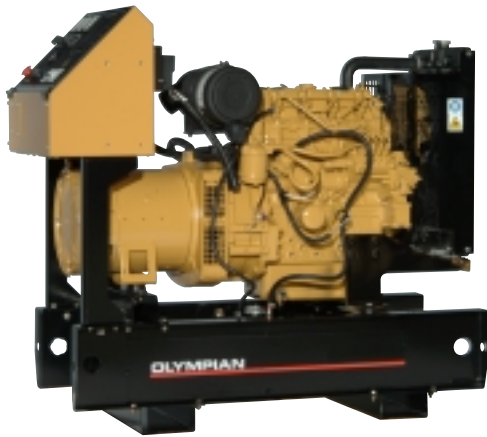


Exclusively from your Caterpillar® dealer



Generator Set Pictured May Include Optional Accessories

FEATURES

GENERATOR SET

- Complete system designed and built at ISO 9001 certified facilities
- Factory tested to design specifications at full load conditions

ENGINE

- Governor, mechanical
- Electrical system, 12 VDC
- Cartridge type filters
- Battery, rack and cables
- Coolant and lube drains piped to edge of base

GENERATOR

- Insulation system, class H
- Drip proof generator air intake (NEMA 2, IP23)
- Electrical design in accordance with BS5000 Part 99, IEC60034-1, EN61000-6, NEMA MG-1.33

CONTROL SYSTEM

- LCP2 Autostart control panel
- Vibration isolated NEMA 1 enclosure with lockable hinged door
- DC and AC wiring harnesses

MOUNTING ARRANGEMENT

- Heavy-duty fabricated steel base raised for forklift access
- Seismic (Zone 4) vibration isolators
- Directly mounted 10 dB(A) silencer
- Complete OSHA guarding
- Flexible fuel lines to base with NPT connections

STANDBY 20 kW
PRIME 18 kW
60 Hz

Model	Standby kW (kVA)	Prime kW (kVA)
D20P4*	20 (25)	18 (22.5)
D20P4S*	20 (20)	18 (18)

*Tier II EPA Approved, Emissions Certified
Consult factory for more details.

COOLING SYSTEM

- Radiator and cooling fan complete with protective guards
- Standard ambient temperatures up to 122° F (50° C)

CIRCUIT BREAKER

- UL/CSA (mainline) listed
- 3-pole with solid neutral
- NEMA 1 steel enclosure, vibration isolated
- Electrical stub-up area directly below circuit breaker

AUTOMATIC VOLTAGE REGULATOR

- Voltage within $\pm 0.5\%$ 3 Phase and $\pm 1.0\%$ Single Phase at steady state from no load to full load
- Provides fast recovery from transient load changes

EQUIPMENT FINISH

- All electroplated hardware
- Anticorrosive protection prior to painting
- High gloss polyurethane paint for durability and scuff resistance

QUALITY STANDARDS

- BS4999, BS5000, BS5514, EN61000-6, IEC60034, NEMA MG-1.33, NFPA 110 (with optional equipment)

DOCUMENTATION

- Operation and maintenance manuals provided
- Wiring diagrams included

WARRANTY

- All equipment carries full manufacturer's warranty. Extended warranty terms available.

S T A N D B Y
P R I M E
6 0 H z

2 0 k W
1 8 k W

OLYMPIAN™

OPTIONAL EQUIPMENT*

ENCLOSURE

- Sound attenuated enclosure (includes internal silencer system)
- Single point lift
- Panel viewing window

SILENCER SYSTEM — OPEN UNIT ONLY

- Level 2 Silencer

CIRCUIT BREAKER

- Auxiliary voltfree contacts

GENERATOR

- Anti-condensation heater

COOLING SYSTEM

- Coolant heater

CONTROL SYSTEM

- Access 2000 control system (Enclosure only)
- Access 4000 control system

FUEL SYSTEM

- Single-walled steel fuel tank
- UL Listed double walled, closed top diked tank, skid mounted, nominal 24 hour low level alarm

