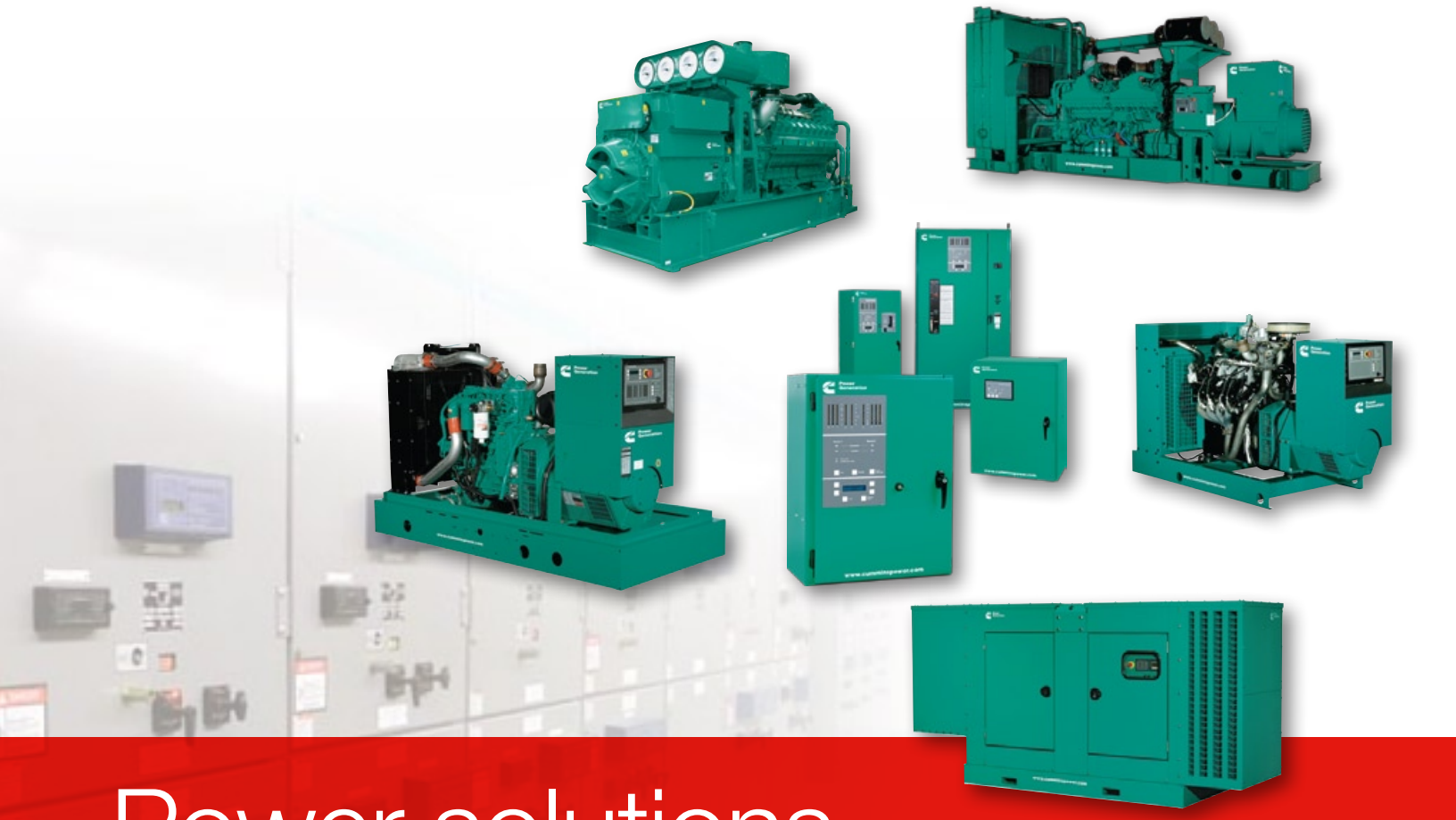


Power solutions
North America

> **Fully integrated, reliable and efficient**

Cummins Power Generation

Our energy working for you.™

Global power leader

With more than 80 years of experience in power generation and an extensive global distributor network across 190 countries, Cummins Power Generation is ready to match the right generating, transfer and control technologies with your power needs—whether you require continuous, prime, peaking or standby power, cogeneration or a complete turnkey power plant.

Contents

Global strength, local partnership

Cummins Power Generation is committed to understanding and meeting our customers' needs worldwide—through trusted local relationships, innovative solutions and dedicated customer service. This promise enables us to deliver power wherever, whenever and however it is needed.

