

Sample Comparison of the Cummins Power Generation QuietConnect Series Standby Generators with other Brands

Cummins Power Gen.	RS22 Quiet Connect Series vs. others	RS30 Quiet Connect Series vs. others	RS40 Quiet Connect Series vs. others
Part Numbers:	#A048H946 (Single Phase) or #A048K385 (Three Phase)	#A046F136 (Single Phase) or #A046F223 (Three Phase)	#A046F576 (Single Phase) or #A046F396 (3 phase, 208V)
Power Rating: Cummins continues to be the most conservative Company when it comes to declaring amps/kw output of their generators. Cummins DOES NOT measure output on UL2200 like ALL selling in the Residential/Light Commercial market today.	Spark Ignited Genset: 60Hz-22kW (24.5 kW measured on UL2200 Rating) True Output for this 22kw: 22kW or 92 amps @ 240V (22kW divided by 240V). The set will hold load above 22kw and will provide maximum starting kVA up to 3 times of 22kW to bring motor loads on line. UL allows for a 10% voltage dip when calculating amperage. This is what competition uses to designate their generator output. For example: 22kw divided by 216V (240V less 10% Dip allowed by UL2200) = 102 amps. Competition then takes this 102 amps and converts it back to kW. Ex. 24.5 kW divided by 240V = 102 amps. Competition calls their TRUE 22kW a 24 or 25kW.	Spark Ignited Genset: 60Hz-30kW (35kW measured on UL2200 Rating) True Output for this 30kW: 30kW or 125 Amps @ 240V (30kW divided by 240V). The set will hold load above 30kw and will provide maximum starting kVA up to 3 times of 30kW to bring motor loads on line. UL allows for a 10% voltage dip when calculating amperage. This is what competition uses to designate their generator output. For example: 30kW divided by 216V (240V (less 10% Dip allowed by UL2200) = 139 amps. Competition then takes this 139 amps and converts it back to KW. Ex. 34kW divided by 240V = 141 amps. Competition calls their TRUE 30kw a 34 or 35kW.	Spark Ignited Genset: 60Hz-40kW (45KW measured on UL2200 Rating) True Output for this 40kW: 40kW or 167 amps @ 240V (40kW divided by 240V). The set will hold load above 40kW and will provide maximum starting kva to bring motor loads on line. Basically the set acts like an 80kW when starting motor loads. UL allows for a 10% voltage dip when calculating amperage. This is what competition uses to designate their generator output. For example: 40kW divided by 216V (240V (less 10% Dip allowed by UL2200) = 186 amps. Competition then takes this 186 amps and converts it back to kW. Ex. 45kW divided by 240V = 187 amps. Competition calls their TRUE 40kW: a 45-48kW.
Deratings for high temperatures and elevations:	Cummins vs Generac – Generac’s output of their 22kW Derates at 77 °F and only 600 ft elevation. That is, above 77°F and above 600 ft altitude, Generac’s 22kW will output LESS power. Cummins doesn’t derate until 104°F and 3300 feet elevation.	Natural Gas: Engine power available up to 2500 ft at ambient temperatures up to 104°F. Propane: Engine power available up to 3300 ft at ambient temperatures up to 104°F).	Engine power available up to 375 ft at ambient temperatures up to 104°F.
Enclosure:	Coastal Design which means the enclosure is Aluminum (no rusting, corrosion of steel over time), Enclosed Muffler (many competitors offer exposed mufflers that sit atop the enclosure that are not aesthetically appealing and rust over time and provide no protection against someone touching while hot). Cummins enclosure can with stand 150MPH Winds and meets ALL Costal Restrictions and Codes.) The enclosure also has easy access doors for maintenance intervals.		
Sound Levels:	Stage 2 Enclosure Upgrade Part #A043J733. Minimizes sound of air flow moving into the generator. At 64dba Cummins is the most quiet on the market in its class. Generac advertises that their set will run @ 61 dbA. Please know this measurement is at NO Load. At “normal rated load” (which is less than full load) the Generac will run at 70 dbA. The Cummins 64 dbA is at FULL Load.	Stage 2 Enclosure Upgrade Part # A043J733. Minimizes sound of air flow moving into the generator. 60dba makes it the most quiet on the market in its class. Kohler is 68dba, #2 in the market at this 30kW size.	Stage 2 Enclosure Upgrade Part # A043J733. ONLY 63dba @ 23 feet – Most Quiet on the market today at 40kW size. Sound is #1 issue with homeowners today. No issues with this Genset. Minimizes sound of air flow moving into the generator. Cummins is most quiet compared to Kohler who is #2. Kohler is 66 dbA. Cummins is the most quiet at 40kW on the market today.

