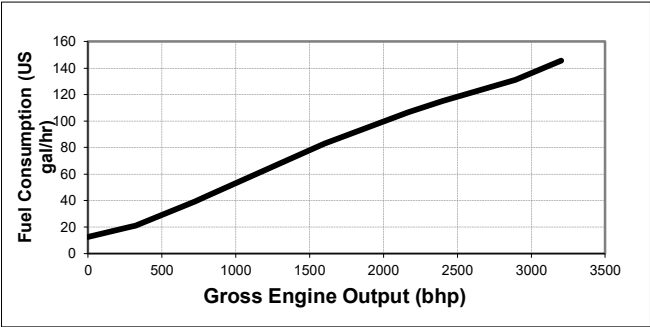
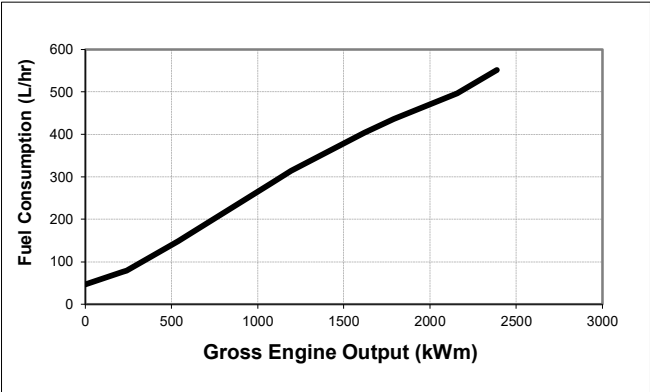


	Engine Performance Data Cummins Inc. Columbus, Indiana 47202-3005 http://www.cummins.com		G-Drive QSK60-G23 FR60532	Date 7-Apr-25		
				Configuration D593008GX03	CPL 4816	Revision 3
	Compression Ratio	14.5:1	Displacement	60.2 L (3672 in³)		
Fuel System	Cummins MCRS		Aspiration	Turbocharged and Low Temperature Aftercooled		
Aftertreatment	None		Emission Compliance	EPA Tier 2 (NSPS)		

Engine Speed	Standby Power		Prime Power	
rpm	kWm	bhp	kWm	bhp
1500	2388	3202	2157	2893

Engine Fuel Consumption @ 1500 rpm

Output Power			Fuel Consumption			
%	kWm	bhp	kg/kWm-hr	lb/bhp-hr	L/hr	US gal/hr
Standby Power						
100	2388	3202	0.196	0.323	551.4	145.7
75	1791	2402	0.207	0.340	435.7	115.1
50	1194	1601	0.224	0.368	314.7	83.1
25	597	801	0.233	0.382	163.4	43.2
10	239	320	0.284	0.467	79.8	21.1
Prime Power						
100	2157	2893	0.196	0.322	496.5	131.2
75	1618	2170	0.212	0.349	404.2	106.8
50	1079	1447	0.225	0.369	284.9	75.3
25	539	723	0.234	0.385	148.6	39.3



Data Subject to Change Without Notice

These guidelines have been formulated to ensure proper application of generator drive engines in A.C. generator set installations. STANDBY POWER RATING: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. Under no condition is an engine allowed to operate in parallel with the public utility at the Standby Power rating. This rating should be applied where reliable utility power is available. A Standby rated engine should be sized for a Max of an 80% average load factor and 500 hours of operation per year. This includes less than 25 hours per year at the Standby Power rating. Standby ratings should never be applied except in true emergency power outages. Negotiated power outages contracted with a utility company are not considered an emergency. PRIME POWER RATING: Applicable for supplying electric power in lieu of commercially purchased power. Prime Power is available for an unlimited number of hours per year in a variable load application. Variable load should not exceed a 70% average of the Prime Power rating during any operating period of 250 hours. A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation. Total operating time at the 10% overload power shall not exceed 25 hours per year.	Reference CEB00150 for determining Electrical Output.
	Data shown above represent gross engine performance and capabilities as per ISO 3046-1, obtained and corrected in accordance with ISO 15550, conditions of 100 kPa (29.53 in Hg) barometric pressure [110 m (361 ft) altitude], 25 °C (77 °F) air inlet temperature, and relative humidity of 30% with fuel corresponding to grade No. 2-D per ASTM D975.
	The fuel consumption data is based on No. 2 diesel fuel weight at 0.850 kg/L. Power output curves are based on the engine operating with fuel system, water pump and lubricating oil pump; not included are battery charging alternator, fan, optional equipment and driven components.
	Data Status : Production Tolerance : +/- 5% Chief Engineer: Tom McGibbon