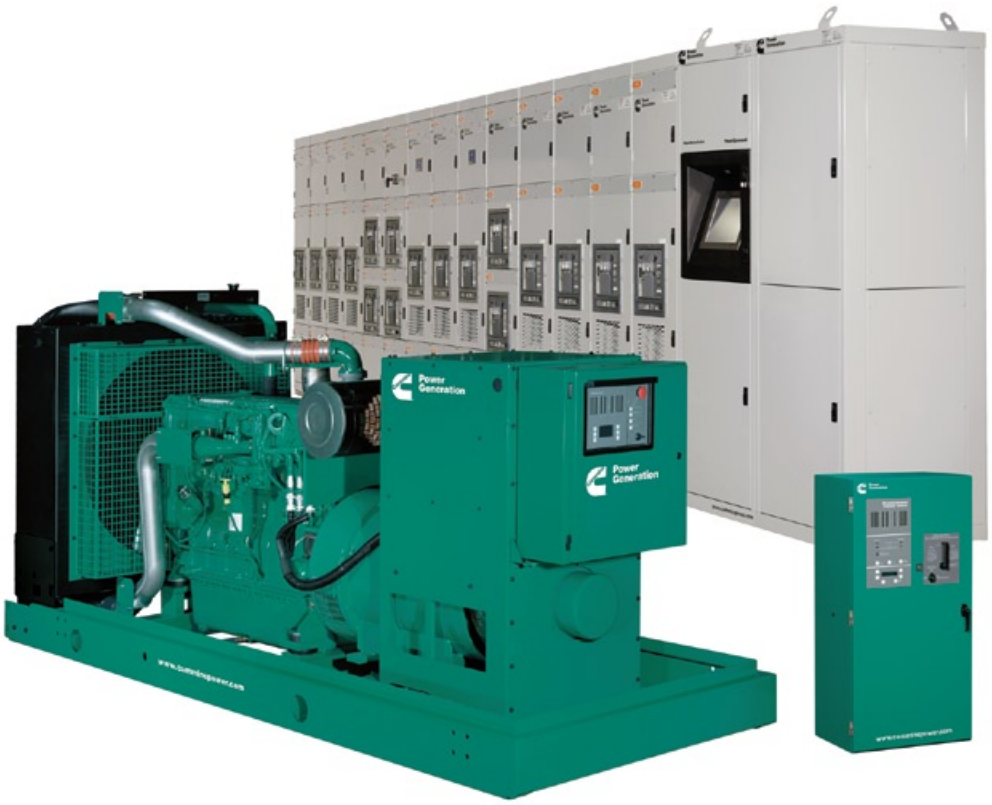
Our worldwide distribution network includes 550 distributors and 5,000 sales and service locations and 20 parts distribution centers. That means you can expect a face-to-face, trustworthy relationship and fast access to reliable service, engineering expertise and parts support. Our service centers, located strategically throughout the world, are staffed with technicians trained to the highest Cummins Power Generation standards.

Wherever you need fully integrated, reliable and efficient power, your local Cummins Power Generation distributor is available. Visit www.cumminspower.com/local to find the distributor nearest you.

Fully integrated, reliable, efficient

For more than a decade, Cummins Power Generation has been the industry leader in power system integrated designs. All major components of our systems—the engine, alternator, generator sets, transfer switches and control systems—are manufactured by Cummins. Because they are designed by one manufacturer, all of the elements of a generator set system are designed to work in harmony from the start. This integral approach— what we call the Power of One™—gives you the peace of mind that comes from premium customer support and reliable, trouble-free operation.

Cummins Power Generation PowerCommand® diesel-powered generator sets are available in sizes ranging from 10 to 2500 kW. Our spark-ignited generator sets are available from 20 to 150 kW. A complete range of transfer and control equipment supports our generator sets. As a result, you can expect an industry-leading power solution with unrivaled reliability.



PowerCommand® diesel generator sets

Integrated design and manufacturing combine to give you unequaled reliability, power quality, rated performance and efficient operation.

PowerCommand diesel-powered generator sets remain the best-value choice for standby and emergency power systems worldwide. Known for their rugged dependability and reliable mechanical and electrical performance, our diesel generators are also well suited to utility peaking plants, distributed generation facilities, peak shaving (or peak lopping) and power management at large commercial or industrial sites.

Powered by Cummins engines, PowerCommand diesel generator sets are available in sizes ranging from 10 to 2500 kW. Heavy-duty Cummins engines are known for their fuel efficiency, responsive transient performance and rugged reliability. Cooling systems are prototype-tested to provide guaranteed performance in high ambient applications, so you get all the power you pay for every day.

High-performance, low-reactance Cummins-manufactured alternators provide good voltage waveform and exceptional motor starting in demanding applications such as data centers, hospitals and industrial facilities.

PowerCommand generator sets are controlled by the world's first and most fully integrated microprocessor-based control system. The system seamlessly integrates governing, voltage regulation, genset control and protection functions.

You can rely on PowerCommand diesel-powered generator sets to provide these benefits:

> IBC-certified for seismic forces and wind loads (up to 250 kW)

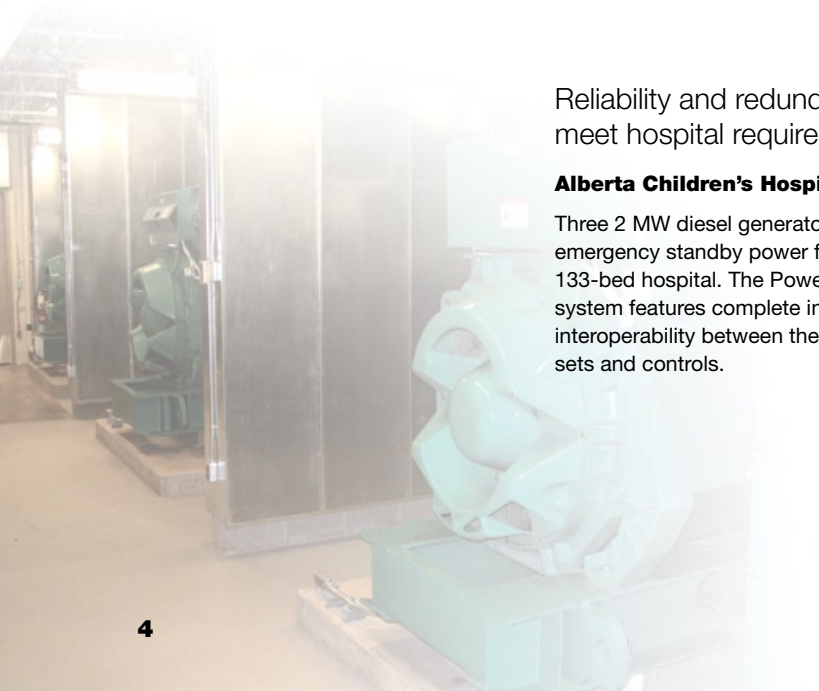
> Proven reliability and low life-cycle costs

> High efficiency and operational flexibility

> High-quality electrical performance

> Well-established service and fuel supply infrastructure

> Optional factory-integrated exhaust aftertreatments to reduce emissions for high-hour use in environmentally sensitive locations



Reliability and redundancy meet hospital requirements

Alberta Children's Hospital, Calgary

Three 2 MW diesel generators provide emergency standby power for the 133-bed hospital. The PowerCommand system features complete integration and interoperability between the generator sets and controls.

