

# **TMC200**

## Ratings Range — 60 Hertz Operation

Standby: kW 200

kVA 250

Prime: kW 180

kVA 225

Throughout it's 80 year history, **Taylor Machine Works**, which manufactures heavy machinery for industries worldwide, has maintained a reputation of having unparalleled products with service to match. **Taylor Power Systems** is no different!

In the early 1980's Taylor Machine Works created Taylor Power Systems to distribute industrial engines and manufacture generator sets offering diesel powered 9 kW to 2000 kW and gaseous powered 30 kW to 400 kW. Taylor Power Systems provides quality standby and prime generator sets in stationary or mobile configurations for a wide variety of applications for example the Healthcare and Telecommunications Industries, Public Utilities, Federal, State and Local Government agencies, Educational and Financial Institutions as well as Agricultural.

Taylor Power Systems is your 21st Century Power Source!

- 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. Extended warranties also available.
- Unit conforms to CSA, NEMA, EGSA, ANSI and other standards.
- 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.
- EPA Tier 3 Flex Certified Engine.

## **Genset Ratings**

perature above 40°C (104°F).

Genset Model Number	Alternator	Voltage L-N / L-L	Phase	Hertz	130° Rise Standby Rating		105° Rise Prime Rating	
					kW / kVA	Amps	kW / kVA	Amps
qj ` CMM	r`fOTQgPNN	277/480	3	60	200/250	301	180/225	271
		139/240	3	60	200/250	601	180/225	541
		120/208	3	60	200/250	693	180/225	625
		120/240	3	60	200/250	601	180/225	541
		120/240	1	60	166/166	691	150/150	625

# **Application and Engineering Data**

**Basic Technical Data Lubrication System** 

Manufacturer Cummins Lubricating oil capacity total 4.4 gal (16.5 L) Model

QSB7-G5 NR3 system

**Number of cylinders** Maximum sump capacity 4.6 gal (17.4 L)

Cylinder arrangement Vertical in-line 4.0 gal (15.1 L) Minimum sump capacity

Cycle Four stroke Induction system Turbocharged, charge air cooled Maximum engine operating

angles (front up, front down, Compression ratio 17.2:1 right side or left side)

**Bore** 4.21 in. (107 mm) Stroke 4.88 in. (124 mm)

**Cubic capacity** 408 cu in. (6.69 L) **Lubricating Oil Pressure** Direction of rotation Oil Temperature (continuous 280 °F (138 °C)

operation)

N/A

N/A

Firing order Oil Temperature (maximum Governor type ECM. Isochronous 0.25% intermittent operation)

Gross engine power 324 hp (242 kWb) Electropak net engine power

**Electrical System** Brake mean effective 349 psi (2404 kPa) Type 12/24 volt negative earth

pressure Alternator type

**Engine coolant flow (against Alternator Voltage** 12/24\/ 5 psi (35 kPa) restriction)

**Alternator Output** 70/100A Starter motor type

Cooling fan air flow (29 psi 569 cfm (269 L/sec) (200 kPa) external Starter motor voltage 12/24V

Starter motor power restriction) Combustion air flow (at Minimum cranking speed

rated speed) Exhaust gas flow (max) 1549 cfm (739 L/sec)

Exhaust gas mass flow **Induction System** (max) Maximum air intake restriction Exhaust gas temperature in 988 °F (532 °C)

Clean filter 15 H2O (3.7 kPa) manifold (max) Dirty filter 25 H2O (6.2 kPa)

Boost pressure ratio Air filter type Overall thermal efficiency N/A

(net) Duct allowance with 50% glycol

**Cooling System** Coolant

Without radiator 2.7 gal (10.2 L) **Coolant Pump Drive** 

**Fuel System** Coolant pump drive ratio Maximum top tank Type of injection Direct 233° F (112° C)

temperature Fuel injection pump Bosch HPCR Temperature rise across **Fuel atomizer** Unit injector/ multi-hole

engine

(rating dependent) 45° F (25° C) **Fuel Lift Pump** Thermostat operation range 175-203° F (79-95 °C) Max flow through customer 27 gal/hr (103 L/hr) Recommended coolant:

filter Maximum suction head 20 kPa

**Fuel Consumption** 110% Load 17.05 gal/hr 100% Load 15.5 gal/hr **Exhaust System** 

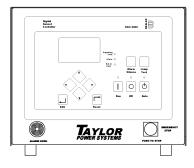
75% Load 11.625 gal/hr Maximum back pressure 3 Hg (10.2 kPa) **Exhaust outlet size** 50% Load 7.75 gal/hr



