



Power solutions

Fully integrated, reliable, efficient

Our energy working for you.™



**Power
Generation**

With more than 80 years experience in power generation and an extensive global distributor network across 130 countries, we are ready to match the right generating, transfer and control technologies with your power needs – be they continuous, prime, peaking, standby, cogeneration or a complete turnkey power plant.



Global power leader

Global strength, local partnership

With a worldwide distribution network across 130 countries, with nearly 500 dealers and 4,500 service/parts outlets, we have the capability and experience to support our products wherever they are operating.

As a user of Cummins Power Generation products, you can expect a face-to-face relationship with someone worthy of your trust and fast access to reliable service, engineering expertise and parts support. Service outlets are spread strategically across the world with technicians trained to the highest Cummins standards.

So wherever you need fully integrated, reliable and efficient power, call your local Cummins Power Generation distributor.

Fully integrated, reliable, efficient

Cummins Power Generation is a world leader in the design and manufacture of pre-integrated generator sets, transfer switches, paralleling equipment and controls for use in standby, prime and continuous rated systems.

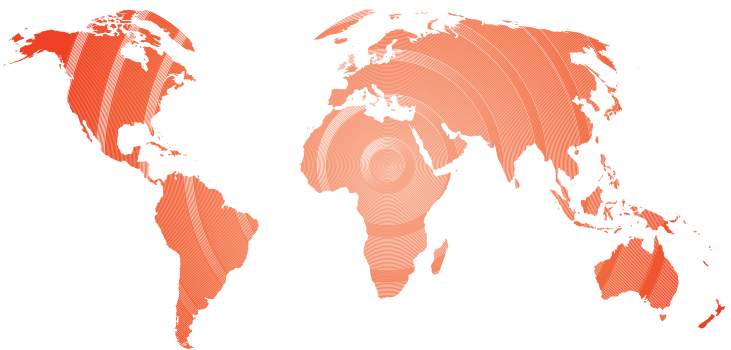
All major components – the engine, alternator and control systems – are manufactured by divisions of Cummins. This integral approach means each element of a generator set is designed to work in harmony from the start.

Cummins-powered diesel generator sets are available in sizes ranging from 15 to 2700 kW. A high quality product, coupled with unrivaled reliability, provides industry-leading power solutions.

Cummins Power Generation, a subsidiary of Cummins Inc., has the global resources to meet your unique power needs.

Manufacturing sites

- > India
- > USA
- > United Kingdom
- > Singapore
- > Brazil
- > China



Diesel generator sets

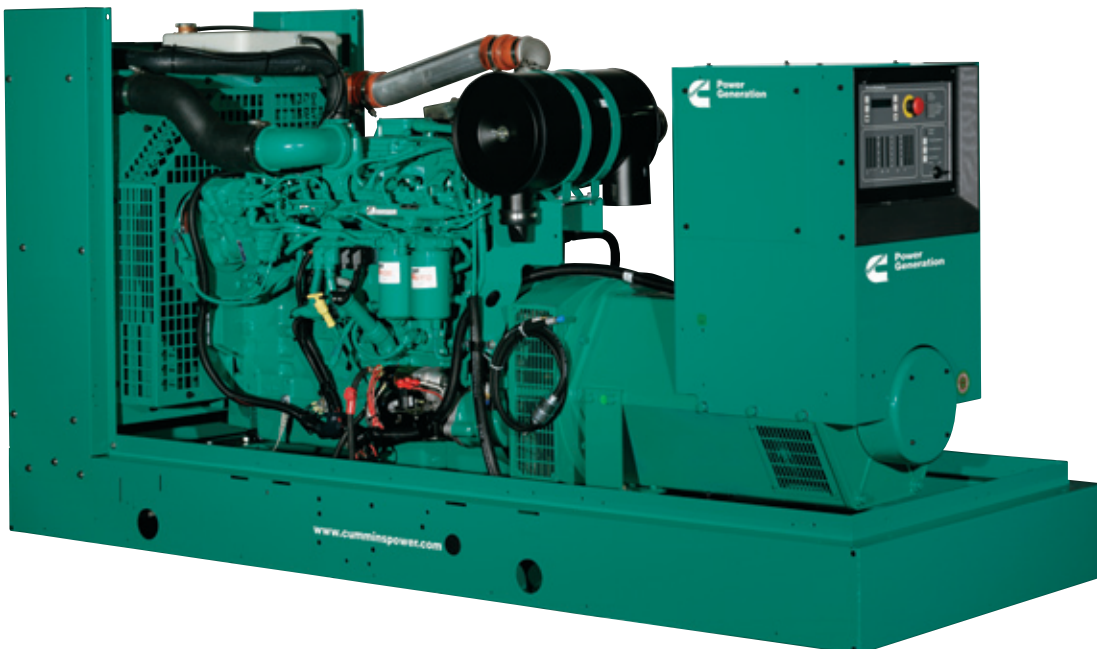
Cummins-powered diesel generator sets are available in sizes ranging from 15 to 2700 kW. Whether your application is for prime or continuous power, or if reliable standby power is critical to your business, we provide standard features that have no equal. Heavy-duty Cummins engines are known for their stingy fuel efficiency, responsive transient performance and rugged reliability. Each generator set includes a cooling system that is designed to provide guaranteed performance in high ambient temperatures, so you get all the power you pay for. High performance Cummins-manufactured alternators offer optimum performance in demanding applications, such as data centers and industrial plants.

