

TAYLOR[®]

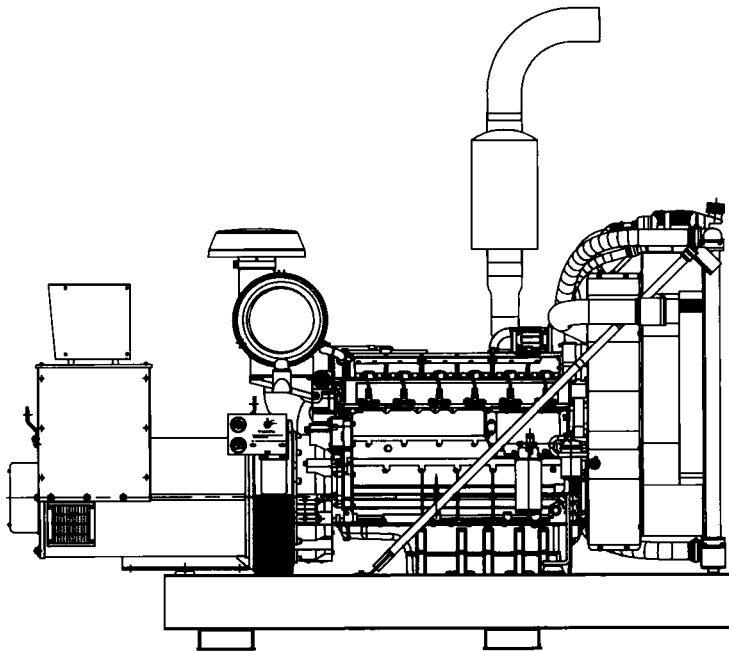
POWER SYSTEMS

Model: V200CD1

Unit Ratings:

	60Hz
Standby: kw/kva	200
Prime: kw/kva	180

Alternator Ratings at 1.0 Power Factor



Features

- **Single source responsibility for the generator set and accessories.**
- **Prototype and production tested to insure one step load acceptance per NFPA 110.**
- **Two year limited warranty on generator sets and accessories.**
- **Unit conforms to CSA, NEMA, EGSA, ANSI and other standards.**
- **EPA mobile-off highway certified engine**
- **Electronic Isochronous Governor**
- **Analog control system with an ECU-CAN74 providing metering and monitoring.**
- **Heavy duty 4 cycle industrial engine for reliability and fuel efficiency.**
- **Brushless rotating field generator with class H insulation.**
- **Heavy duty steel base with integral vibration isolators.**

APPLICATION & ENGINEERING DATA

ENGINE

Engine Specifications	60 Hz	50 Hz
Manufacturer	VOLVO	
Engine, model, type	TAD722GE 4-CYCLE Tier 2 Air to air intercooled	
Cylinder arrangement	6 vertical, in-line	
Displacement, cu. in. (L)	436.3 (7.15)	
Bore and stroke, in. (mm)	4.25 (108) x 5.12 (130)	
Compression ratio	18.1:1	
Piston speed, ft/sec. (m/sec)	25.7 (7.8)	21.4 (6.5)
Rated rpm	1800	1500
Max. power at rated rpm, hp (kw)	296 (218)	268 (197)
Cylinder head material	Cast iron	
Crankshaft material	Forged steel	
Governor type	Heinzmann / EDC 4	
Air cleaner type, all models	Dry paper element w/air rest. indicator	
Injection Pump Type	Single Bosch w/ EDC4 actuator	

EXHAUST

Exhaust System	60 Hz	50 Hz
Exhaust flow at rated kW, cfm (m ³ /min.)	1607 (45.5)	1314 (37.2)
Exhaust temperature at rated kW, dry exhaust, °F (°C)	968 (520)	1035 (557)
Maximum allowable back pressure, in. wc (kPa)	28.1 (7 KPA)	20.1 (5 KPA)
Heat Rejected to Exhaust: BTU/min	10123	9099

ENGINE ELECTRICAL

Engine Electrical System	60 Hz	50 Hz
Battery charging alternator: Ground (negative/positive).....	Negative	
Volts (DC).....	24	
Ampere rating.....	55	
Starter motor rated voltage (DC)	24	
Recommended battery cold cranking amps (CCA) rating for +20° C	400	
Quantity of batteries	2	
Battery voltage (DC)	24	

FUEL

Fuel System	60 Hz	50 Hz
Total Fuel Flow U.S. gal/hour	119	95
Feed Pump Pressure psi (kPa)	72.5 (500)	
Feed Pump Max. Suction Head ft. (m)	4.9 (1.5)	
Injection Timing std.	4° B.T.D.C.	
Fuel filters	1 Spin on Type and 1 Fuel Pre-Filter W/ water separator	
Recommended fuel	#2 diesel	

FUEL CONSUMPTION

Fuel Consumption	60 Hz	50 Hz
Diesel, gph (Lph) at % of load		
100%	14 (53)	12.9 (49)
75%	12.4 (47)	12.2 (46)
50%	6.6 (25)	6.6 (25)

COOLING

Cooling System	60 Hz	50 Hz
Coolant Capacity U.S. gal. (liters) radiator with hoses	7.21 (27.3)	
Coolant Flow U.S. gal/s (liter/s)	.95 (3.6)	.79 (3)
Fan Power Consumption hp (kw)	10 (7.4)	6 (4.4)
Fan Diameter in. (mm)	30.31 (770)	
Heat rejected to cooling water at rated kW, dry exhaust Btu/min.	5835	5147
Water pump type	Belt Driven Efficient Cooling Pump	
Air Consumption at Rated rpm cfm (m ³ /min.)	562 (15.9)	449 (12.7)

LUBRICATION

Lubricating System	60 Hz	50 Hz
Type	FULL PRESSURE W/ INTEGRATED FULL FLOW OIL COOLER	
Oil pan capacity with filter, U.S. GAL (L)	8.9 (34)	
Oil filter, quantity, type	1 FULL FLOW DISPOSABLE	
Oil cooler	full flow oil cooler	
Oil Pressure at Rated Speed psi	64	58

ANALOG CONTROL PANEL

- Taylor Power Systems Analog Auto Start Control Panel. The panel is equipped with AC Voltmeter, AC Frequency Meter, Percent of Load Meter, Running Time Meter, Control Toggle Switch with Off/Auto/Manual positions, and ECU-CAN74 engine control with specific safety shutdown lights.
- Separate Oil Pressure and Water Temperature Gauge Located on Generator Set.
- Taylor Power Systems also supplies a manual key override by-pass switch that allows you to start the generator manually in the event of control systems failure.

ECU-CAN74 FEATURES

- Engine Started LED
- Overspeed Shutdown LED
- Overcrank Shutdown LED
- High Water Temperature Shutdown LED
- Low Oil Pressure Shutdown LED

The ECU automatically cranks, starts, and monitors the engine for Overcrank, Overspeed, High Water Temperature, and Low Oil Pressure. A built in speed switch uses a magnetic pickup to monitor engine speed for crank disconnect and overspeed. The bypass timer/logic assures Low Oil Pressure and High Water Temperature override during the crank period and an additional adjustable period after crank disconnect. The ECU monitors the Magnetic Pickup signal for problems during both cranking and running. If a problem is detected the engine will shutdown and Overcrank and Overspeed LED's will both turn on.