



Rental & Construction Power

**13-500 kVA
50 Hz – Dual Frequency**

Our energy working for you.™



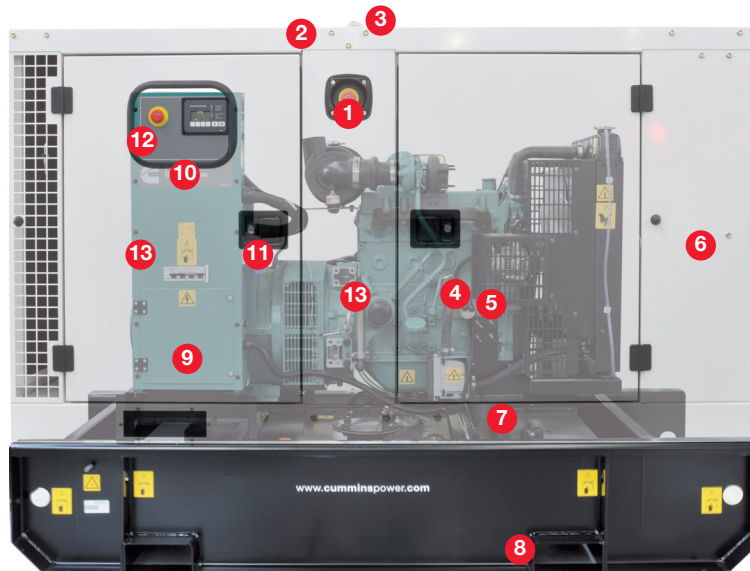
**Power
Generation**

A Modular Approach to Meet Your Needs

For over 80 years, Cummins Power Generation has designed, manufactured and supplied reliable on-site power systems to keep operations running smoothly. Dependable power is supplied through a global network of distributors in over 130 countries.

Consultation with the major plant rental companies, their customers, utilities and event organisers has led to the development of this new breed of generators. Exceptionally quiet, they are designed to improve profitability for the owner. With more built in features as standard they provide easier maintenance and transportability, as well as greater reliability.

XRS Features



- ① External emergency stop button.
- ② Canopies are compliant to the 2000/14/CE step 2006 and are suitable for the most demanding applications, particularly in residential areas.
- ③ Single point lift up to 100kVA or patented two point recessed lift from 150kVA and above to avoid roof access and reduce the risk of fall.
- ④ Reliable power source – All sets are motorised with Cummins engines or Kubota for the 13kVA model.
- ⑤ Alternators are supplied from Cummins Generator Technologies. For better operation, all packages are proposed in Prime rated power (PRP) to meet expectations.
- ⑥ Acoustic insulation helps reduce noise levels.
- ⑦ Internal fill up helps prevent spillage in to the environment.
- ⑧ Fork-lift capability on all models up to 200kVA.
- ⑨ Easy connection bus bar eliminates the risk of accidental contact.
- ⑩ Four pole CB with earth leakage protection.
- ⑪ Lockable doors to help prevent unauthorised access.
- ⑫ Window allows visibility of the controller whilst doors are closed.
- ⑬ **Easy Serviceability:**
 - Large double access door.
 - Easy access to the fuel and oil fill up or drainage and filters.
 - Easy external access to the radiator compartment.

Additional Features:

- Dual frequency capability (Except models fitted with sockets)
- Remote start capability
- Pre-filter fuel/water separator
- Adjustable earth leakage protection
- Battery isolator switch