Our 15 to 25 kW liquid-cooled diesel generator sets provide our traditional rugged designs, durability and reliability for applications ranging from nursing homes to wireless services, to prime power for small, remote, unattended sites.

User-friendly operation and maintenance features include:

- > Heavy-duty engines and high performance alternators
- > Mechanical or electronic governing systems and electronic voltage regulation
- > Optional control systems for automatic, local or remote-start applications
- > Optional weather-protective and sound attenuated enclosures, coolant heaters and other features to enhance performance and reliability in extreme ambient environments
- > Complete set of accessory devices designed for use with the generator set to simplify installation and enhance reliability

Diesel generator set
DSHAC



15 to 150 kW_e

Model	Power output								Engine				Open genset	
	Standby (kW _e)		Prime (kW _e)		Standby (kVA)		Prime (kVA)		Type	Cyl conf	Bore x stroke (mm)	Cubic cap (L)	Dimension (L x W, mm)	Weight (kg)
60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz							
DKAC*	15	–	14	–	19	–	17	–	Kubota D1703	3 Inline	87 x 92	1.6	1699 x 787	508
DKAE*	20	–	18	–	25	–	23	–	Kubota V2203	4 Inline	87 x 92	2.2	1699 x 787	568
DKAF*	25	–	23	–	31	–	29	–	Kubota F2803	5 Inline	87 x 92	2.7	1699 x 787	622
DGGD*	35	28	30	25	44	35	38	31	4B3.3-G1 (60/50Hz) 4BT3.3-G6 NR2 (60Hz)	4 Inline	95 x 115	3.3	2104 x 1016	696
DGBB*	35	28	32	25	44	35	40	31	4B3.9-G2 (50/60Hz) 4BTA3.9-G5 NR2 (60Hz)	4 Inline	102 x 120	3.9	2104 x 1016	757
DGBC*	40	32	35	29	50	40	44	36	4BTA3.9-G5 NR2 (60Hz) 4B3.9-G2 (60/50Hz)	4 Inline	102 x 120	3.9	2104 x 1016	757
DGHD*	40	32	36	29	50	40	45	36	4BT3.3-G2 (60/50Hz) 4BT3.3-G6 NR2 (60Hz)	4 Inline	95 x 115	3.3	2104 X 1016	711
DGCA*	50	40	45	36	63	50	56	45	4BT3.9-G4 (60/50Hz) 4BTA3.0-G5 NR2 (60Hz)	4 Inline	102 x 120	3.9	2104 X 1016	780
DGHE*	50	40	45	36	63	50	56	45	4BT3.3-G2 (60/50Hz) 4BT3.3-G6 NR2 (60Hz)	4 Inline	95 x 115	3.3	2104 X 1016	727
DGCB*	60	50	55	45	75	63	69	56	4BTA3.9-G4 (60/50Hz) 4BTA3.9-G5 NR2 (60Hz)	4 Inline	102 x 120	3.9	2104 X 1016	780
DGCG	80	65	72	60	100	81	90	75	4BTA3.9-G3	4 Inline	102 x 120	3.9	2104 x 1016	915
DSFAE*	80	–	72	–	100	–	90	–	QSB5-G3 NR3	4 Inline	107 x 124	4.5	2104 x 1016	930
DSHAF*	100	–	90	–	125	–	113	–	QSL9-G2 NR3	6 Inline	114 x 119	8.9	2662 x 1016	1470
DSGAA*	100	–	90	–	125	–	113	–	QSB7-G3 NR3	6 Inline	107 x 124	6.7	2656 x 1100	1180
DGDK	125	100	113	90	156	125	141	113	6BTA5.9-G3	6 Inline	102 x 120	5.9	2662 X 1016	1179
DSHAE*	125	–	113	–	156	–	141	–	QSL9-G2 NR3	6 Inline	114 x 145	8.9	2662 X 1016	1470
DSGAB*	125	–	113	–	156	–	141	–	QSB7-G3 NR3	6 Inline	107 x 124	6.7	2656 x 1100	1225
DGFA	150	140	135	125	188	175	169	156	6CTA8.3-G2	6 Inline	114 x 135	8.3	2662 X 1016	1513
DSHAA*	150	–	135	–	188	–	169	–	QSL9-G2 NR3	6 Inline	114 x 145	8.9	2662 X 1016	1561

*Available with EPA Nonroad Emissions Certification.

°EPA emission compliant.

Most models UL 2200-listed. See your distributor for specific details.