10 to 300 kWe

Power output

Model	Standby kWe		Prime kWe		Standby kVA		Prime kVA		Engine type
	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	
DSKAA*	10	–	9.1	–	12.5	–	11.4	–	Kubota D1703-M
DSKAB*	15	–	13.6	–	18.8	–	17	–	Kubota D1703-M
DSKBA*	20	–	18.2	–	25	–	22.7	–	Kubota V2203-M
DSKCA*	25	–	22.7	–	31.3	–	28.4	–	Kubota V3300
DGGD*	35	–	30	–	44	–	38	–	4BT3.3-G6 NR2 (60Hz)
DGBB	35	28	32	25	44	35	40	31	4B3.9-G2 (60/50Hz)
DSFAA*	35	–	32	–	44	–	40	–	QSB5-G3 NR3
DGBC	40	32	35	29	50	40	44	36	4B3.9-G2 (60/50Hz)
DGHD*	40	–	36	–	50	–	45	–	4BT3.9-G6 NR2 (60Hz)
DSFAB*	40	–	35	–	50	–	44	–	QSB5-G3 NR3
DGCA	50	40	45	36	63	50	56	45	4BT3.9-G4 (60/50Hz)
DGHE*	50	–	45	–	63	–	56	–	4BT3.3-G6 NR2 (60Hz)
DSFAC*	50	–	45	–	63	–	56	–	QSB5-G3 NR3
DGCB	60	50	55	45	75	63	69	56	4BT3.9-G4 (60/50Hz)
DSFAD*	60	–	55	–	75	–	69	–	QSB5-G3 NR3
DGCG	80	65	72	60	100	81	90	75	4BTA3.9-G3
DSFAE*	80	–	72	–	100	–	90	–	QSB5-G3 NR3
DGDB	100	85	90	80	125	106	113	100	6BT5.9-G6
DSGAA*	100	–	90	–	125	–	113	–	QSB7-G3 NR3
DGDK	125	100	113	90	156	125	141	113	6BTA5.9-G3
DSGAB*	125	–	113	–	156	–	141	–	QSB7-G3 NR3
DGFA	150	140	135	125	188	175	169	156	6CTA8.3-G2
DSGAC*	150	–	135	–	188	–	169	–	QSB7-G3 NR3
DGFB	175	150	160	135	219	188	200	169	6CTA8.3-G2
DSHAB*	175	–	160	–	219	–	200	–	QSL9-G2 NR3
DGFC	200	176	180	160	250	220	225	200	6CTAA8.3-G2
DSHAC*	200	–	180	–	250	–	225	–	QSL9-G2 NR3
DGFS	230	–	–	–	288	–	–	–	6CTAA8.3-G2
DSHAD	230	–	209	–	288	–	261	–	QSL9-G2 NR3
DQDAA*	250	220	225	200	313	275	281	250	QSL9-G3 NR3 QSL9-G5
DQDAB	275	250	250	227	344	313	313	284	QSL9-G5
DQHAA*	275	–	250	–	344	–	313	–	QSM11-G4 NR3
DQDAC	300	265	270	240	375	331	338	300	QSL9-G5
DQHAB*	300	–	270	–	375	–	338	–	QSM11-G4 NR3

For additional technical specifications, visit:
http://www.cumminspower.com/na/products/generators/diesel

* Available with EPA Nonroad Emissions Certification
Most models UL 2200-listed.
See your distributor for specific details.

DSFAE

DSGAB

DSHAC

Diesel 350 to 2500 kWe

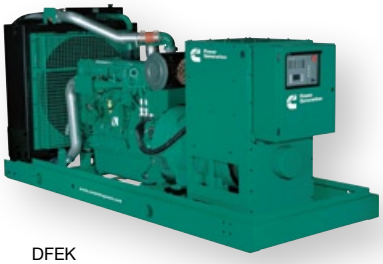
Power output

Model	Standby kWe		Prime kWe		Standby kVA		Prime kVA		Engine type
	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	
DFCC	350	-	315	-	438	-	394	-	NTA855-G4 (60 Hz)
DFEG*	350	–	320	–	438	–	400	–	QSX15-G9 NR2
DFDE	400	–	–	–	500	–	–	–	NTA855-G5
DFEH*	400	352	350	320	500	440	438	400	QSX15-G9 NR2 (60 Hz) QSX15-G8 (50 Hz)
DFEJ*	450	400	410	364	563	500	513	455	QSX15-G9 NR2 (60 Hz) QSX15-G8 (50 Hz)
DFEK*	500	440	455	400	625	550	569	500	QSX15-G9 NR2 (60 Hz) QSX15-G8 (50 Hz)
DFGB	600	550	545	500	750	688	681	625	VTA28-G5
DQCA*	600	500	545	545	750	625	651	681	QSK23-G7 NR2
DFGE	750	–	–	–	938	–	–	–	VTA28-G7
DFHA	750	620	680	560	938	775	850	700	QST30-G1
DQCB*	750	660	680	600	938	825	850	750	QSK23-G7 NR2
DQFAA*	750	–	680	–	938	–	850	–	QST30-G5 NR2
DFHB	800	700	725	640	1000	875	906	800	QST30-G2
DQCC*	800	720	725	656	1000	900	906	820	QSK23-G7 NR2
DQFAB*	800	–	725	–	1000	–	907	–	QST30-G5 NR2
DFHC	900	800	818	725	1125	1000	1023	906	QST30-G3
DQFAC*	900	–	818	–	1125	–	1023	–	QST30-G5 NR2
DFHD	1000	880	900	800	1250	1100	1125	1000	QST30-G5 (60 Hz) QST30-G4 (50 Hz)
DQFAD*	1000	–	900	–	1250	–	1125	–	QST30-G5 NR2
DFLC	1250	1120	1100	1000	1563	1400	1375	1250	KTA50-G3
DQGAA*	1250	–	1100	–	1563	–	1375	–	QSK50-G4 NR2
DFLE	1500	1290	1250	1100	1875	1613	1563	1375	KTA50-G9 (60 Hz) KTA50-G8 (50 Hz)
DQGAB*	1500	–	1350	–	1875	–	1688	–	QSK50-G4 NR2
DQKB	1750	1500	1600	1350	2188	1875	2000	1688	QSK60-G6 (60 Hz) QSK60-G3 (50 Hz)
DQKAA*	1750	–	1600	–	2188	–	2000	–	QSK60-G6 NR2
DQKC	2000	1650	1825	1500	2500	2063	2281	1875	QSK60-G6 (60 Hz) QSK60-G3 (50 Hz)
DQKAB*	2000	–	1825	–	2500	–	2281	–	QSK60-G6 NR2
DQKD	–	1800	–	1600	–	2250	–	2000	QSK60-G4
DQKH°	2250	2000	–	–	2813	2500	–	–	QSK60-G9 (60 Hz) QSK60-G8 (50 Hz)
DQLB	–	2660	–	2400	–	3325	–	3000	QSK78-G6
DQLC°	2500	–	2335	–	3125	–	2920	–	QSK78-G6

