

# BLUE STAR

## Power Systems Inc.

### Diesel Product Line

208-600 Volt

TD600-01 / TD600-01P

60 Hz / 1800 RPM

600 kWe / 550 kWe

Standby / Prime

### Ratings

	208V	240V	480V	600V
Phase	3	3	3	3
PF	0.8	0.8	0.8	0.8
Hz	60	60	60	60
Generator Model	573RSL4033	573RSL4033	572RSL4031	572RSS4272
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
Standby				
kWe	600	600	600	600
AMPS	2084	1806	903	723
Temp Rise	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C
Prime [Only Available For Mobile Applications]				
kWe	550	550	550	550
AMPS	1911	1656	828	662
Temp Rise	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C

### Standard Equipment

#### Engine

- ▶ Radiator Cooled Unit Mounted (50°C)
- ▶ Blower Fan & Fan Drive
- ▶ Starter & Alternator
- ▶ Oil Pump & Filter
- ▶ Oil Drain Extension w/Valve
- ▶ Governor - Electronic Isochronous
- ▶ 24V Battery System & Cables
- ▶ SAE Flywheel & Housing
- ▶ Air Cleaner (Dry Single Stage)
- ▶ Flexible Fuel Connectors
- ▶ EPA Certified - Tier 2

#### Generator

- ▶ Brushless Single Bearing
- ▶ Automatic Voltage Regulator
- ▶ ± .25% Voltage Regulation
- ▶ 4 Pole, Rotating Field
- ▶ 130°C Standby Temperature Rise
- ▶ 105°C Standby Temperature Rise
- ▶ 100% of Rated Load - One Step
- ▶ 5% Maximum Harmonic Content
- ▶ NEMA MG 1, IEEE and ANSI standards compliance for temperature rise

#### Additional

- ▶ Microprocessor Based Digital Control
- ▶ Base - Structural Steel
- ▶ Main Line Circuit Breaker Mounted & Wired
- ▶ Critical Grade Silencer (Loose)
- ▶ Flexible Exhaust Connectors
- ▶ Battery Charger 24V 5 Amp
- ▶ Jacket Water Heater -20°F 6000W 240V w/Isolation Valves
- ▶ Vibration Isolation Mounts (Pad Type)
- ▶ Radiator Duct Flange (OPU Only)
- ▶ Single Source Supplier
- ▶ 2YR / 2000HR Standby Warranty
- ▶ 1YR / 1500HR Prime Warranty
- ▶ Standard Colors - White / Tan / Gray

TD600-01 / TD600-01P

# Diesel Product Line

600 kWe / 550 kWe



## Application Data

### Engine

Manufacturer:	MTU	Displacement - Cu. In. (lit):	1282 (21.0)
Model Standby (Prime):	12V1600G80S (12V1600G20S)	Bore - in. (cm) x Stroke - in. (cm):	4.80 (12.2) x 5.90 (15.0)
Type:	4-Cycle	Compression Ratio:	17.5:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	12 Cylinder Vee	Max HP Stby (kWm):	896 (668)

### Exhaust System

	Standby	Prime
Gas Temp. (Stack): °F (°C)	797 (425)	777 (414)
Gas Volume at Stack Temp: CFM (m³/min)	4,662 (132)	4,450 (126)
Maximum Allowable Exhaust Restriction: in. H2O (kPa)	60.2 (15.0)	60.2 (15.0)

### Cooling System

Ambient Capacity of Radiator: °F (°C)	122 (50.0)	122 (50.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H2O (kPa)	0.5 (0.12)	0.5 (0.12)
Water Pump Flow Rate: Gpm (lit/min)	137 (517)	137 (517)
Heat Rejection to Coolant: BTUM (kW)	15,354 (269)	13,762 (241)
Heat Rejection to CAC: BTUM (kW)	9,667 (169)	8,530 (149)
Heat Radiated to Ambient: BTUM (kW)	5,123 (89.7)	4,305 (75.3)

### Air Requirements

Aspirating: CFM (m³/min)	1,907 (54.0)	1,865 (52.8)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	26,700 (756)	26,700 (756)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)	Consult Factory For Remote Cooled Applications	