Note: Contact your local distributor for complete information on dual-walled fuel tanks, alternators and other features available for your application.

Diesel generator set
DBBB



Diesel generator set
DQKAA



150 to 750 kW_e

Model	Power output								Engine				Open genset	
	Standby (kW _e)		Prime (kW _e)		Standby (kVA)		Prime (kVA)		Type	Cyl conf	Bore x stroke (mm)	Cubic cap (L)	Dimension (L x W, mm)	Weight (kg)
60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz							
DSGAC*	150	-	135	-	188	-	169	-	QSB7-G3 NR3	6 Inline	107 x 124	6.7	2656 x 1100	1263
DGFB	175	150	160	135	219	169	200	188	6CTA8.3-G2	6 Inline	114 x 135	8.3	2662 X 1016	1520
DSHAB*	175	-	160	-	219	-	200	-	QSL9-G2 NR3	6 Inline	114 x 119	8.9	2662 X 1016	1561
DGFC	200	176	180	160	250	220	225	200	6CTAA8.3-G2	6 Inline	114 x 135	8.3	2662 x 1016	1538
DSHAC*	200	-	180	-	250	-	225	-	QSL9-G2 NR3	6 Inline	114 x 119	8.9	2662 x 1016	1561
DGFS	230	-	-	-	288	-	-	-	6CTAA8.3-G2	6 Inline	114 x 135	8.3	2662 x 1016	1538
DQDAA*	250	220	225	200	313	275	281	250	QSL9-G5-G3 NR3	6 Inline	114 x 119	8.9	3023 x 1270	2234
DQDAB	275	250	250	227	344	313	313	284	QSL9-G5	6 Inline	114 x 119	8.9	3023 x 1270	2234
DQHAA*	275	-	250	-	344	-	313	-	QSM11-G4 NR3	6 Inline	125 x 147	10.8	3453 x 1524	2762
DQDAC	300	265	270	240	375	331	338	300	QSL9-G5	6 Inline	114 x 119	8.9	3023 x 1270	2370
DFCB	300	275	270	250	375	344	338	313	NTA855-G2	6 Inline	140 x 152	14	3607 x 1270	3393
DQHAB*	300	-	270	-	375	-	338	-	QSM11-G4 NR3	6 Inline	125 x 147	10.8	3453 x 1524	2762
DFCC	350	310	315	282	438	388	394	353	NTA855-G4 (60Hz) NTA855-G3 (50Hz)	6 Inline	140 x 152	14	3607 x 1270	3393
DFEG*	350	-	320	-	438	-	400	-	QSX15-G9 NR2	6 Inline	137 x 169	14.9	3864 x 1524	3992
DFCE	400	-	-	-	500	-	-	-	NTA855-G5	6 Inline	140 x 152	14	3607 x 1270	3393
DFEH*	400	352	350	320	500	440	438	400	QSX15-G9 NR2 (60Hz) QSX15-G8 (50Hz)	6 Inline	137 x 169	14.9	3864 x 1524	3992
DFEJ*	450	400	410	364	563	500	513	455	QSX15-G9 NR2 (60Hz) QSX15-G8 (50Hz)	6 Inline	137 x 169	14.9	3864 x 1524	4218
DFEK*	500	440	455	400	625	550	569	500	QSX15-G9 NR2 (60Hz) QSX15-G8 (50Hz)	6 Inline	137 x 169	14.9	3864 x 1524	4445
DFGB	600	550	545	500	750	688	681	625	VTA28-G5	V12	140 x 152	28	4305 x 1830	6423
DQCA*	600	500	545	545	750	625	651	681	QSK23-G3 NR2	6 Inline	170 x 170	23.2	4394 x 1715	6518
DFGE	750	-	-	-	938	-	-	-	VTA28-G7	V12	140 x 152	28	4305 x 1831	6423
DFHA	750	620	680	560	938	775	850	700	QST30-G1	V12	140 x 165	30.5	4260 x 1743	7973

*Available with EPA Nonroad Emissions Certification

°EPA emission compliant

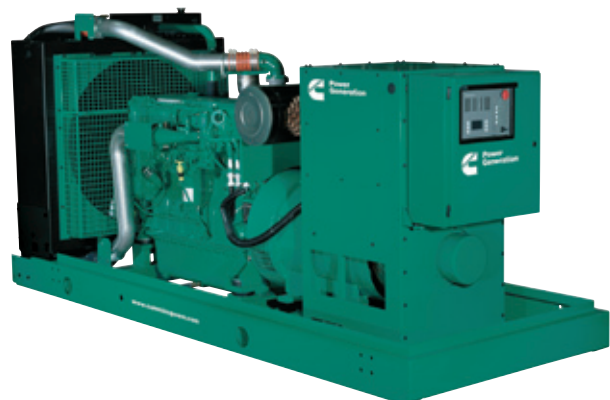
Most models UL 2200-listed. See your distributor for specific details.