Specifications and Options

Specification	Genset Type	Emission Level	Performances								Engine			Alternator Type	Dimensions and Weights				
			Rated Power					Noise level		Fuel System									
			50 Hz			60 Hz*		50 Hz											
			PRP (kVA pf 0.8)	ESP (kVA pf 0.8)	Amps @ 400v (L/L)	PRP (kWe pf 0.8)	ESP (kWe pf 0.8)	LWA	dBA @ 1 m	Max Capacity (L)	Autonomy (L)	Engine Type	Bore x Stroke (mm)	Cubic Capacity (L)	Length (mm)	Width (mm)	Height (mm)	Wet Weight Approx. (kg) †	
Dual Frequency Models (D2R) or models with sockets (D5RS)	C13 D2R^	UR	13	15	22	14	15	88	72	94	29	D1703	87x92.4	1.65	BC164D	1668	769	1360	849
	C20 D5R	SII	20	22	29	18	20	94	77	198	26	4BT3.3G3	95x115	3.3	BC184E	2344	990	1694	1262
	C30 D5R	SII	30	33	43	28	31	94	77	198	25	4BT3.3G3	95x115	3.3	BC184G	2344	990	1694	1301
	C35 D5R	SII	35	38	51	32	35	94	77	198	24	4BT3.3G3	95x115	3.3	BC184H	2344	990	1694	1350
	C40 D5R	SII	40	44	58	36	40	94	77	198	23	4BT3.3G3	95x115	3.3	UC224C	2344	990	1694	1419
	C50 D5R	SII	50	55	72	45	50	94	77	198	21	4BT3.3G3	95x115	3.3	UC224D	2344	990	1694	1461
	C80 D2R	SIIIA	80	88	122	73	80	96	78	389	24	QSB5G3	107x124	4.5	UC274C	2922	1140	1965	2004
	C125 D2R	SIIIA	125	137	198	114	125	95	75	894	26	QSB7G3	107x124	6.7	UC274E	3980	1100	2246	3679
	C150 D2R	SIIIA	150	165	238	136	150	95	75	980	25	QSB7G5	107x124	6.7	UC274F	3900	1100	2246	3729
	C200 D2R	SIIIA	200	220	289	180	200	97	76	980	24	QSB7G5	107x124	6.7	UC274H	3900	1100	2246	3880
	C250 D2R	SIIIA	250	275	361	227	250	96	76	1330	24	QSL9G3	114x145	8.8	UCD274K	4370	1424	2509	4310
	C400 D2R	SII	400	440	636	365	402	TBC	TBC	1850	28	QSX15G8	137x169	15	HCi4F	5120	1600	2700	7830
	C500 D2R	SII	500	550	795	365	402	TBC	TBC	1850	24	QSX15G8	137x169	15	HCi5D	5120	1600	2700	8063

^ VRS Model * D5R Does not conform to EU emissions legislation at 60Hz operation † With Fuel

Specification	Genset Type	Canopy						Electricity										Engine						
		Compliant with 2000/14/CE	Point Lift	Built in step for lifting eye access	Fork Lift ability	Jetable radiator	Customised colour	Fast Connect BusBar	EU Sockets Pack	UK Sockets Pack	4 Pole Breaker	ELP Adjustable	Earth Spike	Remote Start Capability	AMF pack	PMG + AVR	Alternator heater	Pre-filter / Water separator	HD Air Filter	Oil sump pump	Battery Isol switch	Electronic governor	3 way fuel valve	Dual Frequency Capability
Dual Frequency Models with the Easy BusBar connection (D2R)	C13 D2R	■	1	■	■	■	0	■	X	X	■	0	■	■	0	X	X	■	0	X	0	0	X	■
	C20 D5R	■	1	■	■	■	0	■	X	X	■	■	■	■	0	X	X	■	■	■	■	0	0	(1)
	C30 D5R	■	1	■	■	■	0	■	X	X	■	■	■	■	0	X	X	■	■	■	■	0	0	(1)
	C35 D5R	■	1	■	■	■	0	■	X	X	■	■	■	■	0	X	X	■	■	■	■	0	0	(1)
	C40 D5R	■	1	■	■	■	0	■	X	X	■	■	■	■	0	X	X	■	■	■	■	0	0	(1)
	C50 D5R	■	1	■	■	■	0	■	X	X	■	■	■	■	0	X	X	■	■	■	■	0	0	(1)
	C80 D2R	■	1	■	■	■	0	■	X	X	■	■	■	■	0	0	0	■	■	■	■	■	■	■
	C125 D2R	■	2	■	■	■	0	■	X	X	■	■	■	■	0	0	0	■	■	■	■	■	■	■
	C150 D2R	■	2	■	■	■	0	■	X	X	■	■	■	■	0	0	0	■	■	■	■	■	■	■
	C200 D2R	■	2	■	■	■	0	■	X	X	■	■	■	■	0	0	0	■	■	■	■	■	■	■
	C250 D2R	■	2	■	X	■	0	■	X	X	■	■	■	■	0	0	0	■	■	■	■	■	■	■
	C400 D2R	■	2	■	X	■	0	■	X	X	■	■	■	■	0	0	0	■	■	■	■	■	■	■
C500 D2R	■	2	■	X	■	0	■	X	X	■	■	■	■	0	0	0	■	■	■	■	■	■	■	
50 Hz Models with the Socket Panel	C13 D5RS	■	1	■	■	■	0	X	■	0	■	■	■	■	0	X	X	■	0	X	0	0	X	X
	C20 D5RS	■	1	■	■	■	0	■	■	0	■	■	■	■	0	X	X	■	■	■	■	0	0	X
	C30 D5RS	■	1	■	■	■	0	■	■	0	■	■	■	■	0	X	X	■	■	■	■	0	0	X
	C35 D5RS	■	1	■	■	■	0	■	■	0	■	■	■	■	0	X	X	■	■	■	■	0	0	X
	C40 D5RS	■	1	■	■	■	0	■	■	0	■	■	■	■	0	X	X	■	■	■	■	0	0	X
	C50 D5RS	■	1	■	■	■	0	■	■	0	■	■	■	■	0	X	X	■	■	■	■	0	0	X
	C80 D5RS	■	1	■	■	■	0	■	■	0	■	■	■	■	0	0	0	■	■	■	■	■	■	X

