



# Pre-Configured Diesel generator sets



## Features and Benefits

**Robust product design and testing** - The generator is designed to operate under extreme environmental conditions. The generator is tested and certified per the latest EPA and UL standards.

**Heavy duty engines** - Rugged 4-cycle industrial diesel engines deliver reliable power and fast response to load changes.

**Alternator** - Several alternator sizes offer selectable motor starting capability with low reactance 2/3 pitch windings, low waveform distortion with non-linear loads and fault clearing short-circuit capability.

**Control system** - The PowerCommand® 1.1 electronic control is standard equipment and provides total generator set system integration including automatic remote starting/stopping, precise frequency and voltage regulation, alarm and status message display, output metering, auto-shutdown at fault detection and NFPA 110 Level 1 compliance.

**Cooling system** - Standard cooling package provides reliable running at up to 122 °F (50 °C) ambient temperature. Coolant heaters also come standard on generator sets for starting well below freezing.

**Flexible exercise mode** - The innovative, flexible exercise mode enables the generator to exercise at a time, frequency and duration that suits the customer's preference reducing unnecessary fuel consumption, emissions and noise.

**Self-diagnostics and easy service** - The generator is equipped with Cummins PowerCommand® electronic control to provide industry-leading self-diagnostic capabilities. In addition, critical components of the generator are designed to ensure service and preventive maintenance can be completed in a short period of time

Model	Model Number	Fuel Tank	Standby 60 Hz	
			kW	kVA
C20 D6	A063P962	None	20	20
C30 D6	A063P964	None	30	30
C50 D6	A063P966	None	50	50
C80D6C	A063P969	None	80	80
C100D6C	A063P987	None	100	100
C20 D6	A063P961	24 Hr.	20	20
C30 D6	A063P963	24 Hr.	30	30
C50 D6	A063P965	24 Hr.	50	50
C80D6C	A063P967	24 Hr.	80	80
C100D6C	A063P977	24 Hr.	100	100

## Generator set specifications

Model	C20 D6	C30 D6	C50 D6	C80D6C	C100D6C
Enclosures	Sound Level 1 - Sandstone				
Controller	PowerCommand 1.1				
Voltage - Phase	120/240 – 1 Phase				
Operating temp. range	-40 °F to +122 °F (-40 °C to +50 °C)				
Circuit Breaker	100	150	250	400 *	600 *
Battery Charger	Standard – 6A				
Governor reg. class	ISO 8528 Part 1 Class G3				
Voltage regulation, no load to full load	± 1.0%				
Random voltage variation	± 1.0%				
Frequency regulation	Isochronous				
Random freq. variation	± 0.5%				
Radio frequency emissions compliance	FCC code Title 47 part 15 class A and B				

\* - Indicates that circuit breaker is adjustable

## Engine specifications

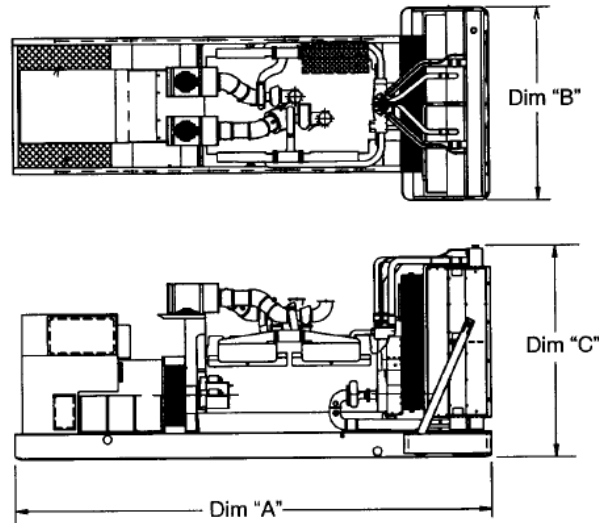
Model	C2 0D6	C30 D6	C50 D6	C80D6C	C100D6C
Engine	D2200	QSB3.3		QSB5	
Displacement	2.20 L (134.1 in <sup>3</sup> )	3.3 L (199 in <sup>3</sup> )		4.5 L (272 in <sup>3</sup> )	
Cylinder block	Cast iron, in-line				
Battery capacity at ambient temperature of 0 °C (32 °F)	550 amps	550 amps	550 amps	2x 850 amps	2x 850 amps
Battery charging alternator	50 amps	40 amps	50 amps	100 amps	100 amps
Starting voltage	12-volt, negative ground	12-volt, negative ground	12-volt, negative ground	2x 12-volt, negative ground	2x 12-volt, negative ground
Lube oil filter type(s)	Spin-on with relief valve				
Rated speed	1800 rpm				