MISCELLANEOUS ACCESSORIES

- Additional operator's manual pack
- UL listing
- French or Spanish language labels

EXTENDED WARRANTY

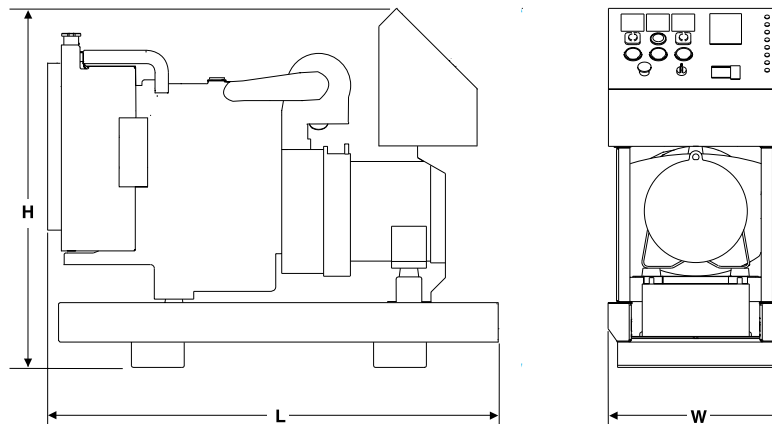
- 36 months
- 48 months
- 60 months
(See warranty policy for details of coverage)

TESTING

- Factory witness test (restricted to 6 hours — full load, 1.0 pf)

*Some options may not be available on all models.
 Not all options are listed.

GENERATOR SET DIMENSIONS AND WEIGHTS



Model	Length in (mm)	Width in (mm)	Height in (mm)	Weight lbs (kg)**
D20P4	56.1 (1425)	21.7 (552)	44.7 (1135)	450.0 (992)
D20P4S	56.1 (1425)	21.7 (552)	44.7 (1135)	450.0 (992)

NOTE: General configuration not to be used for installation. See specific dimensional drawings for detail.

**Includes oil and coolant

S T A N D B Y
P R I M E
6 0 H z

2 0 k W
1 8 k W

OLYMPIAN™

SPECIFICATIONS



GENERATOR

Voltage Regulation . . . ±0.5% 3 Phase and ±1.0% Single Phase at steady state from no load to full load
Frequency ±0.8% for constant load, no load to full load
Waveform Distortion THD < 4%, at no load
Radio Interference Compliance with EN61000-6
Telephone Interference TIF <50, THF <2%
Overspeed Limit. 2250 rpm
Insulation Class H
Temperature Rise Within Class H limits
Available Voltages. 277/480, 120/240, 120/208
Deration Consult factory for available outputs
Ratings At 86° F (30° C), 500 ft. (152.4 m), 60% humidity, 1.0 pf (1-Phase), 0.8 pf (3-Phase)



ENGINE

Manufacturer Perkins
Type 4-Cycle
Cylinder Configuration In-line 4
Displacement — cu in (L) 135 (2.22)
Bore — in (mm) 3.3 (84)
Stroke — in (mm) 3.9 (100.0)
Compression Ratio. 23.3:1
Governor Type. Mechanical
Class. A1
Piston Speed — ft/sec (m/sec) 19.7 (6)
Engine speed — rpm. 1800
Air Cleaner Type Dry, replaceable paper element type with restriction indicator
Regenerative Power — kW 8.64

D20P4 — 404C-22G2

Max Power at Rated rpm — hp (kW)
Standby 33.0 (24.3)
Prime 29.5 (22.0)
BMEP — psi (kPa)
Standby 106 (731)
Prime 95.5 (658)
Aspiration Naturally Aspirated

D20P4S — 404C-22G2

Max Power at Rated rpm — hp (kW)
Standby 33.0 (24.3)
Prime 29.5 (22)
BMEP — psi (kPa)
Standby 106 (731)
Prime 95.5 (658)
Aspiration Naturally Aspirated



CONTROL PANEL

NEMA 1 steel enclosure with lockable hinged door
Vibration isolated mounted Autostart control panel
Single location customer connector point
Electrical stub-up area directly below control panel

RATING DEFINITIONS

Standby — Applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The generator is peak rated (as defined in ISO8528-3).