For additional technical specifications, visit:
http://www.cumminspower.com/na/products/generators/diesel

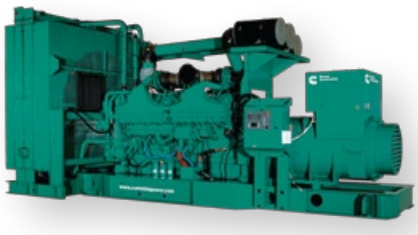
* Available with EPA Nonroad Emissions Certification
° EPA emission compliant
Most models UL 2200-listed.
See your distributor for specific details.

DQDAA



DFEK

DFHC



DQKAA

Low-emissions technologies

We are committed to meeting and exceeding clean air standards worldwide.

Developing products for a cleaner tomorrow

Cummins Power Generation leads the industry in the development of cleaner, quieter and more efficient diesel-powered generators. We are committed to meeting and exceeding all global air-quality regulatory standards for stationary and nonroad diesel engine generators through 2017 and beyond. This protects public health and conserves vital natural resources.

New technologies to reduce emissions

Since 1996, when U.S. EPA emissions regulations for nonroad diesel engines first went into effect, Cummins Power Generation has developed technologies that reduce the primary pollutants in the exhaust of a diesel generator set by approximately 80 percent. Pollutants such as nitrogen oxides (NOx), hydrocarbons (HC) and particulate matter (PM) from diesel engines are precursors to smog and ozone in many populated areas of the world. All of our emissions-reduction technologies are accomplished through in-cylinder design improvements and precise control of the combustion process.

"Clean" power creates powder

Snow Summit Ski Resort, Big Bear Lake, California

A PowerCommand system provides 12 megawatts of electricity to power air compressors, water pumps and fan guns that make up the resort's snowmaking equipment. The 2 MW diesel generators are designed to meet Southern California's strict air-quality requirements.

Award-winning diesel technology

Frost & Sullivan named Cummins Power Generation the recipient of the 2006 North American Diesel Engine Technology Leadership of the Year Award. The award recognizes Cummins Power Generation's advancements and market leadership in emissions technology.

"The company boasts an approach to engine emissions reduction based not only on best-in-class technology and design, but also on providing a product and cost that aligns with customer requirements."

Lean-burn gas 315 kW to 2 MW

Lean-burn gas generator sets provide premier performance, fuel efficiency and low emissions for high-hour peaking, prime power and combined heat and power (CHP) applications.

Using a lean mixture of fuel and air, this design significantly reduces combustion temperatures, which minimizes the production of nitrogen oxides (NOx). The result is high power output with maximum thermal efficiency and minimal emissions.

Proven in more than 3.5 million hours of continuous-duty operation around the world, these generators meet federal, state and local emissions requirements. Selective catalyst reduction (SCR) aftertreatment options reduce NOx levels to as low as 0.1 grams/BHP-hr or less.

Power output

Model	RPM		kWe		kVA		Engine type
	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	
GFBE	1800	1500	334	315	418	394	QSK19G
GQMA	–	1500	–	1370	–	1713	QSV81G
GQKB	1200	–	1000	–	1250	–	QSK60G
GQKC	1200	1500	1100	1400	1375	1750	QSK60G
GQNA	1200	1500	1250	1540	1563	1925	QSV91G
GQKA	1800	1500	1400	1160	1750	1450	QSK60G
GQPB	1800	–	1750	–	2188	–	QSV91G
GQPC	1800	–	2000	–	2500	–	QSV91G
GQMB	–	1500	–	1570	–	1963	QSV81G
GQNB	–	1500	–	1750	–	2188	QSV91G
GQNC	–	1500	–	2000	–	2500	QSV91G

For additional technical specifications, visit: http://www.cumminspower.com/na/products/generators/leanburn

GQNC

CHP system saves money on high on-peak electric rates

William Floyd School District, Shirley, New York

Facing rapidly rising electricity costs, school district officials installed a 2.5 MW combined heat and power system to power three buildings of the Shirley campus. The CHP system provides nearly all of the electricity, heating and cooling for the campus during the local utility's daily peak usage hours when power is very expensive. In the first three years of operation, the CHP system saved more than $1.2 million.

Spark-ignited 20 kW to 150 kW

Spark-ignited generator sets are a convenient choice for a variety of emergency and standby applications, including healthcare offices and retail businesses, that require gaseous fuel options to meet local codes or fuel containment and economic requirements. They are available with natural gas, propane and combined fuel systems.

Installation and connection to the fuel source lines are both basic and convenient. As with our diesel generator sets, a complete selection of voltages, accessories, generator sets and control options are available for customizing to your specific needs.

