speed ratio	110/100=1.1
Cooling fan	Dia.335-Puller
Air cleaner	With
Alternator	With
Exh. silencer	With (ISUZU standard)



ENGINE SPEED (min<sup>-1</sup>)

## Engine specifications Revision chart

Customer : EXPORT

Engine Model : 3CB1-CZP02

Application : General power

<b>Rev. No.</b>	<b>IS No.</b>	<b>Date</b>	<b>Page</b>	<b>Item</b>	<b>Previous</b>	<b>Current</b>	<b>Description (Reason of change)</b>
0	IS-08-061-0	23th April '08		For confirmation of prototype engine specifications			