Note: Contact your local distributor for complete information on dual-walled fuel tanks, alternators and other features available for your application

Diesel generator set
DQDAA



Diesel generator set
DFEK



750 to 2700 kW_e

Model	Power output								Engine				Open genset	
	Standby (kW _e)		Prime (kW _e)		Standby (kVA)		Prime (kVA)		Type	Cyl conf	Bore x stroke (mm)	Cubic cap (L)	Dimension (L x W, mm)	Weight (kg)
60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz							
DQCB*	750	660	680	600	938	825	850	750	QSK23-G3 NR2	6 Inline	170 x 170	23.2	4394 x 1715	6518
DQFAA*	750	-	680	-	938	-	850	-	QST30-G5 NR2	V12	140 x 165	30.5	4333 x 1999	6971
DFHB	800	700	725	640	1000	875	906	800	QST30-G2	V12	140 x 165	30.5	4260 x 1743	7973
DQCC*	800	720	725	656	1000	900	906	820	QSK23-G3 NR2	6 Inline	170 x 170	23.2	4394 x 1715	6518
DQFAB*	800	-	725	-	1000	-	907	-	QST30-G5 NR2	V12	140 x 165	30.5	4333 x 1999	7194
DFHC	900	800	818	725	1125	1000	1023	906	QST30-G3	V12	140 x 165	30.5	4260 x 1743	7837
DQFAC*	900	-	818	-	1125	-	1023	-	QST30-G5 NR2	V12	140 x 165	30.5	4333 x 1999	7672
DFHD	1000	880	900	800	1250	1100	1125	1000	QST30-G5 (60 Hz) QST30-G4 (50 Hz)	V12	140 x 165	30.5	4361 x 2000	7973
DQFAD*	1000	-	900	-	1250	-	1125	-	QST30-G5 NR2	V12	140 x 165	30.5	4333 x 1999	7931
DFLC	1250	1120	1100	1000	1563	1400	1375	1250	KTA50-G3	V16	159 x 159	50.3	5652 x 2383	10053
DQGA*	1250	-	1100	-	1563	-	1375	-	QSK50-G4 NR2	V16	159 x 159	50.3	5969 x 2007	11493
DFLE	1500	1290	1250	1100	1875	1613	1563	1375	KTA50-G9 (60 Hz) KTA50-G8 (50 Hz)	V16	159 x 159	50.3	5652 x 2514	10788
DQGAB*	1500	-	1350	-	1875	-	1688	-	QSK50-G4 NR2	V16	159 x 159	50.3	5969 x 2007	11493
DQKB	1750	1500	1600	1350	2188	1875	2000	1688	QSK60-G6 (60 Hz) QSK60-G3 (50 Hz)	V16	159 x 190	60.2	6175 x 2286	14868
DQKAA*	1750	-	1600	-	2188	-	2000	-	QSK60-G6 NR2	V16	159 x 190	60.2	6175 x 2494	15396
DQKC	2000	1650	1825	1500	2500	2063	2281	1875	QSK60-G6 (60 Hz) QSK60-G3 (50 Hz)	V16	159 x 190	60.2	6175 x 2286	15152
DQKAB*	2000	-	1825	-	2500	-	2281	-	QSK60-G6 NR2	V16	159 x 190	60.2	6175 x 2494	17908
DQKD	-	1800	-	1600	-	2250	-	2000	QSK60-G4	V16	159 x 190	60.2	6175 x 2286	15366
DQKH°	2250	2000	-	-	2813	2500	-	-	QSK60-G9 (60 Hz) QSK60-G8 (50 Hz)	V16	159 x 190	60.2	6175 x 2286	15781
DQLB	-	2660	-	2400	-	3325	-	3000	QSK78-G6	V18	170 x 190	77.6	7158 x 2251	25800
DQLC°	2500	-	2335	-	3125	-	2920	-	QSK78-G6	V18	170 x 190	77.6	5571 x 2251	NA

*Available with EPA Nonroad Emissions Certification

°EPA emission compliant

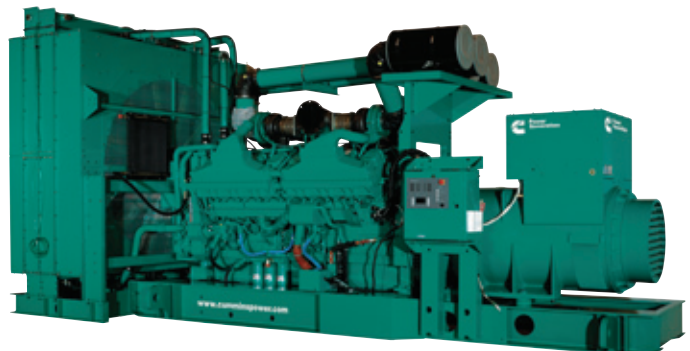
Most models UL 2200-listed. See your distributor for specific details.