1500 rpm Power Derate Tables

Standby

Standby Power Altitude Capability (kWm)											
Ambient Operating Temp. (°F)		77.0	86.0	95.0	104.0	108.5	113.0	117.5	122.0	126.5	131.0
Ambient Operating Temp. (°C)		25.0	30.0	35.0	40.0	42.5	45.0	47.5	50.0	52.5	55.0
Altitude (ft)	Altitude (m)										
0	0	2388	2388	2388	2388	2388	2388	2388	2388	2388	2314
656	200	2388	2388	2388	2388	2388	2388	2388	2388	2361	2287
1312	400	2388	2388	2388	2388	2388	2388	2388	2388	2334	2260
1969	600	2388	2388	2388	2388	2388	2388	2388	2377	2307	2233
2625	800	2388	2388	2388	2388	2388	2388	2385	2326	2268	2207
3281	1000	2388	2388	2388	2388	2388	2388	2334	2276	2217	2159
3937	1200	2388	2388	2388	2377	2364	2341	2283	2225	2167	2108
4593	1400	2388	2388	2363	2338	2325	2290	2232	2174	2116	2058
5249	1600	2376	2350	2325	2299	2286	2239	2181	2123	2065	2007
5906	1800	2337	2311	2286	2260	2246	2188	2130	2072	2014	1956
6562	2000	2298	2272	2247	2221	2195	2137	2079	2021	1963	1905
7218	2200	2259	2233	2208	2182	2144	2086	2028	1970	1912	1854
7874	2400	2220	2194	2169	2143	2093	2035	1977	1919	1861	1803
Max Altitude Before Derate (ft)		5049	4617	4184	3752	3536	3313	2583	1762	N/A	N/A
Max Altitude Before Derate (m)		1539	1407	1275	1144	1078	1010	787	537	N/A	N/A

Prime

Prime Power Altitude Capability (kWm)											
Ambient Operating Temp. (°F)		77.0	86.0	95.0	104.0	108.5	113.0	117.5	122.0	126.5	131.0
Ambient Operating Temp. (°C)		25.0	30.0	35.0	40.0	42.5	45.0	47.5	50.0	52.5	55.0
Altitude (ft)	Altitude (m)										
0	0	2157	2157	2157	2157	2157	2157	2157	2157	2157	2091
656	200	2157	2157	2157	2157	2157	2157	2157	2157	2133	2067
1312	400	2157	2157	2157	2157	2157	2157	2157	2157	2109	2042
1969	600	2157	2157	2157	2157	2157	2157	2157	2148	2084	2018
2625	800	2157	2157	2157	2157	2157	2157	2154	2102	2050	1994
3281	1000	2157	2157	2157	2157	2157	2157	2108	2056	2003	1951
3937	1200	2157	2157	2157	2147	2136	2115	2062	2010	1957	1905
4593	1400	2157	2157	2135	2112	2101	2069	2016	1964	1911	1859
5249	1600	2147	2123	2100	2077	2065	2023	1970	1918	1865	1813
5906	1800	2111	2088	2065	2042	2029	1977	1924	1872	1819	1767
6562	2000	2076	2053	2030	2007	1983	1931	1878	1826	1773	1721
7218	2200	2041	2018	1995	1971	1937	1885	1832	1780	1727	1675
7874	2400	2006	1983	1959	1936	1891	1839	1786	1734	1681	1629
Max Altitude Before Derate (ft)		5002	4593	4184	3775	3571	3025	2282	1540	797	54
Max Altitude Before Derate (m)		1524	1400	1275	1151	1088	922	696	469	243	17

Altitude derate data is based on a 2.2°C air temperature rise over ambient at the compressor inlet and 45°C LAT cooling system capability. Please contact Application Engineering if the air temperature rise over ambient exceeds this value.

Please contact Application Engineering for operation above table temperature or altitude values.

SAE AS210 Table A15 was referenced for standard day barometric pressure versus altitude.