■ Standard o Option x Not possible (1) Does not conform to EU emissions legislation at 60Hz operation

Features and Benefits

The Cummins rental range of generator sets have been designed to provide a number of key features and benefits to the customer.



Transportability

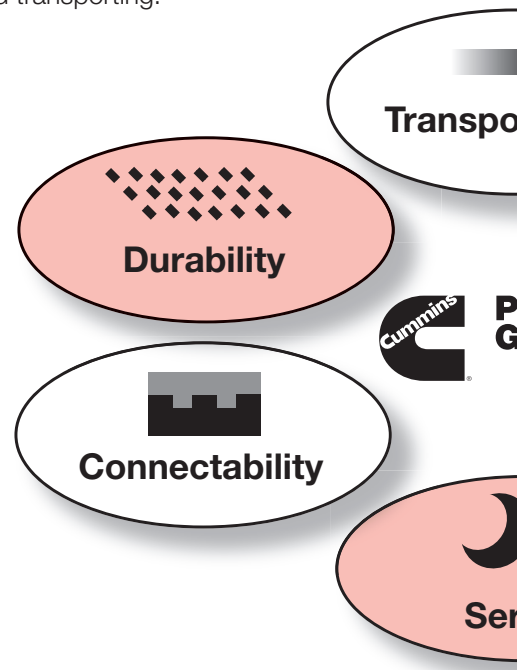
Transportation of the generator set is improved either with fork-lift points on each side of the enclosure for easy access, single-point or two-point lifting for use with cranes, hiabs, etc., together with a drag bar to assist loading into restricted areas. The centre of gravity has been carefully calculated to give maximum possible stability while lifting and transporting.

Durability

All generators are housed within a Zintec or galvanized steel corrosion and weather resistant container, providing excellent protection and durability in any environment. The arduous skid allows the generator set to be placed on poor, unprepared surfaces without compromising operation and the water separator provides protection against the risk contaminated fuel and lube oil.

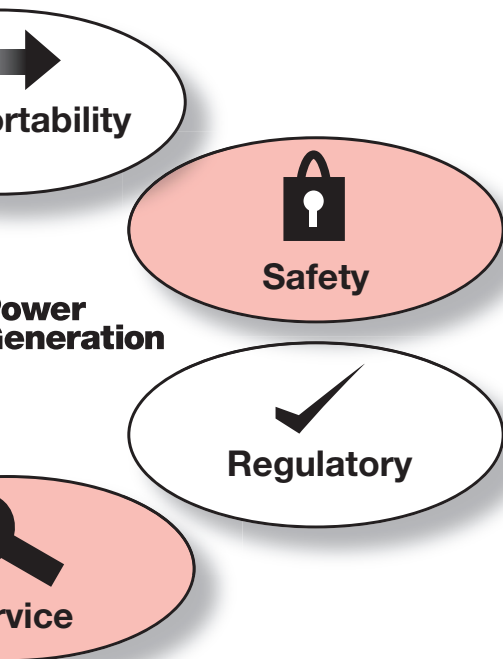
Connectability

An optional three-way valve is available to allow fuel to be taken either from bulk-supply, or from the generous integral 24 hour fuel tank. Electrical connections are arranged to accept most standard lug forms, while smaller generators can be provided with sockets. An automatic mains failure start control can also be provided for use in standby applications.