Note: Contact your local distributor for complete information on dual-walled fuel tanks, alternators and other features available for your application

Diesel generator set
DFHC



Diesel generator set
DQKAA

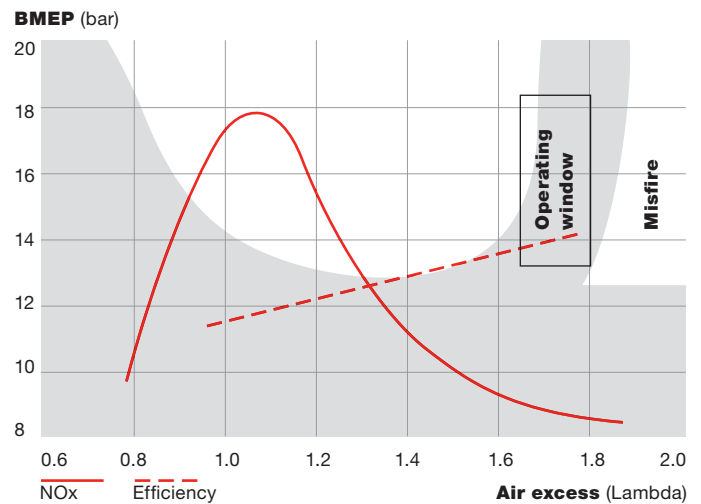


Lean-burn gas

Lean-burn gas generator sets from Cummins Power Generation are designed to provide premier performance, fuel efficiency and low emissions for high-hour peaking baseload and CHP applications. Using a lean mixture of fuel and air, combustion temperatures are significantly reduced, which minimizes the production of nitrogen oxides. The result is high power output with maximum thermal efficiency and minimal emissions.

Already proven in more than 500,000 hours of continuous duty operation around the world, these generators meet most federal, state and local emissions requirements. SCR aftertreatment options reduce NOx levels (as low as 0.15 grams/BHP-hr or less) to the most stringent air quality standards. Capable of running on variable quality gas – from pipeline natural gas to field gas or biogas with a methane number more than 45, Cummins gas reciprocating engine technology and standard PowerCommand® controls provide maximum operational flexibility for power generation applications.

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



Lean-burn gas
QSV91



Spark-ignited
DFEK



Spark-ignited

Enclosures

Our spark-ignited generator sets, 20 to 880 kW, are available with natural gas, propane and combined fuel systems. They can be used in a variety of life-support and related applications, including small health care facilities and retail businesses. Installation and hook up to the fuel source lines is both basic and convenient. As with our diesel generator sets, a complete selection of voltages, accessories, generator set and control options are available for customizing to your specific needs.

Major features include:

- > Multiple control system options including those that are NFPA 110 compliant
- > Natural gas, propane or combination fuel systems
- > Weather protective and sound attenuated enclosures (steel or aluminum)

Model	Engine type	Power output							
		Standby (kW _e)		Prime (kW _e)		Standby (kVA)		Prime (kVA)	
		60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz
GGMA									
Natural Gas	GM i4 3.0 L	20	-	18	-	25	-	23	-
Propane*	GM i4 3.0 L	20	-	18	-	25	-	23	-
GGMB									
Natural Gas	GM i4 3.0 L	25	-	22	-	31	-	28	-
Propane*	GM i4 3.0 L	25	-	22	-	31	-	28	-
GGMC									
Natural Gas	GM i4 3.0 L	29	-	26	-	36	-	32.5	-
Propane*	GM i4 3.0 L	30	-	26	-	38	-	32.5	-
GGFD									
Natural Gas	Ford v6 4.2 L	35	-	30	-	44	-	37.5	-
Propane*	Ford v6 4.2 L	35	-	30	-	44	-	37.5	-
GGFE									
Natural Gas	Ford v6 4.2 L	42	30	36	25	52.5	38	45	31
Propane*	Ford v6 4.2 L	47	35	40	30	58.8	44	50	37.5
GGHE									
Natural Gas	Ford v10 6.8 L	60	-	51	-	75	-	64	-
Propane*	Ford v10 6.8 L	60	-	51	-	75	-	64	-
GGHF									
Natural Gas	Ford v10 6.8 L	70	55	60	47	87	69	75	59
Propane*	Ford v10 6.8 L	75	60	64	51	94	75	80	64
GGHG									
Natural Gas	Ford v10T 6.8 L	85	-	-	-	106	-	-	-
Propane*	Ford v10T 6.8 L	85	-	-	-	106	-	-	-
GGHH									
Natural Gas	Ford v10T 6.8 L	100	75	-	-	125	94	-	-
Propane*	Ford v10T 6.8 L	100	75	-	-	125	94	-	-
GGLA									
Natural Gas	GM v8T 8.1L	125	-	100	-	156	-	125	-
Propane*	GM v8T 8.1L	125	-	100	-	156	-	125	-
GGLB									
Natural Gas	GM v8TA 8.1L	150	-	-	-	188	-	-	-
Propane*	GM v8TA 8.1L	140	-	-	-	175	-	-	-

*Liquid or Vapor

All Cummins Power Generation diesel generator sets up to 1000 kW and spark-ignited gensets from 15 to 150 kW are available with weather protective and sound attenuated enclosures.