**Total System Capacity** 

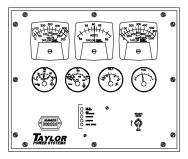
With radiator

# **Generator Controller Options**



#### **Digital Control Panel**

- Integrated engine-genset control, protection, and metering
- Microprocessor allows for exact measurement, setpoint adjustment, and timing functions
- Front panel 3 position controls and indicators enable quick and simple operation
- Emergency stop push button and an Alarm Horn with silence button
- A wide temperature-range liquid crystal display (LCD) with backlighting
- SAE J1939 Engine ECU communications
- Multilingual capability
- Remote RS-485 communications for Optional RDP-110 Remote Annunciator
- 4 programmable contact inputs and 10 contact outputs (2 Adc rated)
- Modbus Communications with RS-485, Battery Backup for Real Time Clock, UL recognized, CSA certified, CE approved, HALT (Highly Accelerated Life Tests) tested, IP 54 Front Panel rating with integrated gasket. and NFPA 110 Level 1 Compatible.



## **Analog Controller**

- Analog instruments to monitor AC voltage, AC frequency, oil pressure, water temperature, battery voltage, fuel level, run time/hour meter and percent of load
- Red LED indication for overspeed, overcrank, low oil pressure, and high coolant temperature
- Green LED indication of engine running
- Control switch is provided for local and remote starting with 3 position run/off/remote switch
- Engine mounted emergency by-pass key switch

# **Alternator Specifications**

Manufacturer Newage Stamford

Type Ext. Voltage Regulated, Brushless

Gen Frame UCI274J311
Insulation NEMA
Material Class H

Temperature Rise 130 °C, Standby

 Hertz
 60

 Phase
 3

 RPM
 1800

 Exciter
 Rotating

# Leads 12 Reconnectable or 4 Single Phase

PF 0.8
Ambient 40°C
Coupling Single Bearing Flexible
Amortisseur Windings Full
Cooling Air Volume 1090 CFM

Peak Motor Starting 30% Voltage Dip, 840 kVA Voltage Regulation 1 Phase Sensing 1% no-load and full-load

- NEMA MG1, IEEE, AND ANSI standards compliance for temperature and motor starting.
- Sustained short-circuit current of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator
- Self-ventilated and dripproof construction.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.
- Linkboards
- Optimized Electrical Design
- Enhanced Ventilation
- Fully Guarded
- Heavy Duty Bearings



#### STANDARD FEATURES

- Trailer with integral fuel tank
- Vibration Isolators
- Oil Drain Valve with Extension
- Battery
- **Battery Rack**
- **Battery Cables**
- Water jacket heater
- Flexible Fuel Lines
- High Ambient Unit Mounted Radiator
- **Battery Charging Alternator**
- **Factory Paint**
- Factory Test Prior to Shipment
- 2 Year Warranty
- **Owners Manual**

### **AVAILABLE ACCESSORIES**

#### **ENCLOSED UNIT**

Standard Enclosure With Internal Silencer

Sound Attenuated Enclosure With Silencer

#### **CONTROLLER**

DGC2020 Control Panel

DGC2020 Control Panel with Modem

DGC2020 with Generator Protection

DGC2020 with Modem and Generator Protection

Flush or Surface Mount Remote Annunciator

Remote Mount Break Glass E-Stop Switch

**Analog Control Panel** 

#### **MISCELLANEOUS**

Coolant Drain Kit

Water Jacket Heater

Oil Pan Heater

Generator Strip Heater

**Battery Charger** 

Pad Type Battery Heater

Battery Heater Blanket with Thermostat

Line Circuit Breaker

**Output Power Cable** 

Y-YY-ZZ Multi-voltage selector switch

20 amp 120vac and GFI receptacle

20 amp 120vac GFI and 30 amp 120/240vac

twist lock receptacle

30 amp 120vac RV receptacle

Cam-Loks

Diesel Locomotive cable

Extenda-Lites

Hydraulic Brake Kit

Pintle ring hitch

Spare tire kit

Lug wrench

Hydraulic Jack

Single Point Lift

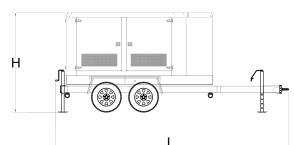
#### **WARRANTY**

3 Year Warranty

5 Year Warranty

#### WEIGHTS AND DIMENSIONS

OVERALL SIZE, L x W x H, in.: 210 in. 84 in. x 91 in. WEIGHT (DRY): 6827 lbs.
Note: Dim and weights reflect standard open unit with no options



Note: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

#### **DISTRIBUTED BY:**

