

Application and Engineering Data

Basic Technical Data

Lubrication System

Manufacturer Mitsubishi
Model S16R-Y2PTAW-1
Number of cylinders 16

Cylinder arrangement
Cycle Four stroke
Induction system Turbocharged intercooler

Compression ratio 14.5:1
Bore 6.69 in (170 mm)
Stroke 7.09 in (180 mm)
Cubic capacity 3989 cu in (65.4 L)
Direction of rotation

Firing order
Governor type Isochronous
Gross engine power 2346 bhp (1750 kWm)
Electropak net engine power

Lubricating oil capacity total system
Maximum sump capacity 52.8 gal (200.0 L)

Minimum sump capacity

Maximum engine operating angles (front up, front down, right side or left side)

Lubricating Oil Pressure

Oil Temperature (continuous operation)
Oil Temperature (maximum intermittent operation)

Electrical System

Brake mean effective pressure
Engine coolant flow (against 5 psi (35 kPa) restriction) 489 gpm (1850.9 Lpm)

Cooling fan air flow (29 psi (200 kPa) external restriction) 91700 scfm (2589 cmm)
Combustion air flow (at rated speed) 5932 cfm (168 cmm)
Exhaust gas flow (max) 15642 cfm (443 cmm)
Exhaust gas mass flow (max)
Exhaust gas temperature in manifold (max) 935° F (487° C)
Boost pressure ratio
Overall thermal efficiency (net)

Type
Alternator type
Alternator Voltage 24 V
Alternator Output 30 A
Starter motor type
Starter motor voltage 24 V
Starter motor power
Minimum cranking speed

Induction System Maximum air intake restriction

Clean filter
Dirty filter
Air filter type

Duct allowance with 50% glycol

Cooling System

Coolant
Total System Capacity
With radiator 622.0 qt (588.6 L)
Without radiator 179.6 qt (169.9 L)
Coolant Pump Drive Centrifugal
Coolant pump drive ratio
Maximum top tank temperature
Temperature rise across engine (rating dependent)
Thermostat operation range
Recommended coolant:

Fuel System

Type of injection
Fuel injection pump Engine driven
Fuel atomizer

Fuel Lift Pump

Max flow through customer filter 148 gph (560.2 Lph)
Maximum suction head 3 ft (1 m)

Fuel Consumption

110% Load
100% Load 126.6 gph (479.2 Lph)
75% Load 9401 gph (356.2 Lph)
50% Load 65.0 gph (246.0 Lph)

Exhaust System

Maximum back pressure 23.6 H₂O (5.9 kPa)
Exhaust outlet size 13.39 in (340 mm)

Generator Controller Options



- Dashboard Style LCD Panel
- NFPA 110
- SAE J1939 ECU Communications
- Load Share Synch Features
- Metering, Data Trending, Alarms
- Engine Status Indicators
- Fuel Consumption
- CanBus, ModBus
- Ethernet Communications
- Remote Contacts Form C, RS 232/485

- Internet Bridge Module
- Internet Connection & Web Browser
- Remote Access & Control
- IntelliMonitor Network Management
- SNMP, PC SCADA
- Site Overview & Statistic Settling
- Automatic Downloads, Report Writer
- Receive Emails or IM Text
- CAT 5e, RS232/485, RJ 45
- Ethernet or Dial Up Connection
- Fleet Scalability

Alternator Specifications

Manufacturer	Marathon	<ul style="list-style-type: none"> • 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 field. • 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
Type	Ext. Voltage Regulated, Brushless	
Gen Frame	360 MAGNAMAX	
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	250 CFM	
Peak Motor Starting	35% Voltage Dip, 5500 skVA	
Voltage Regulation no-load and full-load	3 Phase Sensing 1/2%	

STANDARD FEATURES

- Heavy Duty Steel Base
- Vibration Isolators
- Oil Drain Valve with Extension
- Battery Rack
- Battery Cables
- High Ambient Unit Mounted Radiator
- Battery Charging Alternator
- Factory Paint
- Factory Test Prior to Shipment
- 2 Year Warranty
- Owners Manual

AVAILABLE ACCESSORIES

OPEN UNIT

- Narrow Skid Base
- Radiator Duct Flange
- Ship Loose Flex Exhaust
- Ship Loose Critical Silencer

ENCLOSED UNIT

- Wide Skid Base
- Standard Enclosure With Internal Silencer
- Sound Attenuated Enclosure With Silencer
- Load Center With Lights and GFI Receptacle
- Sub-Base Fuel Tank

CONTROLLER

InteliLite Model IL-NT-MRS19

Ethernet Bridge

Remote Annunciator

MISCELLANEOUS

- Flexible Fuel Lines
- Coolant Drain Kit
- Water Jacket Heater
- Oil Pan Heater
- Generator Strip Heater
- Battery
- Battery Charger
- Pad Type Battery Heater
- Battery Heater Blanket with Thermostat
- Line Circuit Breaker

WARRANTY

- 3 Year Warranty
- 5 Year Warranty

APPROVALS AND LISTINGS

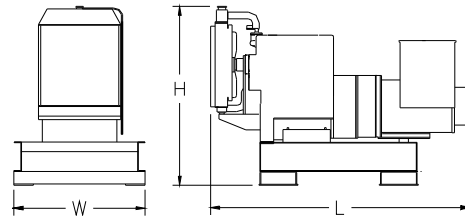
- UL Standard 2200

WEIGHTS AND DIMENSIONS

OVERALL SIZE, L x W x H,: 252 in. x 87.9 in. x 101.8 in.

WEIGHT: 31600 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.

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