All enclosures cover and protect the generator set. Enclosures are designed to optimize genset cooling performance, providing you with confidence that genset ratings and ambient capability have not been compromised. All enclosures provide easy access to service points and provide operators with plenty of room for maintenance.

Enclosures are factory installed or can be retrofitted by your local Cummins Power Generation distributor for existing generator set installations.

Sound enclosures are available in two levels of sound attenuation, providing compliance at sites with the most stringent noise requirements. Sound attenuated enclosures come in either steel or the aluminum construction preferred in coastal regions or other environments where corrosion is a concern.

All sound attenuated enclosures are designed to provide optimal genset performance and sound-treatment. This results in achieving the lowest noise level possible without compromising performance.

Major features include:

- > Level 1: 65 to 85 dB(a) with full load at 7 meters
- > Level 2: 61 to 78 dB(a) with full load at 7 meters
- > Compact footprint, low profile design
- > Easy access to all major generator, engine control components for servicing
- > Enclosed, protective exhaust systems
- > Upgrade kits
- > Sub-based fuel tanks available
- > UL 2200-listed

Level II sound-attenuated enclosure shown with optional sub-base tank 70-78 dB(A)



PowerCommand[®] controls

Only generator sets from Cummins Power Generation are available with the industry-leading PowerCommand controls. This unique, field-proven control system offers features, performance and reliability. A dazzling array of standard features includes not only integrated digital governing and voltage regulation, but also analog and digital metering, digital engine monitoring systems, smart-starting systems that actually regulate the fuel system based on engine temperature to improve stability, starting time and smoke emissions, battery monitoring systems that test the genset batteries, AmpSentry™ true alternator protection and more. PowerCommand controls offer the capability of integrated digital paralleling, substituting less reliable, complex and expensive paralleling equipment with simple, off the shelf solutions.

Main features	Model				
	PCC 0300	PCC 1301	PCC 2100	PCC 3100	PCC 3201
General					
AVR	x	•	•	•	•
Electronic governing	x	o	•	•	•
Glow plug control	•	•	•	x	x
Cycle cranking	•	•	•	•	•
Full authority engine control	x	o	o	x	•
Networking (LonWorks)	x	x	o	o	o
Fault history	x	•	•	•	•
Operator interface					
Manual start/stop	•	•	•	•	•
Auto/remote start	•	•	•	•	•
Exercise function	x	x	x	x	•
Auto led	x	•	x	x	x
Not in auto LED	x	•	•	•	•
Manual LED	x	•	•	x	•
Common shutdown LED	x	•	•	•	•
Common warning LED	x	•	•	•	•
Exercise LED	x	x	x	x	•
Fail to start LED	•	x	•	x	x
Emergency stop (local & remote)	•	•	•	•	•
Alpha/numeric screen	x	•	•	•	•
Remote start input active led	x	•	•	x	•
Fault reset	•	•	•	•	•
Threshold warning indicators					
Low oil pressure	x	•	•	•	•
Low engine coolant temperature	x	•	•	•	•
High engine coolant temperature	x	•	•	•	•
Low coolant level	x	x	•	•	•
Low battery voltage	x	•	•	•	•
High battery voltage	x	•	•	•	•
Battery alt. charge fault	•	•	x	x	x
Over current	x	•	•	•	•
Overload	x	x	•	•	•



PCC0300



PCC1301

Main features	Model				
	PCC 0300	PCC 1301	PCC 2100	PCC 3100	PCC 3201
Paralleling capability					
Auto synchronising (isolated bus)	x	x	x	o	o
kWe & VAR load sharing control	x	x	x	o	o
Auto synchronising (utility bus)	x	x	x	o	o
Base load (utility bus)	x	x	x	o	o
Synchroscope	x	x	x	o	o
Peak lopping	x	x	x	o	o
Power transfer function					
Open transition transfer	x	x	x	x	o
Hard closed transition	x	x	x	x	o
Soft closed transition (ramping)	x	x	x	x	o
Transfer & base load (utility)	x	x	x	x	o
Gen/mains breaker control	x	x	x	x	o
Gen/mains breaker status protection	x	x	x	x	o
Environment					
Operating temperature range -40°C to +70°C	-25 to +50°C	•	•	•	•
Humidity up to 95% (non condensing)	90%	•	•	•	•
Shutdown protection & indication – Engine					
Low fuel level	x	o	o	•	•
High fuel level	x	x	o	x	x
Low oil pressure	•	•	•	•	•
High engine coolant temperature	•	•	•	•	•
Failure to crank shutdown	x	•	•	•	•
Over crank (failure to start)	•	•	•	•	•
Overspeed	•	•	•	•	•
Shutdown protection & indication – Alternator					
Under & over voltage	x	•	•	•	•
Under & over frequency	•*	•	•	•	•
Overcurrent	x	•	•	•	•
Earth leakage	x	o	o	o	o
Reverse power	x	x	•	•	•
Reverse VAR	x	x	•	x	•