Prime — Applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and the generator set can supply 10 percent overload power for 1 hour in 12 hours.

Consult your Olympian representative for more information.

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S T A N D B Y
P R I M E
6 0 H z

2 0 k W
1 8 k W

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D20P4 (3-Phase)

Materials and specifications are subject to change without notice.

Generator Set Technical Data — 1800 rpm/60 Hz		Standby	Prime
Power Rating	kW (kVA)	20 (25)	18 (22.5)
Lubricating System Type: Full Pressure Oil Filter: Spin-On, Full Flow Oil Cooler: Watercooled Oil Type Required: API CF-4 Total Oil Capacity Oil Pan	U.S. gal (L) U.S. gal (L)	2.8 (10.6) 2.35 (8.9)	2.8 (10.6) 2.35 (8.9)
Fuel System Generator Set Fuel Consumption 100% Load 75% Load 50% Load	G/hr (L/hr) G/hr (L/hr) G/hr (L/hr)	1.9 (7.0) 1.3 (5.0) 1.0 (3.6)	1.6 (6.2) 1.2 (4.5) 0.9 (3.2)
Engine Electrical System Voltage/Ground: 12/Negative Battery Charging Generator Ampere Rating	Amps	55	55
Cooling System Water Pump Type: Centrifugal Radiator System Capacity Incl. Engine Maximum Coolant Static Head Coolant Flow Rate Minimum Temperature to Engine Temperature Rise Across Engine Heat Rejected to Coolant at Rated Power Total Heat Radiated to Room at Rated Power Radiator Fan Load	U.S. gal (L) Ft H ₂ O (m H ₂ O) U.S. gal/hr (L/hr) °F (°C) °F (°C) Btu/min (kW) Btu/min (kW) Hp (kW)	1.8 (7) 10.2 (3.1) 769 (2910) 169 (76) 45 (7.4) 1263 (22.2) 461 (8.1) 0.5 (0.4)	1.8 (7) 10.2 (3.1) 769 (2910) 169 (76) 45 (7.4) 1132 (19.9) 415 (7.3) 0.5 (0.4)
Air Requirements Combustion Air Flow Maximum Air Cleaner Restriction Radiator Cooling Air (zero restriction) Generator Cooling Air Allowable Air Flow Restriction (After radiator) Cooling Airflow (@ rated speed) Rate with restriction	Cfm (m ³ /min) In H ₂ O (kPa) Cfm (m ³ /min) Cfm (m ³ /min) In H ₂ O (kPa) Cfm (m ³ /min)	61.4 (1.74) 25.6 (6.4) 1652 (46.8) 382 (10.8) 0.48 (0.120) 1398 (39.6)	61.4 (1.74) 25.6 (6.4) 1652 (46.8) 382 (10.8) 0.48 (0.120) 1398 (39.6)
Exhaust System Maximum Allowable Backpressure Exhaust Flow at Rated kW Exhaust Temperature at Rated kW — Dry Exhaust	In Hg (kPa) Cfm (m ³ /min) °F (°C)	3.01 (10.2) 168 (4.76) 950 (510)	3.01 (10.2) 153 (4.34) 824 (440)
Generator Set Noise Rating* (Without Attenuation) at 3 ft (1 m)	dB(A)	TBA	TBA

Generator Technical Data	277/480V	120/208V		
Motor Starting Capability: (kVA) (30% Voltage Dip)	62	39		
Full Load Efficiencies: Standby Prime	87.1 87.6	85.9 86.6		
Reactances (per unit): X _d X' _d X'' _d X _q X'' _q Reactances shown are applicable to the standby rating X ₂ X ₀	1.95 0.12 0.060 0.98 0.083 0.072 0.005	2.60 0.16 0.080 1.30 0.111 0.095 0.007		
Time Constants:	t' _d 25 ms	t'' _d 2.5 ms	t' _{do} 409 ms	t _a 4 ms

S T A N D B Y
P R I M E
6 0 H z

2 0 k W
1 8 k W

OLYMPIAN™

D20P4S (1-Phase)

Materials and specifications are subject to change without notice.

