500 kWe Diesel Generator Set 208 - 480 Volt

60 Hz / Standby EPA Tier 2

Engine Technical Data: Manufacturer:

Cummins Model: QSX15-G9 Type: 4-Cycle Turbo Charged, Air to Air CAC Aspiration: Cylinder Arrangement: Inline 6 cyl. Displacement - Cu. In. (lit): 912 (15.0) Bore – in. (cm) x stroke – in. (cm): 5.39 (13.7) x 6.65 (16.9) Compression Ratio: Rated RPM: 1800 Max HP Stby (kWm): 755 (563)

Voltage (L-L)	480V	208V	240V	240V	
Phase	3	3	3	1	
PF	0.8 0.8		0.8	1.0	
Hz	60 60		60	60	
kW Stby (Prime)	500 (460)	500 (460)	500 (460)	N/A	
AMPS Stby (Prime)	752 (692)	1736 (1597)	1505 (1384)	N/A	
Generator Model	572RSL4027	572RSL4027	572RSL4027	N/A	
Temp Rise 130° C / 27° C		130° C / 27° C	130° C / 27° C	130° C / 27° C	
Connection	12 LEAD WYE	12 LEAD WYE	12 LEAD DELTA	12 LEAD ZIG-ZAG	

Engine Features

- Radiator Cooled
- Starter and Alternator
- Oil Pump and Filter
- Isochronous Governor
- EPA Tier level 2 Certified
- J1939 Engine Communications

Generator Features

- Brushless Single Bearing
- Automatic Voltage Regulator
- » Over-excitation Protection
- » Under-Frequency Compensation
- Available Voltages:
- » 480/277 3PH 12 wire
- » 208/120 3PH 12 wire
- » 240/120 3PH 12 wire
- » 240/120 1PH 12 wire

DGC 2020 Controller Features

- Microprocessor based, digital control system
- Unit-mounted
- Engine vitals monitored by LCD display:
- » Oil Pressure
- » Running Time
- » Engine Temperature
- » Safety Shutdowns:
 - ▲ HWT, OC, OS, OP
- » Battery Voltage
- » Generator AC Voltage
- » AC Amperage
- » Frequency
- » Continuous Displays:
 - ▲ Oil pressure
 - ▲ Engine temperature
 - ▲ Battery voltage
 - ▲ Fuel level

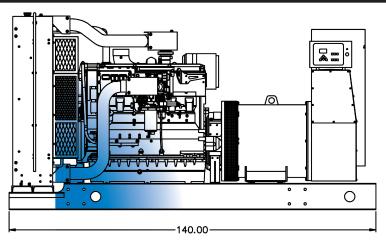
Additional Standard Features

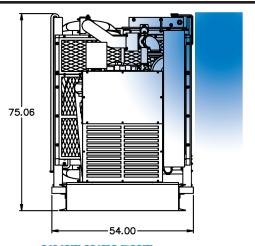
- Main Circuit Breaker (Mounted and wired)
- Flexible Fuel Connectors
- Battery: 24 volt with rack
- Battery Charger: 24 volt 5 amp
- Vibration Isolation Mounts
- Jacket water heater: -20°F w/valves
- Critical Grade Silencer (Mounted)
- Oil Drain valve with extension
- Radiator duct adapter (OPU only)
- Emergency Stop Pushbutton
- PMG Excitation.

Optional Features

- Weather Protective and/or Sound Attenuated enclosures
- Remote monitoring panels

CD500-01





UNIT DIMENSIONS (OPU less silencer)

Unit Type	Dimensions
OPU	140 x 54 x 75 in
WPE	150 x 68 x 102 in
SAE	205 x 68 x 106 in

UNIT WEIGHT (OPU less silencer)

Unit Type	Weight (less tank): lbs (kg)
OPU	8875 (4026)
WPE	9775 (4434)
SAE	10725 (4865)

Dimensions and weights based on standard 480V open power unit. All dimensions and weights may vary with other voltages. Consult factory for installation drawings and accurate weights for your particular unit.

SOUND DATA

Unit Type	Standby		Prime	
Unit Type	NO LOAD	FULL LOAD	NO LOAD	FULL LOAD
OPU w/ Std Critical Silencer	88 dBA	92 dBA	88 dBA	91 dBA
WPE	84 dBA	91 dBA	84 dBA	90 dBA
SAE	72 dBA	74 dBA	72 dBA	73 dBA

INSTALLATION DATA

	Standby	Prime	
Exhaust System	·		
Gas Temp. (Stack): °F (°C)	909 (488)	875 (468)	
Gas Volume at Stack Temp: CFM (m³/min)	3,845 (109)	3,200 (91)	
Maximum Allowable Exhaust Restriction: in. H2O (kPa)	40.8 (10.2)	40.8 (10.2)	
Cooling System			
Ambient Capacity of Radiator: °F (°C)	122 (50)	122 (50)	
Maximum Allowable Static Pressure on Rad. Exhaust: in. H20 (kPa)	0.5 (0.12)	0.5 (0.12)	
Water Pump Flow Rate: Gpm (lit/min)	105 (397)	105 (397)	
Heat Rejection to Coolant: BTUM (kW)	9,230 (161)	7,830 (137)	
Heat Radiated to Ambient: BTUM (kW)	2,070 (36)	2,410 (42)	
Air Requirements			
Aspirating: CFM (m³/min)	1,510 (42.7)	1,380 (39.0)	
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	16,308 (462)	16,308 (462)	
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 (liter/hr)	35.9 (136.0)	31.1 (117.7)	
At 75% of Power Rating: gal/hr (liter/hr)	26.2 (99.2)	23.9 (90.5)	
At 50% of Power Rating: gal/hr (liter/hr)	18.2 (68.9)	17.2 (65.3)	
Fluids Capacity			
Total Oil System: gal (lit)	24 (91)	24 (91)	
Engine Jacket Water Capacity: gal (lit)	6.0 (22.7)	6.0 (22.7)	
System Coolant Capacity: gal (lit)	26.2 (99.1)	26.2 (99.1)	

Specifications subject to change at any time without notice. FORM #: CD500-01 #-9-10

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