Main features	Model				
	PCC 0300	PCC 1301	PCC 2100	PCC 3100	PCC 3201
Codes & standards					
CE compliant	•	•	•	•	•
NFPA110	x	•	•	•	•
UL 508-listed/recognized	x	•	•	•	•
UL-certified	•	•	•	•	•
Customer configurable inputs & outputs					
Digital inputs-2 (shutdown, warning or status)	x	•	N/A	N/A	N/A
Digital inputs-4 (shutdown, warning or status)	x	x	•	•	•
Relay outputs-2	x	•	N/A	N/A	N/A
Relay outputs-4	x	x	•	•	•
Measurement & instrumentation – Engine					
Oil pressure	x	•	•	•	•
Oil temperature	x	x	o	o	o
Water temperature	x	•	•	•	•
Engine speed	x	•	•	•	•
Hours run	•	•	•	•	•
Number of starts	x	•	•	•	•
Battery voltage	x	•	•	•	•
Exhaust temperature	x	x	x	o	o
Measurement & instrumentation – Alternator					
3 Phase L-L & L-N voltage & frequency	x	•	•	•	•
3 Phase current	x	•	•	•	•
kWh	x	x	•	•	•
Total kVa	x	•	•	•	•
Total kWe & kVAR	x	x	•	x	•
PF	x	x	•	•	•
Per phase kVAR, kWe	x	x	•	x	•
Per phase kVa	x	x	•	x	•

• Standard
 x Not Available
 o Option
 N/A Not Applicable
 * Under frequency only



PCC2100



PCC2100



PCC3100



PCC3201

Digital paralleling

With Cummins Power Generation you get a superior fully integrated digital power system – systems that are designed, built, tested and serviced by one manufacturer. As the only single-source manufacturer of engines, alternators, digital controls, transfer switches and digital paralleling systems, Cummins Power Generation leads the way in the seamless integration of power system technology. It's a proven systems approach that provides you with a superior power system and the easiest installation, along with low operating and maintenance costs.

Generator paralleling controls

Paralleling is an integrated function of our microprocessor-based genset control, PowerCommand®. In addition to monitoring, protection, governing and voltage regulation functions, this single control provides paralleling control functions, including synchronizing, load sharing and paralleling protection. PowerCommand controls even provide utility (mains) paralleling functions such as import/export control and var/power factor control. PowerCommand controls were the first fully integrated paralleling control systems. Now with more than 10 years of experience and unmatched reliability.

Digital Master Control

At the heart of the Digital Master Control is the PowerCommand MCM™ System controller. The MCM is a highly flexible, utility-grade controller that is fully integrated with the PowerCommand generator control. This allows for a thoroughly prototype-tested design that includes power transfer and load control functions. The MCM can be used as both a stand-alone controller, thereby eliminating the need for a PLC, or in combination with I/O PLC modules to provide highly customizable designs that are still based on MCM core functions. As an option, the Power Command MCM controller can provide fully redundant control system logic, which is easy to use, flexible and reliable.

The Digital Master Control offers the following system features:

- > A wide selection of optional AC metering and status displays
- > Optional fully interactive touchscreen operator interface panels
- > Internet/Intranet capability for remote monitoring and alarm notification
- > Manual backups for all critical automated functions
- > Isolated and infinite bus (utility mains paralleling) designs – out of the same hardware
- > Easy integration into other building control systems
- > True local service capability for critical control functions through trained and certified Cummins service technicians

Digital paralleling
PLTS



Digital paralleling
DMC



Power transfer equipment

Switchboards and switchgear

A host of OEMs will provide you with their UL-listed equipment. However, for superior performance in design, testing, manufacturing and field service it is impossible for any OEM to compete with the depth of a major electrical manufacturer. Cummins Power Generation works with all major electrical industry leaders to provide our customers with a full range of choices and options, while maintaining system integrity and taking full responsibility for system design, project management, integration and startup. We offer integrated controls solutions in both low voltage (UL 891) switchboards/(UL 1558) switchgear and ANSI/UL-listed medium voltage metal-clad/metal-enclosed switchgear assemblies. Our design, integration and system responsibility is what leads to years of reliable operation and superior service.

Power transfer switches and equipment

The same microprocessor-based control technology is also found on our full line of transfer switches; optimizing performance and simplifying operation and service. Direct connection with the genset controller offers a more reliable and smoother communication with the entire system.

Open transition transfer switches

We provide a complete line of open transition transfer equipment for utility-to-utility, utility-to-genset or genset-to-genset applications. Our transfer switches employ common controls that provide many standard and optional features, including a front panel digital display, bar graph metering, programmed transition, phase check and optional simultaneously switched neutral.

