

■ Model: C138D5

Powered by DCEC

Output Rating

MODEL		Power rating		Voltage available
		PRIME(1)	STANDBY(2)	
C138D5	400V/50HZ	100KW	110KW	380/220V 400/230V 415/27V
	PF:0.8	125KVA	138KVA	

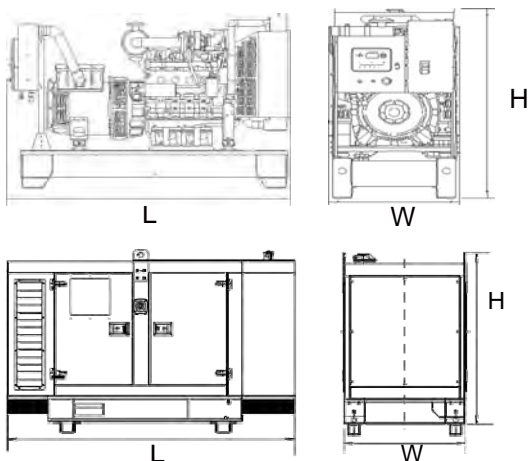
General Information

General Information		
Model		C138D5
Engine		6BTAA5.9G2
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)	34
	Prime Power(1)	30
	75% prime power	23
	50% prime power	16



Dimension and Weight

Dimension	Open	Silent
Length (L)	2240mm	3280mm
Width (W)	980mm	1080mm
Height (H)	1515mm	1765mm
Net Weight	1250KG	1780KG



AGG POWER gensets are compliant with EC mark which include the following directives:

- * 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 and Charge Air Cooled
Bore:	102 mm	Displacement:	5.9 L
Stroke:	120 mm	No. of Cylinders:	6
Emission Certification:	MEP STAGE I	Fuel System:	BYC PB/Electronic Governor
Governor Regulation:	≤3%		

ENGINE MOUNTING

Maximum (Static) Bending Moment at Rear Face of Block.....	-N.m	1356
--	------	------

EXHAUST SYSTEM

Maximum Back Pressure.....	-kPa	10
----------------------------	------	----

AIR INTAKE SYSTEM

Maximum Intake Air Restriction with Heavy Duty Air Cleaner		
— Dirty Element.....	-kPa	6
— Clean Element.....	-kPa	3.7
Minimum Dirt Holding Capacity with Heavy Duty Air Cleaner.....	-g/cfm	53
Maximum Temperature Rise from Ambient to the Inlet of the Turbocharger....	-°C	17
	-mm	76

CHARGE AIR COOLING SYSTEM

Maximum Temp. Rise Between Engine Air Intake and Intake Manifold	-°C	25
Maximum Air Pressure Drop from Turbo Air outlet to Intake Manifold		
— 1500RPM	-kPa	13
— 1800RPM.....	-kPa	13
	-°C	50
	-°C	58

LUBRICATION SYSTEM

Minimum Engine Oil Pressure for Engine Protection Devices:		
— Idle Speed.....	-kPa	207
— Governed Speed.....	-kPa	345
Maximum Oil Temperature.....	-°C	121
Oil Capacity with OP 9006 Oil Pan : High - Low.....	-litre	14.2 - 12.3
Minimum Required Lube System Capacity - Sump plus Filters.....	-litre	16.4
Angularity of Standard Oil Pan: (Values stated are for intermittent operation only):		
— Front Down.....	-°	40
— Front Up.....	-°	40
— Side to Side.....	-°	40

FUEL SYSTEM

Type Injection System.....	BYC PB Direct Injection
Maximum Restriction at Lift Pump.....	-kPa 13.6
Maximum Allowable Head on Injector Return Line (Consisting of Friction Head and Static Head)	
.....	-kPa 67.7
Total Drain Flow (constant for all loads).....	-litre/hr 30



■ 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)

■ Options

Engine	Alternator	Generator Sets	Fuel System	Canopy
<ul style="list-style-type: none"> •Water Jacket Preheater •Oil Preheater 	<ul style="list-style-type: none"> •Winding Temperature measuring Instrument •Alternator Preheater •PMG •Anti-damp and anti-corrosion treatment •Anti-condensation heater 	<ul style="list-style-type: none"> •Tools with the machine 	<ul style="list-style-type: none"> • Low fuel level alarm •Automatic fuel feeding system •Fuel T-valves 	<ul style="list-style-type: none"> •Rental Type Canopy •Trailer
Lubricating System	Exhaust System	Cooling System	Control Panel	Voltages
<ul style="list-style-type: none"> •Oil with the machine 	<ul style="list-style-type: none"> •Protection board from hotness 	<ul style="list-style-type: none"> • Front heat protection • Coolant (-30°C) 	<ul style="list-style-type: none"> •Remote control panel • ATS • Remote controller • Synchronizing controller 	<ul style="list-style-type: none"> • 415/240V • 380/220V • 220/127V • 220/127V • 200-115V



Control Panel



Product description

- Single gen-set controller for Stand-by and Prime-power applications
- Direct communication with EFI engines
- Total remote monitoring and control

Key features

- Easy to install, configure and use
- Wide range of communication capabilities including:
 - connection via RS232, RS485, CAN and on board USB
 - internet access using Ethernet or GPRS
 - support for Modbus and SNMP protocols
- Cloud-based monitoring and control
- Active SMS and emails in different languages
- 2x 5 A binary outputs for cranking and fuel solenoid
- Option for up to 16 additional binary inputs/outputs
- Flexible event based history with up to 350 events
- Load shedding, dummy load capability
- Automatic temperature based cooling/heating
- Comprehensive gen-set protections
- Multipurpose flexible timers
- True RMS measurement

Available extension modules

Product	Description	Order code
CM-Ethernet	Ethernet interface	CM2ETHERXBX
CM-GPRS	GSM modem / wireless internet	CM2GPRSXXBX
CM-RS232-485	Dual port interface	CM223248XBX
EM-BIO8-EFCP	8 additional binary inputs/outputs	EM2BIO8EXBX

Functions and protections

Description	ANSI code	Description	ANSI code
Over voltage	59	Load shedding	32P
Under voltage	27	Overload	32
Voltage asymmetry and Phase rotation**	47	Power factor	55
Over frequency	81H	Temperature	49T
Under frequency	81L	Gas (fuel) level	71
Over current*	50 + 51	Earth fault current	50N + 64
Current unbalance	46		

* Short current only

** Fixed setting