Safety

All enclosures are provided with lockable doors to prevent unauthorised access and the enclosure provides full protection against mechanical and electrical hazards when locked. Electrical protection is provided by the four-pole circuit breaker, earth leakage protection and earth spike. Cummins Rental Products are designed with the environment in mind and coolant, lubrication oil or fuel oil spillages are contained within the generator housing. A four-pole circuit breaker provides complete isolation from the load and a neutral-earth link is provided as standard.



Regulatory Compliance

Cummins Rental Products meet or exceed the requirements of CE including Machinery, Low Voltage, EMC and Noise. Depending on the engine selection, the exhaust emissions will comply with stage II or stage IIIA. All rental products in the 80kVA – 250kVA range are stage IIIA compliant and are good until 2017 as per EU NRMM regulations, ahead of any genset manufacturer today.

Service

All serviceable parts are readily accessible and a high degree of standardisation means that spares are readily obtainable. Safety during servicing is assured with the integral circuit breaker and battery isolator switch. The generator is provided with an oil pan evacuation pump for easy and clean oil changes and a fuel tank cleaning hatch provides access into the tank for thorough cleaning. Fuel, lubrication and air filters and other consumable parts are readily available from distributors and spares stockists.



PowerCommand Controls

The PowerCommand® control system is a microprocessor based genset monitoring, metering and control system designed to meet the demands of today's engine driven generator sets.

The control provides a simple operator interface to the generator set, digital voltage regulation, digital engine speed governing, start / stop control, 12V/24V battery operation and generator set protective functions. PowerCommand® Controls also features support for full authority electronically controlled Cummins engines.

The integration of all functions into a single control system provides enhanced reliability and performance, compared to conventional genset control systems. These control systems have been designed and tested to meet the harsh environment in which generator sets are typically applied.

Power for the control is derived from the generator set starting batteries. The control operates over a voltage range from 8V DC to 30V DC. Common features of the PowerCommand® controllers include:

- **Digital Voltage Regulation** – Full wave rectified single phase sensing (line to line) for shunt or PMG excitation.
- **Digital Engine Speed Governing** – Provides isochronous frequency regulation.
- **Full Authority Engine Support** – Provides communication and control between the engine control module and the PowerCommand control.
- **Advanced Serviceability** using InPower™, a PC-based software service tool.
- **Certifications** – Suitable for use on generator sets that are designed, manufactured, tested, and certified to relevant UL, NFPA, ISO, IEC, Mil Std., and CE standards.

Powercommand 1.1/1.2

- **Configurable Inputs and Outputs** – four discreet inputs and two dry contact relay outputs.
- **Operator Display Panel** – Provides easy to use symbolic operator display of critical generator set parameters and operating history

Powercommand 3.3

- **Configurable Inputs and Outputs** – Up to four configurable alarm or status inputs indicate customer specified condition. Four relay outputs can be configured to activate on any control warning or shutdown fault. Ready to load signal (generator set running) operates when the set has reached 90% rated speed and voltage and latches until set is switched to off or idle mode.
- **Operator Interface Panel** – Provides an intuitive operator interface panel that allows for complete generator set control as well as metering, fault annunciation, configuration and diagnostics. 320 x 240 pixel backlit display provides multiple language support.