Generator Set Technical Data — 1800 rpm/60 Hz		Standby	Prime
Power Rating	kW (kVA)	20 (20)	18 (18)
Lubricating System Type: Full Pressure Oil Filter: Spin-On, Full Flow Oil Cooler: Watercooled Oil Type Required: API CF-4 Total Oil Capacity Oil Pan	U.S. gal (L) U.S. gal (L)	2.8 (10.6) 2.35 (8.9)	2.8 (10.6) 2.35 (8.9)
Fuel System Generator Set Fuel Consumption 100% Load 75% Load 50% Load	G/hr (L/hr) G/hr (L/hr) G/hr (L/hr)	1.9 (7.0) 1.3 (5.0) 1.0 (3.6)	1.6 (6.2) 1.2 (4.5) 0.9 (3.2)
Engine Electrical System Voltage/Ground: 12/Negative Battery Charging Generator Ampere Rating	Amps	55	55
Cooling System Water Pump Type: Centrifugal Radiator System Capacity Incl. Engine Maximum Coolant Static Head Coolant Flow Rate Minimum Temperature to Engine Temperature Rise Across Engine Heat Rejected to Coolant at Rated Power Total Heat Radiated to Room at Rated Power Radiator Fan Load	U.S. gal (L) Ft H ₂ O (m H ₂ O) U.S. gal/hr (L/hr) °F (°C) °F (°C) Btu/min (kW) Btu/min (kW) Hp (kW)	1.8 (7) 10.2 (3.1) 769 (2910) 169 (76) 45 (7.4) 1263 (22.2) 461 (8.1) 0.5 (0.4)	1.8 (7) 10.2 (3.1) 769 (2910) 169 (76) 45 (7.4) 1132 (19.9) 415 (7.3) 0.5 (0.4)
Air Requirements Combustion Air Flow Maximum Air Cleaner Restriction Radiator Cooling Air (zero restriction) Generator Cooling Air Allowable Air Flow Restriction (After radiator) Cooling Airflow (@ rated speed) Rate with restriction	Cfm (m ³ /min) In H ₂ O (kPa) Cfm (m ³ /min) Cfm (m ³ /min) In H ₂ O (kPa) Cfm (m ³ /min)	61.4 (1.74) 25.6 (6.4) 1652 (46.8) 382 (10.8) 0.48 (0.120) 1398 (39.6)	61.4 (1.74) 25.6 (6.4) 1652 (46.8) 382 (10.8) 0.48 (0.120) 1398 (39.6)
Exhaust System Maximum Allowable Backpressure Exhaust Flow at Rated kW Exhaust Temperature at Rated kW — Dry Exhaust	In Hg (kPa) Cfm (m ³ /min) °F (°C)	3.01 (10.2) 168 (4.76) 950 (510)	3.01 (10.2) 153 (4.34) 824 (440)
Generator Set Noise Rating* (Without Attenuation) at 3 ft (1 m)	dB(A)	TBA	TBA

Generator Technical Data	240/120V			
Motor Starting Capability: (kVA) (30% Voltage Dip)	29			
Full Load Efficiencies:	Standby	85.6		
	Prime	85.6		
Reactances (per unit):	X _d	1.67		
	X' _d	0.29		
	X'' _d	0.138		
Reactances shown are applicable to the standby rating	X _q	0.83		
	X'' _q	0.196		
Time Constants:	t' _d 40 ms	t'' _d 6 ms	t' _{do} 360 ms	t _a 8 ms