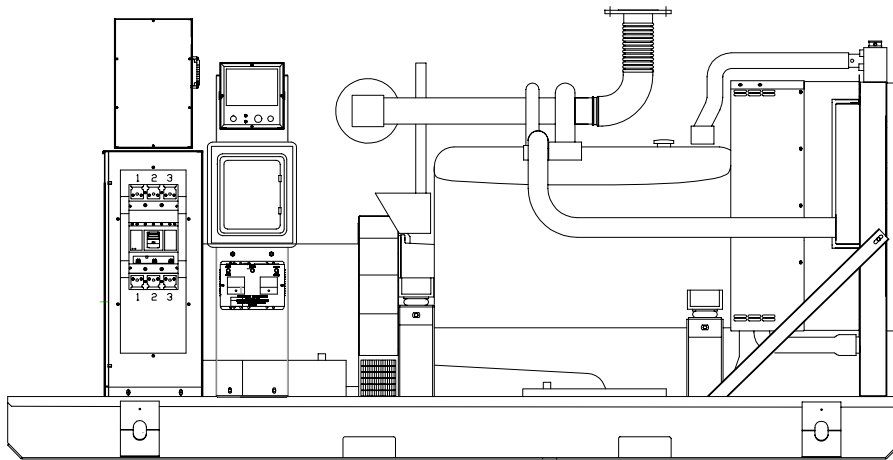


MG300

For Generac Modular Power Systems (MPS)

Standby Power Rating
300 KW 60 Hz

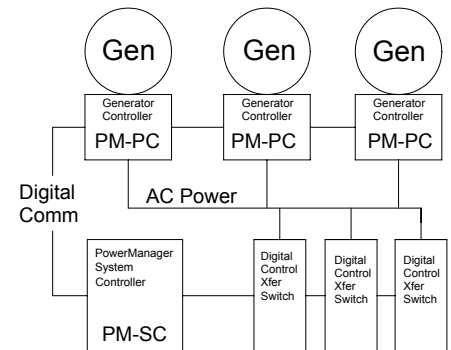


Power Matched

GENERAC 13.3GTA ENGINE

Turbocharged/Aftercooled
Gas Engine Generator
Meets EPA Emission Regulations

PowerManager® Digital Control Platform



FEATURES

- **INNOVATIVE DESIGN & PROTOTYPETESTING** are key components of GENERAC'S success in "IMPROVING POWER BY DESIGN." But it doesn't stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose GENERAC POWER SYSTEMS with the confidence that these systems will provide superior performance.
- **PARALLELING SYSTEM FEATURES:**
 - ✓ AUTO SYNCHRONIZATION
 - ✓ ISOCHRONOUS LOAD SHARING
 - ✓ REVERSE POWER PROTECTION
 - ✓ MAXIMUM POWER PROTECTION
 - ✓ ELECTRICALLY OPERATED MECHANICALLY HELD TRANSFER SYSTEM
 - ✓ REDUNDANT OPERATION AND INCREASED RELIABILITY
 - ✓ UL2200 LISTED
 - ✓ PARALLEL UP TO 10 UNITS
- **POWERMANAGER® DIGITAL CONTROL PLATFORM.** The PowerManager Digital Control Platform (PM-DCP) is a powerful control system built around a 32-bit, industrial microprocessor. Standard factory programming controls the entire engine/generator

system, while allowing the PM-DCP, with its onboard PLC, to be customized to meet any application requirement. The system is available on single unit gas, diesel or bi-fuel installations as well as Modular Power Systems (MPS) from 200 kW - 6000 kW.

- **SINGLE SOURCE SERVICE RESPONSE** from Generac's dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component. You are never on your own when you own a GENERAC POWER SYSTEM.
- **ECONOMICAL NATURAL GAS POWER.** Low cost operation due to modern gas engine technology. Better fuel utilization plus lower cost per kW provide real savings.
- **LONGER ENGINE LIFE.** Generac heavy-duty natural gas engines provide long and reliable operating life.
- **GENERAC TRANSFER SWITCHES, POWERMANAGER® AND ACCESSORIES.** Long life and reliability is synonymous with GENERAC POWER SYSTEMS. One reason for this confidence is that the GENERAC product line includes its own transfer systems, accessories, and PowerManager™ controls for total system compatibility.