### Fuel Consumption

At 100% of Power Rating: gal/hr (lit/hr)	40.0 (151)	37.0 (140)
At 75% of Power Rating: gal/hr (lit/hr)	30.2 (114)	28.0 (106)
At 50% of Power Rating: gal/hr (lit/hr)	21.2 (80.3)	19.8 (75)

### Fluids Capacity

Total Oil System: gal (lit)	19.3 (73.1)	19.3 (73.1)
Engine Jacket Water Capacity: gal (lit)	17.2 (65.1)	17.2 (65.1)
System Coolant Capacity: gal (lit)	28.1 (106)	28.1 (106)

#### Deration Factors

Rated power available at ambient temperatures to 50°C. Derate 3% per 1640 ft (500 m) above 4265 ft (1300 m).  
Consult factory for site conditions above these parameters.

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## DGC-2020 Control Panel

### Standard Features

- ▶ Digital Metering
- ▶ Engine Parameters
- ▶ Generator Protection Functions
- ▶ Engine Protection
- ▶ CAN Bus ECU Communications
- ▶ Windows-Based Software
- ▶ Multilingual Capability
- ▶ Remote Communications to RDP-110 Remote Annunciator
- ▶ 16 Programmable Contact Inputs
- ▶ Up to 15 Contact Outputs (7 standard)
- ▶ UL Recognized, CSA Certified, CE Approved
- ▶ Event Recording
- ▶ IP 54 Front Panel Rating with Integrated Gasket
- ▶ NFPA 110 Level 1 Compatible

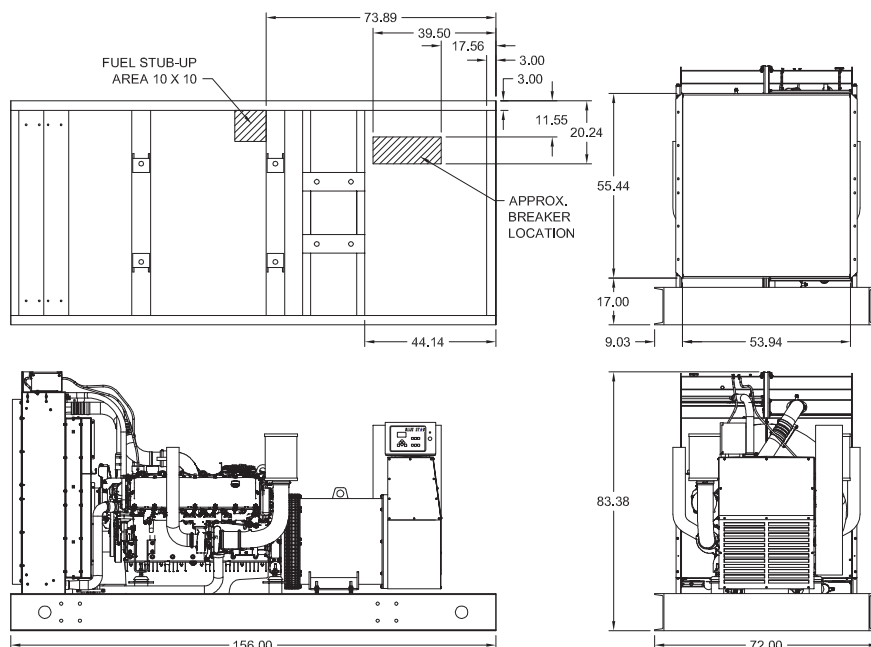


## Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
<b>OPU</b>	156 x 72 x 84 in	10800
<b>Level 1</b>	156 x 72 x 116 in	11600
<b>Level 2</b>	156 x 72 x 129 in	12200
<b>Level 3</b>	215 x 72 x 118 in	12600

Height measured from bottom of base to exhaust stack.

	No Load	Full Load
<b>OPU</b>	90 dBA	95 dBA
<b>Level 1</b>	85 dBA	90 dBA
<b>Level 2</b>	84 dBA	88 dBA
<b>Level 3</b>	75 dBA	79 dBA



Drawings based on standard open power 480 volt standby generator. Lengths may vary with other voltages. Subject to change without notice.  
Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at standby rating.