Major features include:

> Multiple control system options, including NFPA 110 compliance

> Natural gas, propane or combination fuel systems

> Weather-protective and sound-attenuated enclosures (steel or aluminum)

> Good motor-starting capability and fast recovery from transient load changes

> Optional closed-loop fuel control systems and three-way catalyst to limit emissions (select models)

Power output

Model		Standby kWe		Prime kWe		Standby kVA		Prime kVA		Engine type
		60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	
GGMA	Natural gas	20	-	18	-	25	-	23	-	GM i4 3.0L
	Propane*	20	-	18	-	25	-	23	-	GM i4 3.0L
GGMB	Natural gas	25	-	22	-	31	-	28	-	GM i4 3.0L
	Propane*	25	-	22	-	31	-	28	-	GM i4 3.0L
GGMC	Natural gas	29	-	26	-	36	-	33	-	GM i4 3.0L
	Propane*	30	-	26	-	38	-	33	-	GM i4 3.0L
GGFD	Natural gas	35	-	30	-	44	-	38	-	Ford v6 4.2L
	Propane*	35	-	30	-	44	-	38	-	Ford v6 4.2L
GGFE	Natural gas	42	30	36	25	53	38	45	31	Ford v6 4.2L
	Propane*	47	35	40	30	59	44	50	38	Ford v6 4.2L
GGHE	Natural gas	60	-	51	-	75	-	64	-	Ford v10 6.8L
	Propane*	60	-	51	-	75	-	64	-	Ford v10 6.8L
GGHF	Natural gas	70	55	60	47	88	69	75	59	Ford v10 6.8L
	Propane*	75	60	64	51	94	75	80	64	Ford v10 6.8L
GGHG	Natural gas	85	-	-	-	106	-	-	-	Ford v10T 6.8L
	Propane*	85	-	-	-	106	-	-	-	Ford v10T 6.8L
GGHH	Natural gas	100	75	-	-	125	94	-	-	Ford v10T 6.8L
	Propane*	100	75	-	-	125	94	-	-	Ford v10T 6.8L
GGLA	Natural gas	125	-	-	-	156	-	-	-	GM v8T 8.1L
	Propane*	115	-	-	-	144	-	-	-	GM v8T 8.1L
GGLB	Natural gas	150	-	-	-	188	-	-	-	GM v8TA 8.1L
	Propane*	140	-	-	-	175	-	-	-	GM v8TA 8.1L

* Liquid or vapor withdrawal

For additional technical specifications, visit:
http://www.cumminspower.com/na/products/generators/sparkignited

GGLA / GGLB

Enclosures

Sound-attenuated and weather-protective

Sound-attenuated and weather-protective enclosures from Cummins Power Generation meet the strictest sound requirements and provide optimum protection from inclement weather.

Cummins Power Generation diesel and spark-ignited generator sets are available with sound-attenuated and weather-protective enclosures. Pre-assembled, pre-integrated and delivered as part of the entire power system, these enclosures are designed to speed installation time and reduce costs.

> Three levels of sound attenuation

> Compact footprint, low-profile design

> Easy access to all major generator and engine control components for servicing

> Fully housed, enclosed exhaust silencer ensures safety and protects against rust

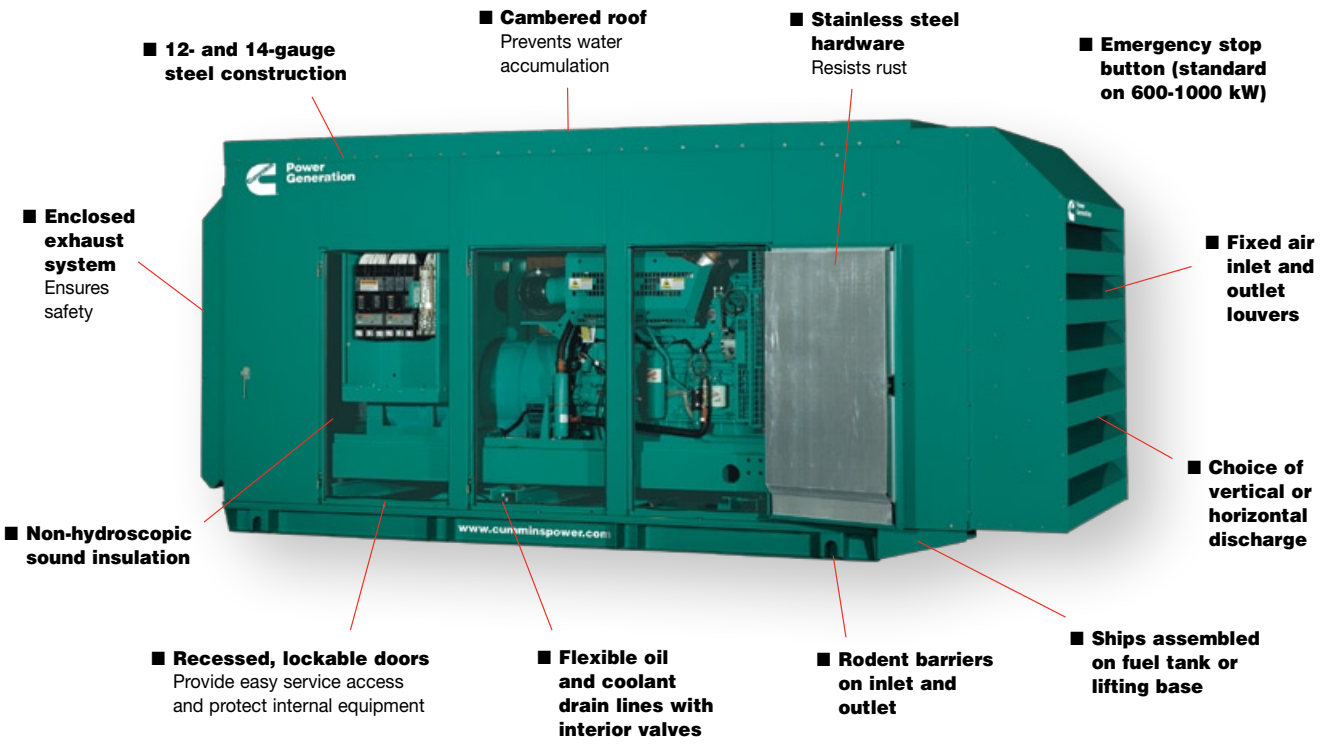
> All-steel construction with stainless steel hardware offers durability