GENERAC®

APPLICATION & ENGINEERING DATA

MG300

GENERATOR SPECIFICATIONS

TYPE	Four-pole, revolving field
ROTOR INSULATION	Class H
STATOR INSULATION	Class H
TOTAL HARMONIC DISTORTION	<3%
TELEPHONE INTERFERENCE FACTOR (TIF)	<30
SHORT CIRCUIT CURRENT	300%
ALTERNATOR	Self-ventilated and drip-proof
BEARINGS (PRE-LUBED & SEALED)	1
COUPLING	Direct, Flexible Disc
LOAD CAPACITY (STANDBY)	100%

NOTE: Generator rating and performance in accordance with ISO8528-5, BS5514, SAE J1349, ISO3046 and DIN6271 standards.

EXCITATION SYSTEM

PERMANENT MAGNET EXCITER	Eighteen pole exciter ✓
	Magnetically coupled DC current ✓
	Mounted outboard of main bearing ✓
REGULATION	Digital Solid-state ✓
	±0.25% regulation ✓

CONTROL SYSTEM PM-GC (See Note 5)

The Generac PowerManager™ Generator control is mounted at the generator set and monitors all engine and alternator parameters:

- High/Low Battery
- High Oil Temp
- Low Oil Pressure
- Low Coolant Level
- High Coolant Level
- Low Coolant Level
- Overspeed/Underspeed
- Sensor Failures
- High/Low Frequency
- Pre-alarm Hi Oil Temp
- Pre-alarm Lo Oil Pressure
- Overcrank
- Pre-alarm Hi Coolant
- Critical Low Fuel
- Over/Under Voltage
- Lo Fuel Pressure

The instrumentation screen displays the following:

- AC volts
- Frequency
- Power Factor
- Coolant level
- Fuel level(%)
- Oil Pressure
- AC amps
- kW
- Coolant Temp
- Run time hours
- Battery Voltage
- Engine Speed

■ Serial Communication to the PowerManager Integral controller or System Controller via RS485 connection

■ Programmable

■ Built in Synchronizer for paralleling control and protection

■ Digital Voltage Regulator for concise control

■ Three Pole 1000amp paralleling switch

- Rated 600 volts
- UL Recognized device
- Electrically Operated - Mechanically heald
- Built in ARC supression

■ Mainline Circuit Breaker

Mounted in series with paralleling switch

■ Generator Connection Box

Mounted on right side (facing rear) 12" x 22" x 36"

Access from side, top, bottom to paralleling switch

ENGINE SPECIFICATIONS

MAKE	GENERAC
MODEL	13.3GTA
CYLINDERS	6 in-line
DISPLACEMENT	13.3 Liter (811 cu. in.)
BORE	137 mm (5.39 in.)
STROKE	150 mm (5.91 in.)
COMPRESSION RATIO	10.5:1
INTAKE AIR	Turbocharged/Aftercooled
NUMBER OF MAIN BEARINGS	7
CONNECTING RODS	6-Carbon Steel
CYLINDER HEAD	Cast Iron with Overhead Valve
CYLINDER LINERS	Wet/Replaceable
IGNITION	Altronic CD1
PISTONS	Heat-Resistant Alloy with 4 Rings
CRANKSHAFT	Induction-Hardened, Die-Forged Carbon Steel

VALVE TRAIN

LIFTER TYPE	Solid
INTAKE VALVE MATERIAL	Special Heat Resistant Steel
EXHAUST VALVE MATERIAL	Inconel Alloy High Temp.
HARDENED VALVE SEATS	High Temp. Alloy Stellite Faced

ENGINE GOVERNOR

ELECTRONIC	Standard
STEADY STATE REGULATION	±0.25%

LUBRICATION SYSTEM

TYPE OF OIL PUMP	Gear Driven
OIL FILTER	Full flow, cartridge
CRANKCASE CAPACITY	27 Liters (7.13 gal.)