TD600-01 / TD600-01P

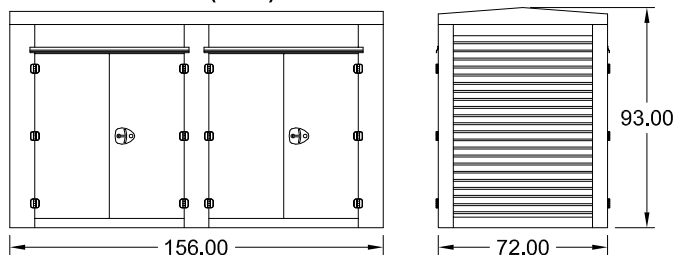
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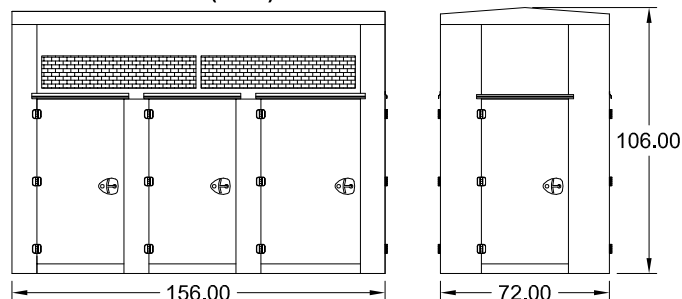


## Optional Enclosures and Fuel Tanks

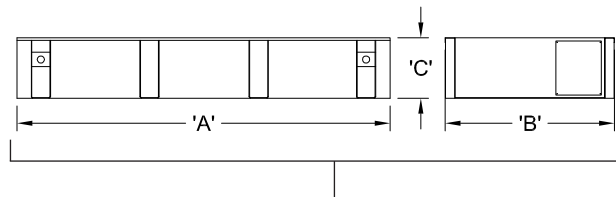
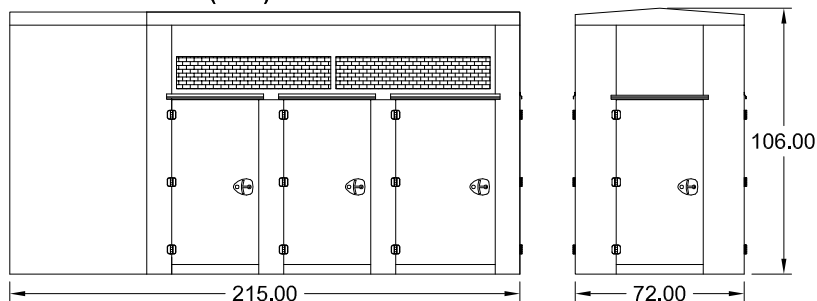
**Level 1 Enclosure (WPE)**



**Level 2 Enclosure (WPF)**



**Level 3 Enclosure (SAE)**



\*Level 1 enclosures are 100 MPH Wind Rated as standard (up to 150 MPH available).

\*\*Level 2 & 3 enclosures are 150 MPH Wind Rated as standard.

\*\*\*Enclosure height does not include unit base or exhaust stack.

### Double Wall UL 142 Listed Fuel Tanks

	24 Hour (975 Gallon)			48 Hour (1950 Gallon)			72 Hour (2925 Gallon)		
	A	B	C	A	B	C	A	B	C
<b>OPU</b>	156.00	72.00	32.00	250.00	72.00	36.00	355.00	72.00	36.00
<b>Level 1</b>	156.00	72.00	32.00	250.00	72.00	36.00	355.00	72.00	36.00
<b>Level 2</b>	156.00	72.00	32.00	250.00	72.00	36.00	355.00	72.00	36.00
<b>Level 3</b>	215.00	72.00	22.00	250.00	72.00	36.00	355.00	72.00	36.00

\*All specification sheet dimensions are represented in inches.

\*\*All enclosures and fuel tanks are based on the standard standby unit configuration. Any deviation can change dimensions.

\*\*\*Level 1 enclosure not UL listed.

Materials and specifications subject to change without notice.

Distributed By:



A USA COMPANY

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