> Direct-mounted to a sub-base fuel tank or lifting base

> Prototype-tested to verify sound attenuation, cooling and ventilation system performance in extreme temperature environments

> UL2200-listed

> Many options available to meet application needs



Sound levels (dB(A))*				
kW	Model	Weather-protective	Level I	Level II
Diesel				
10	DSKAA	78	68	65
15	DSKAB	81	69	66
20	DSKBA	80	70	67
25	DSKFA	82	72	69
35	DGBB	82	71	63
35	DGGD	81	72	66
40	DGBC	82	72	63
40	DGHD	79	71	64
50	DGCA	83	72	66
50	DGHE	79	70	65
60	DGCB	84	73	67
60	DSFAD	87	79	71
80	DGCG	84	76	67
80	DSFAE	87	82	72
100	DGDB	86	77	70
100	DSGAA*	87	-	73
100	DSHAF	95	88	78
125	DGDK	86	80	71
125	DSGAB*	87	-	74
125	DSHAE	95	88	78
150	DGFA	89	77	72
150	DSGAC*	88	-	75
150	DSHAA	95	88	78
175	DGFB	90	78	72
175	DSHAB	95	88	78
200	DGFC	91	80	74
200	DSHAC	95	88	78
230	DGFS	91	81	75
230	DSHAD	96	89	78
250	DQDAA	90	86	71
275	DQDAB	89	86	71
275	DQHAA	86	85	74
300	DFCB	86	84	71
300	DQDAC	89	86	71
300	DQHAB	89	88	76
350	DFCC	87	85	72
350	DFEG	85	83	72
400	DFCE	89	85	73
400	DFEG	89	85	73
450	DFEJ	87	84	73
500	DFEK	88	85	76
600	DFGB	85	78	74
600	DQCA	87	79	74
750	DFGE	87	80	75
750	DFHA	91	81	77
750	DQCB	87	79	74
750	DQFAA	89	79	75
800	DFHB	91	81	77
800	DQCC	87	79	74
800	DQFAB	89	79	75
900	DFHC	93	83	78
900	DQFAC	88	80	76
1000	DFHD	90	80	76
1000	DQFAD	90	80	76

Sound levels (dB(A))*				
kW	Model	Weather-protective	Level I	Level II
Natural gas				
20	GGMA	77	N/A	66
25	GGMB	78	N/A	66
30	GGMC	79	N/A	67
35	GGFD	80	73	65
42/47	GGFE	83	73	66
60	GGHE	86	77	68
70/75	GGHF	87	77	69
85	GGHG	85	79	75
100	GGHH	86	80	76
125	GGLA	85	79	75
150	GGLB	85	79	75

***Also available Level III**

100 kW	DSGAA	68 dB(A)
125 kW	DSGAB	69 dB(A)
150 kW	DSGAC	70 dB(A)

DSGAA

Sound-attenuated generator sets are installed at wastewater lift stations in Camas, Washington as part of a pre-engineered package that simplifies installation and maintenance while ensuring reliability.

PowerCommand® generator set controls

PowerCommand controls give you reliable, cost-effective solutions to integrated digital paralleling.

Only generator sets from Cummins Power Generation are available with industry-leading PowerCommand controls. Standard features include not only integrated digital governing and voltage regulation, but also analog and digital metering, digital engine monitoring systems, smart-starting systems, battery monitoring systems, AmpSentry™ true alternator protection and more.

For non-paralleling applications:

PowerCommand® 1302 and 2100 controls are your best choice for emergency, standby and prime power applications that do not require paralleling.

PCC1302 Reliable and cost-effective control for NFPA 110-level 1 applications

PCC2100 Premium control and flexibility for demanding applications such as data centers

For non-paralleling and paralleling applications:

For demanding applications, PowerCommand 3100 and 3201 controls parallel with other generator sets or with the utility service.

PCC3100 Premium performance and flexibility for generator sets with hydromechanical fuel control systems

PCC3201 Paralleling and power transfer control for generator sets with emissions-controlled engines

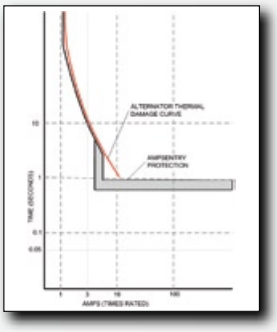
Major features

	PCC 1302	PCC 2100	PCC 3100	PCC 3201
General				
AVR	●	●	●	●
Digital 3-phase sensing voltage regulator	o	●	●	●
Glow plug control	●	●	-	-
Cycle cranking	●	●	●	●
Full authority engine control	o	o	-	●
Networking (LonWorks)	-	o	o	o
Networking (PCCNet)	●	●	-	-
Fault history	●	●	●	●
Operator interface				
Manual start/stop	●	●	●	●
Auto/remote start	●	●	●	●
Exercise function	-	-	-	●
Emergency stop (local and remote)	●	●	●	●
Alphanumeric screen	●	●	●	●
Remote start input active led	●	●	-	●
Fault reset	●	●	●	●
Paralleling capability				
First start sensor system	-	-	o	o
Phase lock loop synchronizer	-	-	o	o
Manual sync with synchroscope	-	-	o	o
kW and kVAR load sharing	-	-	o	o
Import/export and Var/PF control	-	-	o	o
Base loading (utility bus)	-	-	o	o
Power transfer control	-	-	-	o
Peak shaving	-	-	o	o
Environment				
Operating temp. range -40°C to +70°C	●	●	●	●
Humidity up to 95% (non condensing)	●	●	●	●
Codes and standards				
CE compliant	●	●	●	●
NFPA110	●	●	●	●
UL 508-listed/recognized	●	●	●	●
UL-certified	●	●	●	●