Major features include:

- > UL 1008-listed withstand and closing ratings up to 200kA
- > High visibility LED-indicating lamps provide at-a-glance source and ATS status for quick summary of system conditions
- > Convenient front panel digital display provides easy access to review power and load conditions, make adjustments, review events and check network status
- > Configurable through the optional PowerCommand operator panel
- > Inphase monitor that prevents the switch to transfer when the two sources are out of phase

Model	# of poles	Size (amperes)
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*	40-3000 A
OHPC Premium featured, high withstand rated, heavy duty switch	2, 3, 4	125-3000 A
PLTO Open transition, breaker pair (MCCB) switch	3, 4	800-3000 A

Open transition
OTEC



Power transfer equipment

Closed transition transfer

A complete line of closed transition transfer switches operate either open or fast-closed transition with enhanced specific breaker ratings and three cycle ratings. Closed transition includes sync check or optional active sync for short duration paralleled source operation (50 – 70 msec). The unique control designs provide accurate closing to minimize stress on generator set equipment and transient 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. Service entrance rating, ground fault protection and utility-protective relaying are available. UL 891, UL 1008-listed designs.

Model	# of poles	Size (amperes)
CHPC Closed transition, 100ms, high withstand rated, heavy duty switch	2, 3, 4	125-800 A
PLTH Closed transition, 100ms, breaker pair (MCCB) switch	3, 4	800-3000 A
PLTS Closed transition, soft load, breaker pair (MCCB) switch	3, 4	800-3000 A
PLTE Premium featured, high withstand rated, heavy duty switch	2, 3, 4	800-3000 A
PLTO Closed transition, extended paralleling, breaker pair (MCCB) switch	3, 4	800-3000 A

Bypass Isolation
BTPC



Bypass isolation transfer switches

Our bypass isolation transfer switch combines an open transition transfer switch, a two-source manual bypass switch, a closed door drawout isolation mechanism and microprocessor-based controls. The switch allows maintenance, service and testing of the ATS without disrupting power to critical loads. For environments with critical power requirements, such as health care and data center facilities, the bypass isolation switch will combine safe reliable service with simple operation.

Major features include:

- > Non-load break bypass operation that maintains service to critical loads when the ATS is drawn out of service
- > External manual operation capability for the ATS
- > Dead source interlocks prevent the operator from connecting loads to a failed utility or generator source
- > Full mechanical interlock system prevents accidental interconnection of the power sources

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

Non-automatic transfer switches

Our non-automatic transfer switches are operated electrically through a front panel mounted control switch. They are available from 40 to 3,000 amps.

Model	# of poles	Size (amperes)
OT III Non-automatic, heavy duty switch	3, 4*	40-3000 A

Design tools

Power Suite

The Power Suite, 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 is designed to assist the user in selecting appropriate power generation products and identifying facility design and installation requirements.

The Power Suite includes:

GenSize™

A comprehensive, easy-to-use generator set sizing software that allows the user to quickly determine the optimum generator set required for power generation applications. Simply enter project requirements and electrical loads and GenSize calculates generator loading, required generator performance and provides product recommendations based on actual generator set performance testing.

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, even in CAD format. After using GenSize to determine which Cummins generator set best meets project requirements, the Library can be used to acquire documentation containing information needed for facility design. Also included are application manuals and technical papers on a variety of power generation topics.

GenSpec™

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

Minimum personal computer requirements: Hardware: 64 MB Ram and 70 MB free Hard Drive space; Software: Microsoft Windows 2000 or XP, Microsoft Internet Explorer 5.01 or later, Microsoft Word and Adobe Acrobat Reader 5.0.



PowerCommand networks

PowerCommand products use network interfaces to improve system reliability and enhance ease of use. Auxiliary network-based modules minimize wiring to reduce installation time and costs and provide unique control capabilities.

The networks allow enhanced local and remote monitoring with Windows®-based PowerCommand and InPower software. These PC-based tools make monitoring and maintaining systems easier and help to reduce system cost while improving system reliability. Network equipment can even be retrofitted to existing generator set and transfer equipment, to extend system advantages to less capable equipment. Features commonly provided include local or remote monitoring and control, real-time data collection, retention and report generation on generator sets, transfer switches, paralleling controls, switchgear and other related power generation and distribution equipment. We also have standard interfaces with all leading building management systems and automation packages that allow you to communicate effectively with your energy management operations.

Web site

Details on Cummins Power Generation products and services can be found on www.CumminsPower.com. This includes specification and data sheets, case histories, product brochures, technical papers and application engineering manuals. You can also find customer assistance information, including our distributor locations and technical support contacts.

Sales and service

Pre-integrated systems are backed by one of the largest sales, service and support organizations in the world. The Cummins Power Generation distribution channel is the single-source supplier of integrated systems-generators, paralleling switchgear, automatic transfer switches and local design-build support and service. Ask a Cummins distributor how InPower™ can help you. This PC service and planned maintenance tool allows both local and remote set-up and diagnostics. Any technician can "talk" to a PowerCommand system anywhere, determine its status, real-time monitoring, fault simulations and even make adjustments (easily change system operating parameters to fit the needs of a specific application) without being in the same facility.

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