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Fuel Consumption & Efficiency:	Most economical on fuel consumption - Propane: Burning ½ load, it will burn 2 gph. (Generac burns 2.1 gph). At a ¼ load, the Cummins set will burn 1.4 gph. Generac is #2 behind Cummins. Cubic Feet Per hour on Nat Gas: Cummins is at 225, Generac is at 255. Savings over time vs competition when using Competition. Savings Example – Cummins vs Generac: \$30 savings in fuel cost with an avg gallon of propane being \$3 when going with the higher quality Cummins vs Generac after 100 hours of run time.	Most economical on fuel consumption - Propane: Burning ½ load, it will burn 2.7 gph. At a ¼ load, the set will burn 1.8 gph. Kohler is #2 behind Cummins. Cubic Feet Per hour on Propane: Cummins is at 300, Kohler is at 340. On Natural Gas: Cummins is at 129 vs Kohler at 144. Cummins is the most economical in fuel consumption.	Most economical on fuel consumption – Nat Gas. Propane: Burning ½ load, it will burn 3.4 gph. At a ¼ load, the set will burn 2.3 gph.
Alternator Winding Temperature Rise:	Cummins Built CA Series Alternator End-60Hz, Single Phase OR Three Phase capability, 120C temp rise. NEMA Class: CLASS H INSULATION. Cummins uses only Class H Insulation for their alternator end. The lower the temp rise and the higher the insulation class, the longer the alternator end is expected to last. Competition uses NEMA Class A, Class B (most using Class B for residential/light commercial) and Class F with temp rises up to 180 degrees. What’s this mean? Class A insulation, typically means a lifespan of 300 hours, Class B = 1800 hours, Class F = 8500 hours while Class H = tens of thousands of hours. Cummins will only use Class H.		
Excitation:	Cummins – Uses BRUSHLESS DESIGN Alternator. Competition, Generac uses BRUSHES. The Cummins alternator end is a BRUSHLESS design. Competition continues to use Brush Style alternator end. Cheaper design. With brushes, you have parts touching/rubbing and will wear over time. With Brushless style: no moving parts touching, less maintenance and much more durable. Make no mistake, this Cummins alternator is a COMMERCIAL Grade Alternator End. Could be used for a home or critical care facility.		
Power Quality:	Cummins Cleanest Power vs the Competiton: The power produced from the Cummins RS22 is the very cleanest: highest quality - (ISO G Rating for Power Performance) Rating for Cummins Onan was BEST = G3 or ISO 8528 Class G3. Kohler and Generac Do NOT meet this Standard. The Cummins generator set produces the cleanest power available by way of a back up generator system. To get the ISO 8528 Class G3 rating, an independent Engineering Firm must measure voltage and frequency performance using an industry-standard test procedure. The G3 rating takes into account the stability and response time of the electricity delivered from the generator. Unstable or erratic frequency will result in irritating noise coming from the generator, and can cause connected devices to operate poorly and inefficiently. Erratic voltage will also cause lights to flicker. How a generator responds to load changes in the home is critical. If it takes too long for the voltage or frequency to respond, devices like air conditioners, washing machines, and dimmer switches will stop operating. If the voltage or frequency rises too much or too fast as loads are turned off, expensive electronics or appliances might be damaged. To ensure proper operation of devices in a home and protection, homeowners and business owners want the highest quality power flowing through their home. Cummins RS22, RS30 and RS40 produce the very cleanest power. Cleaner than the competition. No other competitor matches the G3 rating that Cummins received.		
Warranty:	Warranty- 2 Year Comprehensive or 2000 hours. Covers travel time, mileage, parts and labor for 2 full years following start up services. Most comprehensive coverage in the industry. NO deductibles like the competition. (Kohler’s warranty is 1 Year)		