

■ Model:TC200

Powered by CUMMINS

Output Rating

MODEL		Power rating		Voltage available
		PRIME(1)	STANDBY(2)	
C200D5	400V/50HZ PF:0.8	146KW 182KVA	160KW 200KVA	380/220V 400/230V 415/27V

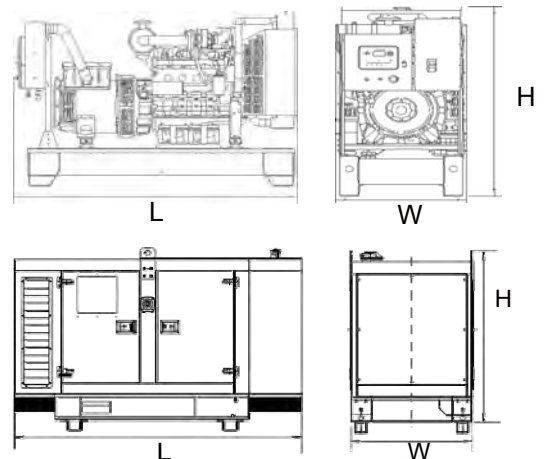
General Information

Model		C200D5
Engine		6CTA8.3G2
Speed control type		Electronical
Phase		3
Control System		Digital
System voltage		24V
Frequency		50HZ
Engine Speed(RPM)		1500
Fuel Consumption (L/hr)	Standby power(2)	48
	Prime Power(1)	42
	75% prime power	31
	50% prime power	21



Dimension and Weight

Dimension	Open	Silent
Length (L)	2389mm	3280mm
Width (W)	980mm	1080mm
Height (H)	1472mm	1765mm
Net Weight	1250KG	1780KG



* 2006/42/EC Machinery safety.

* 2006/95/EC Low voltage

* EN 60204-1: 2006+A1:2009, EN ISO 12100:2010, EN ISO 13849-1: 2008, EN 12601: 2010

(1)Prime Power(PRP):

According to ISO 8528-1:2005, Prime power is the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operation conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output (Ppp) over 24h of operation shall not exceed 70% of the PRP.

(2) Standby Power (ESP):

According to ISO 8528-1:2005, standby power is the maximum power available during a variable electrical power sequence, under the stated operation conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200h of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. The permissible average power output over 24h of operation shall not exceed 70% of the ESP.



▪Engine Specification

Compression Ratio:	17.3:1	Aspiration:	Turbocharged & Aftercooled
Bore:	114 mm	Displacement:	8.3 L
Stroke:	135 mm	No. of Cylinders:	6
Emission Certification:	MEP STAGE I	Fuel System:	FR91961: BYC PB/GAC
Governor Regulation:	≤3%		FR92995: BYC PB/SEGMA
			FR91651: BYC PB/FORTRUST

ENGINE MOUNTING

Maximum (Static) Bending Moment at Front Support Mounting Surface.....	-N.m	495
Maximum (Static) Bending Moment at Side Pad Mounting Surface.....	-N.m	250
Maximum (Static) Bending Moment at Rear Face of Block.....	-N.m	1356
Moment of Inertia of Complete Engine		
— Roll Axis.....	-kg·m ²	29.8
— Pitch Axis.....	-kg·m ²	76.8
— Yaw Axis.....	-kg·m ²	66.9

EXHAUST SYSTEM

Maximum Back Pressure.....	-kPa	10
Exhaust Pipe Size Normally Acceptable.....	-mm	75
Maximum Static Supported Weight at the Turbocharger Outlet Flange.....	-N.m	14
Exhaust Manifold Insulation Acceptable.....	-Yes/No	No
Turbocharger Insulation Acceptable.....	-Yes/No	No

AIR INTAKE SYSTEM

Maximum Intake Air Restriction with Heavy Duty Air Cleaner		
— Dirty Element.....	-kPa	6
— Clean Element.....	-kPa	4
Minimum Dirt Holding Capacity with Heavy Duty Air Cleaner.....	-g/cfm	25
Maximum Temperature Rise from Ambient to the Inlet of the Turbocharger.....	-°C	17
Recommended intake piping size (inner diameter).....	-mm	75

LUBRICATION SYSTEM

Minimum Engine Oil Pressure for Engine Protection Devices:		
— Idle Speed.....	-kPa	103
— Governed Speed.....	-kPa	276 - 414
Maximum Oil Temperature.....	-°C	121
Minimum Required Lube System Capacity - Sump plus Filters.....	-litre	27.6
Angularity of Standard Oil Pan: (Values stated are for intermittent operation only):		
— Front Down.....	-°	45
— Front Up.....	-°	45
— Side to Side.....	-°	45

FUEL SYSTEM

Type Injection System.....		BYC PB Direct Injection
Maximum Restriction at Lift Pump.....	-kPa	27
Maximum Allowable Head on Injector Return Line (Consisting of Friction Head and Static Head)		
.....	-kPa	33.7
Maximum Fuel Inlet Temperature.....	-°C	71
Maximum Fuel Flow on the Supply Side of the Fuel Pump.....	-kg/hr	193

■ Alternator

Alternator		
Poles	Num	4
Winding Connections (standard)		Star-serie
Insulation	Class	H class
Enclosure (according IEC-34-5)		IP23
Exciter System		Brushless
Voltage Regulator		A.V.R. (Electronic)
Bearing		Single bearing
Coupling		Flexible disc
Coating type		Standard (Vacuum impregnation)

■ Control Panel: AMF20



- Mains measurements (50/60 Hz): U1-U3, Hz
- Generator measurements (50/60 Hz): U1-U3, I1-I3, Hz, kW, kVA, kWh
- Selectable protections alarm/shutdown
- 3 phase Generator protections
 - Over-/under voltage
 - Over-/under frequency
- 3 phase AMF function
 - Over-/under frequency
 - Over-/under voltage
 - Voltage asymmetry
- Configurable analog inputs
- Battery voltage, engine speed (pick-up) measurement
- Configurable programmable binary inputs and outputs
- Warm-up and cooling functions

Benefits

- Less wiring and components
- Integrated solution
- Less engineering and programming
- Perfect price/performance ratio

Features

- Support of engines equipped with Electronic Control Unit (J1939 interface)
- Comprehensive diagnostic messages; SPN/FMI codes; KWP2000 support
- Automatic or manual start/stop of the gen-set
- Push buttons for simple control, lamp test
- Graphic back-lit LCD display 128x64 pixels
- 6 LED indicators
- Parameters adjustable via keyboard or PC
- Generator C.B. and Mains C.B. control with feedback and return timer
- RS232 interface (AT-LINK CONV cable is necessary for IL-AMF 20)
- Modem communication support (IL-AMF 25 only)
- Dimensions 180x120 mm (front panel)
- Sealed to IP65