PowerCommand® 1.1



PowerCommand® 1.2



PowerCommand® 3.3

Main Features

		PowerCommand		
		1.1	1.2	3.3
Engine	General			
	AVR	●	●	●
	Electronic Governing	○	○	●
	Glow Plug Control	●	●	
	Cycle Cranking	●	●	●
	Full Authority Engine Control (Where Applicable)	○	○	○
	Networking (LonWorks)	x	x	x
	Networking (ModBus)	●	●	●
	Fault History	●	●	●
	Operator Interface			
	Manual Start/Stop	●	●	●
	Auto/Remote Start	●	●	●
	Exercise Function	x	x	●
	Auto LED	●	●	●
	Not In Auto LED	●	●	●
Alternator	Manual LED	●	●	●
	Common Shutdown LED	●	●	●
	Common Warning LED	●	●	●
	Exercise LED	x	x	●
	Fail to Start LED	x	x	●
	Emergency Stop (Local & Remote)	●	●	●
	Alpha/Numeric Screen	●	●	●
	Remote Start Input Active LED	●	●	●
	Fault Reset	●	●	●
	Measurement & Instrumentation			
	Oil Pressure	●	●	●
	Oil Temperature	x	x	●
	Water Temperature	●	●	●
	Engine Speed	●	●	●
	Hours Run	●	●	●
	Number of Starts	●	●	●
	Battery Voltage	●	●	●
	Exhaust Temperature	x	x	○
Alternator	Measurement & Instrumentation			
	3 Phase L-L & L-N Voltage & Frequency	●	●	●
	3 Phase Current	●	●	●
	Total kVA	●	●	●
	Total kW & kVAr	x	x	●
	PF	x	x	●
	Per Phase kVAr, kW	x	x	●
	Per Phase kVa	x	x	●
	Shutdown Protection & Indication			
	Low Fuel Level	○	○	○
	High Fuel Level	x	x	○
	Low Oil Pressure	●	●	●
	High Engine Coolant Temperature	●	●	●
	Failure to Crank Shutdown	●	●	●
	Over Crank (Failure to Start)	●	●	●
	Overspeed	●	●	●
Alternator	Shutdown Protection & Indication			
	Under & Over Voltage	●	●	●
	Under & Over Frequency	●	●	●
	Overcurrent	●	●	●
	Earth Leakage	○	○	○
	Reverse Power	x	x	○
	Reverse VAR	x	x	●

Main Features

		PowerCommand		
		1.1	1.2	3.3
Threshold Warning Indications				
Low Oil Pressure		●	●	●
Low Engine Coolant Temperature		●	●	●
High Engine Coolant Temperature		●	●	●
Low Coolant Level		x	x	○
Low Battery Voltage		●	●	●
High Battery Voltage		●	●	●
Batt. Alt. Charge Fault		●	●	●
Over Current		●	●	●
Overload		●	●	●
Paralleling Capability				
Auto Synchronising (Isolated Bus)		x	x	●
kW & VAR Load Sharing Control		x	x	●
Auto Synchronising (Utility Bus)		x	x	●
Base Load (Utility Bus)		x	x	●
Synchroscope		x	x	●
Peak Lopping		x	x	●
Power Transfer Function				
Open Transition Transfer		x	x	●
Hard Closed Transition		x	x	●
Soft Closed Transition (ramping)		x	x	●
Transfer & Base Load (Utility)		x	x	●
Gen/Mains Breaker Control		x	x	●
Gen/Mains Breaker Status Protection		x	x	●
Environment				
Operating Temperature Range -40°C to +70°C		●	●	●
Operating Temp. User Interface -20°C to +70°C		●	●	●
Humidity up to 95% (non condensing)		●	●	●
Codes & Standards				
CE Compliant		●	●	●
NFPA110		x	x	●
UL508 Listed		x	x	●
UL Certified		●	●	●
Customer Configurable Inputs & Outputs				
Digital Inputs (shutdown, warning or status)		2	2	2
Relay Outputs		2	2	4

○ Option ● Standard x Not Available

Asia Pacific

10 Toh Guan Road
#07-01
TT International Tradepark
Singapore 608838
Phone 65 6417 2388
Fax 65 6417 2399

Brazil

Rua Jati, 310, Cumbica
Guarulhos, SP 07180-900
Brazil
Phone 55 11 2186 4195
Fax 55 11 2186 4729

China

8 Wanyuan Street
Beijing Economic and
Technological Dev. Area
Beijing 100176
P.R. China
Phone 86 10 6788 2258
Fax 86 10 6788 2285

**Europe, CIS, Middle East
and Africa**

Manston Park Columbus Ave.
Manston Ramsgate
Kent CT 12 5BF
United Kingdom
Phone 44 1843 255000
Fax 44 1843 255902

India

35A/1/2, Erandawana
Pune 411 038
India
Phone 91 020 6602 7525
Fax 91 020 6602 8090

Latin America

3350 Southwest 148th Ave.
Suite 205
Miramar, FL 33027
USA
Phone 1 954 431 5511
Fax 1 954 433 5797

Mexico

Eje 122 No. 200 Zona Industrial
San Luis Potosí, S.L.P. 78090
Mexico
Phone 52 444 870 6700
Fax 52 444 824 0082

North America

1400 73rd Ave. NE
Minneapolis, MN 55432
USA
Phone 1 763 574 5000
USA Toll-free 1 877 769 7669
Fax 1 763 574 5298

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Visit us at www.cumminspower.com