● Standard
o Option
- Not Available

	PCC 1302	PCC 2100	PCC 3100	PCC 3201
Shutdown protection and indication – engine				
Low fuel level	o	o	●	●
High fuel level	-	o	-	-
Low oil pressure	●	●	●	●
High engine coolant temperature	●	●	●	●
Failure to crank shutdown	●	●	●	●
Over crank (failure to start)	●	●	●	●
High/Low battery voltage/Weak battery	●	●	●	●
Overspeed	●	●	●	●
Shutdown protection and indication – alternator				
Under and over voltage	●	●	●	●
Under and over frequency	●	●	●	●
Overcurrent and short circuit	●	●	●	●
Ground fault (earth leakage)	o	o	o	o
Reverse power	-	●	o	o
Reverse Var	-	●	o	o
Measurement and instrumentation – engine				
Oil pressure	●	●	●	●
Oil temperature	-	o	o	o
Coolant temperature	●	●	●	●
Engine speed	●	●	●	●
Engine running hours	●	●	●	●
Number of starts	●	●	●	●
Battery voltage	●	●	●	●
Exhaust temperature	-	o	o	o
Measurement and instrumentation – alternator				
3-Phase L-L & L-N voltage, frequency	●	●	●	●
3 Phase current	●	●	●	●
kWh	-	●	●	●
Total kVa	●	●	●	●
Total kWe and kVAr	-	●	-	●
PF	-	●	●	●
Per phase kVAr, kWe	-	●	-	●
Per phase kVa	-	●	-	●

For additional technical specifications, visit:
http://www.cumminspower.com/na/products/generators/diesel



AmpSentry™ protective relay for monitoring and control

AmpSentry protective relays guard the electrical integrity of the alternator and power system, and facilitate selective coordination while protecting against a wide range of fault conditions.

Single- and three-phase fault regulation give downstream protective devices reliable levels of fault current to clear faults quickly, without risking the life of the alternator or exposing loads to potentially damaging voltage levels.

AmpSentry protective relays are UL-listed as utility-grade protective relays and are standard on **PCC2100**, **PCC3100** and **PCC3201**.

Power transfer equipment

PowerCommand automatic transfer switches optimize performance and simplify operation and service. Direct connection with the genset controller offers more reliable and smoother communication with the entire system.

OTPC

UL 1008

Open-transition transfer switch

PowerCommand open-transition transfer switches feature microprocessor-based control technology for easy operation and robust, high-contact-force design to withstand thousands of switching cycles. Applications include utility-to-generator-set, utility-to-utility or generator-set-to-generator-set. Programmed transition prevents nuisance circuit breaker tripping and damage to motors when transferring between live sources.

Major features include:

> UL 1008-listed withstand and closing ratings up to 200kA

> Convenient front panel display to easily review power and load conditions, make adjustments, review events and check network status

> Service entrance configurations to 1000 amps

Model	**Features**	**# poles**	**Size** (amps)
LT III	Contractor pair, light duty transfer switch	3	30-260 A
OTEC	Basic feature package, heavy duty switch	3, 4	40-1000 A
OTPC	Fully featured, heavy duty switch	3, 4	40-4000 A
OHPC	Premium featured, high withstand rated, heavy duty switch	2, 3, 4	125-3000 A
PLTO	Open transition power circuit breaker	3, 4	800-3000 A

Orange County Convention Center, Orlando, Florida

A 6 MW standby power system in the Phase V expansion includes 72 automatic transfer switches. The transfer switches are used for load distribution and for switching between the utility source and four 1500 kW PowerCommand diesel generator sets.

CHPC

1008

BTPC

1008

Closed-transition transfer switch

Designed specifically for uninterrupted, closed-transition operation, the revolutionary design incorporates proven PowerCommand microprocessor control with an innovative high-endurance mechanism (HEM) for uncompromising reliability. The unique control design provides active slip frequency synchronizing and sync check algorithms that consider actual switch operating speed to minimize stress on the generator set and transfer power disturbances to loads.

For installations rated from 800 to 4,000 amps, our digital paralleling load transfer (PLT) equipment, specifically designed for ramping closed-transition transfer, transfers power between a generator set and utility service without disturbing power to critical loads.

Model	**Features**	**# poles**	**Size** (amps)
CHPC	Closed transition, 100ms, high withstand rated, heavy duty switch	2, 3, 4	125-800 A
PLTH	Closed transition, 100ms, power circuit breaker	3, 4	800-3000 A
PLTS	Closed transition, soft load, power circuit breaker	3, 4	800-3000 A
PLTE	Closed transition, extended paralleling, power circuit breaker	2, 3, 4	800-3000 A
PLTO	Open transition, power circuit breaker	3, 4	800-3000 A

Bypass-isolation transfer switch

PowerCommand bypass-isolation transfer switches allow maintenance, service and testing of the automatic transfer switch without disrupting power to critical loads. They are ideal for critical-need applications where any disruption of supply power, even for routine maintenance, is unacceptable.

Major features include:

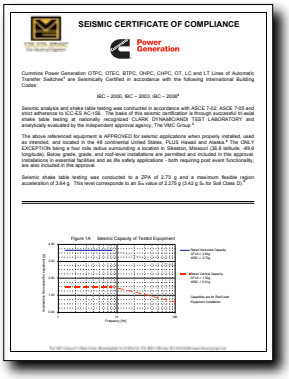
> Closed-door drawout isolation mechanism

> Two-source bypass switch

> Microprocessor-based controls

> Optional 100-millisecond closed-transition transfer

Model	**Features**	**# poles**	**Size** (amps)
BTPC	Fully featured, bypass isolation, heavy duty switch	3, 4	150-3000 A


SEISMIC CERTIFICATE OF COMPLIANCE

Power Generation

Transfer switches are seismically tested and 3rd party approved in compliance to IBC requirements.