## Alternator specifications

Model	C20 D6	C30D6	C50D6	C80D6C	C100D6C
Design	Brushless, 4 pole, drip proof, revolving field				
Stator	2/3 pitch				
Rotor	Direct coupled, flexible disc				
Insulation system	Class H per NEMA MG1-1.65				
Standard temp. rise	120 °C (248 °F) Standby				
Exciter type	Torque match (shunt) with PMG as option				
Alternator cooling	Direct drive centrifugal blower				
AC waveform Total Harmonic Distortion (THDV)	< 5% no load to full linear load, < 3% for any single harmonic				
Telephone Influence Factor (TIF)	< 50 per NEMA MG1-22.43				
Telephone Harmonic Factor (THF)	< 3%				

## Accessories

- Battery heater kit
- Engine oil heater
- Remote control displays
- Auxiliary output relays (2)
- Auxiliary configurable signal inputs (8) and relay outputs (8)
- Annunciator – RS485
- Audible alarm
- Enclosure Sound Level 2
- Battery charger – stand-alone, 10A
- Circuit breakers
- Remote monitoring device – PowerCommand 500/550
- Base barrier – elevated generator sets
- Alternator heater



This outline drawing is for reference only. See respective model data sheet for specific model outline drawing number.

**Do not use for installation design**

Model	Tank	Dim "A" mm (in.)	Dim "B" mm (in.)	Dim "C" mm (in.)	Set weight* dry kg (lbs.)	Set weight* wet kg (lbs.)
C20D6	Yes	1830 (72)	864 (34)	1486 (58.5)	637 (1401)	653 (1437)
	No	1830 (72)	864 (34)	1156 (45.5)	494 (1091)	511 (1127)
C30D6	Yes	2384 (93.8)	864 (34)	1537 (60.5)	790 (1738)	811 (1784)
	No	2384 (93.8)	864 (34)	1156 (45.5)	580 (1282)	600 (1328)
C50D6	Yes	2384 (93.8)	864 (34)	1740 (68.5)	1003 (2207)	1024 (2253)
	No	2384 (93.8)	864 (34)	1156 (45.5)	695 (1538)	716 (1584)
C80D6C	Yes	3016 (119)	1016 (40)	2108 (83)	1505 (3309)	1556 (3425)
	No	3016 (119)	1016 (40)	1473 (58)	1136 (2500)	1185 (2614)
C100D6C	Yes	3016 (119)	1016 (40)	2108 (83)	1505 (3309)	1613 (3548)
	No	3016 (119)	1016 (40)	1473 (58)	1136 (2500)	1237 (2729)

\* Weights above are average. Actual weight varies with product configuration.




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## Codes and standards

Codes or standards compliance may not be available with all model configurations – consult factory for availability.

	<p>This generator set is designed in facilities certified to ISO 9001 and manufactured in facilities certified to ISO 9001 or ISO 9002.</p>		<p>The generator set is available Listed to UL 2200, Stationary Engine Generator Assemblies.</p>
	<p>The Prototype Test Support (PTS) program verifies the performance integrity of the generator set design. Cummins products bearing the PTS symbol meet the prototype test requirements of NFPA 110 for Level 1 systems.</p>	<p><b>U.S. EPA</b></p>	<p>Engine certified to U.S. EPA SI Stationary Emission Regulation 40 CFR, Part 60.</p>

**Warning:** Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.