COOLING SYSTEM

TYPE OF SYSTEM	Pressurized, closed recovery
WATER PUMP	Pre-lubed, self-sealing
TYPE OF FAN	Pusher
NUMBER OF FAN BLADES	8
DIAMETER OF FAN	39 in.
COOLANT HEATER	240V, 2000 W

FUEL SYSTEM

FUEL	<input type="checkbox"/> Natural Gas..... Standard
CARBURETOR	Down draft
SECONDARY FUEL REGULATOR	Nat. Gas
AUTOMATIC FUEL LOCKOFF SOLENOID	Standard
OPERATING FUEL PRESSURE	11" to 15" H ₂ O
MINIMUM BTU (ft ³)	875
INPUT PIPE SIZE	1 1/2" NPT

ELECTRICAL SYSTEM

BATTERY CHARGE ALTERNATOR	20 Amps at 24 V
STARTER MOTOR	24 V
RECOMMENDED BATTERY	925 CCA (2) - 12 V, 135 A.H., 4D
GROUND POLARITY	Negative

- High Coolant Temperature Automatic Shutdown
- Low Coolant Level Automatic Shutdown
- Low Oil Pressure Automatic Shutdown
- Overspeed Automatic Shutdown (Solid-state)
- Crank Limiter (Solid-state)
- Oil Drain Extension
- Radiator Drain
- Factory-Installed Cool Flow Radiator
- Closed Coolant System
- UV/Ozone Resistant Hoses
- Rubber-Booted Engine Electrical Connections
- Stainless Steel Flexible Exhaust Connection
- Battery Charge Alternator
- Battery Cables
- Battery Tray
- 24 Volt, Solenoid-activated Starter Motor
- Air Cleaner
- Fan Guard
- Control Console
- Isochronous Governor
- Jacket water heater
- Autosynchronizer
- Isochronous Load Sharing Module
- Reverse Power Protection Relay
- Dead Bus Sensing
- Sync Check Relay
- Main Line Circuit Breaker
- 2 Year Warranty
- Engine Coolant Heater

GENERATOR CONNECTIONS

1. 4 Wire load connections on Paralleling Contactor: Each phase will accept (4) #6 to 350MCM aluminum or copper conductor.
2. 2 wire shielded cable (RS485) to Power Manager System Control or Power Manager Integral Control
3. 2 wire Twisted pair from Transfer switch (when multiple transfer switches are used) Can also go to the Power Manager System Controller
4. 120 Volt 15 amp input circuit for Battery Charger.
5. 240 Volt 20 amp input for Coolant Heater.

OPTIONS

- **OPTIONAL COOLING SYSTEM ACCESSORIES**
 - Radiator Duct Adapter
- **OPTIONAL FUEL ACCESSORIES**
 - Flex Fuel Lines
 - Low Pressure Alarm
- **OPTIONAL ELECTRICAL ACCESSORIES**
 - 10A Dual Rate Battery Charger
 - Battery, 24 Volt, (2) 12 Volt Size 31
 - Battery warmer
- **OPTIONAL ALTERNATOR ACCESSORIES**
 - Alternator Heater
- **OPTIONAL EXHAUST ACCESSORIES**
 - Critical Exhaust Silencer
- **GENERAC POWERMANAGER® INTEGRATED**
 - Controller and ATS Note 5 - See Spec 0167390SBY for additional information
- **GENERAC POWERMANAGER® SYSTEM**
 - Controller Note 5 for Multiple Transer Switches See Spec 0167380SBY for Additional Information
- **ADDITIONAL OPTIONAL EQUIPMENT**
 - 20 Light Remote Annunciator
 - Remote Relay Panels
 - Oil Make-Up System
 - Oil Heater
 - GenLink® Communications Software
- **OPTIONAL ENCLOSURES**
 - Weather Protective
 - Sound Attenuated
 - Aluminum and Stainless Steel

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