Paralleling systems

PowerCommand paralleling systems are designed around dedicated-purpose controllers that are prototype-tested for reliability and performance.

PowerCommand paralleling systems deliver the flexibility demanded by your complex applications. We use common control blocks with prototype-tested components. These systems deliver the features and performance you require and are supported by the industry's only local paralleling service organization.

Demonstrated reliability

Integrated paralleling in the generator set controls offers fast synchronizing. Any number of generator sets can be synchronized in less than 15 seconds in most applications.

PowerCommand paralleling systems give you demonstrated reliability:

> Industry-leading mean time before failure (MTBF)

> Innovative failure mode effect analysis

> Prototype testing to validate system design

> Distributed logic designs that isolate issues by eliminating single points of failure

Parallel system synchronizes with utility grid

McMinnville Township, Tennessee

The McMinnville Electric System, a Tennessee Valley Authority member utility, relies on a 20 MW diesel power plant to help the TVA meet its peak demand and provide emergency backup power for up to 40 percent of McMinnville's load.

Accessories: software and networking

PowerCommand® software and networking tools let you easily manage on-site and off-site power systems from one location.

Whether you're using a desktop computer, a laptop or a cell phone, PowerCommand iWatch™ and PowerCommand Pulse™ help you reduce power set-up time, operation and maintenance.

PowerCommand iWatch for reliable Web-based monitoring

PowerCommand iWatch lets you monitor generator set and transfer switch functions via the Internet.

PowerCommand iWatch features let you:

> Communicate via an Ethernet connection, phone line or available wireless configuration

> Connect via an Internet browser on a remote PC

> Send alarms to cell phones, pagers or e-mail addresses

> Display voltage and frequency of each source

> Monitor one or two gensets and up to four transfer switches (PowerCommand iWatch 100)

> Monitor up to 30 generator sets and transfer switches (PowerCommand iWatch 200)

PowerCommand Pulse for multiple power systems

PowerCommand Pulse is a full SCADA package. Its enhanced graphical user interface quickly and easily monitors multiple power systems.

PowerCommand Pulse features let you:

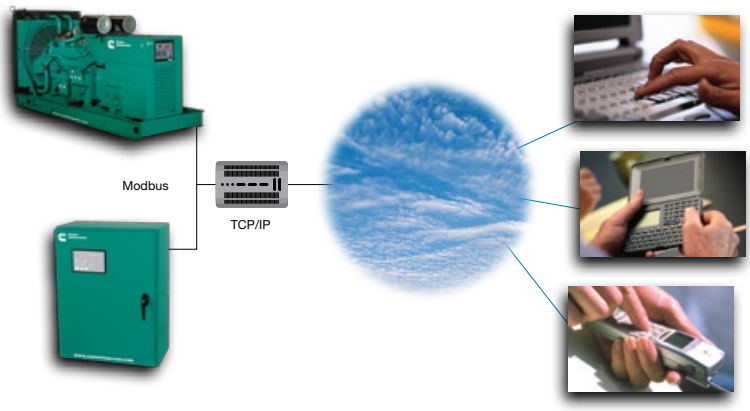
> View displays of current alarms as well as alarm logs

> Set three levels of system security

> Fully customize the monitoring and control system

> Monitor up to 60 devices at a site

> Remotely monitor up to 200 sites



PowerCommand InPower™ for planned maintenance

PowerCommand InPower for service and planned maintenance provides both local and remote set-up and diagnostics. The PC-based software allows a technician to "talk to" a remote PowerCommand system, determine its status and make adjustments.

An Internet browser interface provides easy access to PowerCommand InPower's useful functions:

> *Strip charts*—Obtain real-time recordings of changing conditions and performance
> *Adjustments*—Change system operating parameters
> *Monitoring functions*—Use real-time monitoring and data recording to simplify testing and diagnostics
> *Report generation*—Automatically record test data and formats for quick test reporting
> *Fault simulations*—Simulate warning or shutdown conditions

Accessories: (contd.)

PowerSuite

PowerSuite, on CD-ROM, is available from your local Cummins distributor. This tool contains easy-to-use generator set sizing software, product specification and data sheets, key drawings in both viewable image and CAD formats along with other application technical information. This comprehensive set of product information and software tools helps you select appropriate power generation products and identify facility design and installation requirements.

PowerSuite includes:

GenSize™

A comprehensive, easy-to-use generator set sizing software that lets you quickly determine the optimum generator set required for your application.

Library

This is the electronic version of our power systems manual containing all product specification and data sheets plus much more. The Library also contains outline and schematic drawings in CAD format.

GenSpec™

This includes a series of product sample specifications in Word format that can be used as a source for power generation project specifications.

Reliability, responsiveness and relationships—that's what you can expect from Cummins Power Generation.

Innovative technology, dependable products and custom solutions for your specific applications are all brought to you by people you can trust: the people of Cummins Power Generation.

You can rely on Cummins Power Generation to deliver complete power equipment solutions plus a full range of services, including system design, project management, financing, operation and maintenance contracts and development of turnkey power plants.

Dedicated support team

PowerCommand systems are supported by one of the largest service and support organizations in the world—more than 5,000 sales and service centers in 190 countries. Cummins Power Generation distributors deliver single-source warranty, planned maintenance and round-the-clock emergency service with technicians continuously trained and certified in paralleling power system design.

Our planned maintenance program, staffed by factory-certified technicians, not only increases your system reliability and maintains your factory warranty coverage; it also gives you the flexibility to tailor the program to your specific needs. You can count on Cummins Power Generation for expert local service, planned maintenance, troubleshooting, quality parts and comprehensive power systems support.

Put our energy to work for you.

Our energy working for you.™

One company—your solution

Our global operations:

79 factories
19 technical centers
20 parts distribution centers
550 distributors
5,000 sales and service centers
190 countries
37,800 employees

For more information, visit www.cumminspower.com, or contact your local Cummins Power Generation distributor.

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