General Engine Data

Installation Drawing Number	3170634		
Type	Four Cycle ; Vee ; 16		
Aspiration	Turbocharged and Low Temperature Aftercooled		
Bore x Stroke	in x in (mm x mm)	6.25 x 7.48	(159 x 190)
Displacement	in ³ (L)	3672	(60.2)
Compression Ratio	14.5:1		
Dry Weight (Approximate)	lbm (kg)	17460	(7920)
Wet Weight (Approximate)	lbm (kg)	18893	(8570)
Aftertreatment Weight (Approximate)	lbm (kg)	N/A	(N/A)
Moment of Inertia of Rotating Components			
with FW6080 Flywheel, SAE 00	lbm • ft ² (kg • m ²)	187	(7.9)
Center of Gravity from Rear Face of Block	in (mm)	39.4	(1000.8)
Center of Gravity Above Crankshaft Centerline	in (mm)	8.6	(218.4)

Engine Mounting

Max Bending Moment at Rear Face of Block	lb • ft (N • m)	7634	(10350)
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Exhaust System

Max Allowable Static Bending Moment @ Exhaust Outlet Flange	lb • ft (N • m)	7	(9)
Max Back Pressure at Standby Power (Exhaust Outlet)	in Hg (kPa)	2	(6.8)

Air Induction System

Max Air Temperature Rise Over Ambient At Compressor Inlet	°F (°C)	7.0	(4)
Max Intake Air Restriction			
With Normal Duty Air Cleaner and Clean Filter Element	in H ₂ O (kPa)	6	(1.5)
With Heavy Duty Air Cleaner and Clean Filter Element	in H ₂ O (kPa)	N/A	(N/A)
With Dirty Filter Element	in H ₂ O (kPa)	25	(6.2)

Cooling System**Jacket Water/ High Temperature Circuit Requirements**

Max Coolant Friction Head External to Engine (1500 rpm)	psi (kPa)	10	(70)
Engine Water Flow at Stated Friction Head External to Engine:			
4 psi Friction Head (1500 rpm)	US gpm (L/m)	442	(1673)
Maximum Friction Head (1500 rpm)	US gpm (L/m)	420	(1590)
Coolant Capacity - Engine High Temperature Circuit	US gal (L)	42	(159)
Minimum Pressure Cap Rating at Sea Level	psi (kPa)	11	(75.8)
Max Static Head of Coolant Above Crankshaft Centerline	ft (m)	60	(18.3)
Max Coolant (Top Tank) Temperature for Standby/Prime Power	°F (°C)	230 / 219	(110 / 104)
Thermostat (Modulating) Range	°F (°C)	180 - 202	(82 - 94)

Low Temperature Circuit (LTC) Requirements

Max Coolant Friction Head External to Engine (1500 rpm)	psi (kPa)	5	(34.5)
Aftercooler Water Flow at Stated Friction Head External to Engine:			
2.5 psi Friction Head (1500 rpm)	US gpm (L/m)	139	(526)
Maximum Friction Head (1500 rpm)	US gpm (L/m)	133	(503)
Max Coolant Temp into LTC @ 77°F (25°C) Ambient	°F (°C)	120	(49)
Max Coolant Temperature into LTC @			
Limiting Ambient Conditions for Standby/Prime Power	°F (°C)	160 / 158	(71 / 70)
Thermostat (Modulating) Range	°F (°C)	115 - 130	(46 - 54)
Coolant Capacity - Engine Low Temperature Circuit	US gal (L)	9	(34.1)

Lubrication System

Oil Pressure at Minimum Idle Speed	psi (kPa)	20	(138)
Oil Pressure at Governed Speed	psi (kPa)	60 - 70	(414 - 483)
Max Oil Temperature	°F (°C)	250	(121)
Oil Capacity with OP OP 6108: Low - High	US gal (L)	92 - 100	(348 - 379)
Total System Capacity (with Spin-On Filters)	US gal (L)	105	(397)

Fuel System

Max Allowable Fuel Supply Restriction at Stage 1 Filter Inlet	in Hg (kPa)	5	(16.9)
Max Allowable Head on Injector Return Line			
(Consisting of Friction Head and Static Head)	in Hg (kPa)	10	(33.8)
Max Fuel Inlet Temperature	°F (°C)	160	(71)
Max Supply Fuel Flow	US gph (L/hr)	263	(996)
Max Return Fuel Flow	US gph (L/hr)	116	(439)

Electrical System

System Voltage	volts	24	
Minimum Recommended Battery Capacity			
Cold Soak @ 0 °F (-18 °C)	CCA	1800	
Max Starting Circuit Resistance	ohm	0.002	
Max Current Draw of the System	amps	N/A	

Cold Start Capability

Unaided Cold Start			
Minimum Cranking Speed	rpm	150	
Minimum Ambient Temp for Unaided Cold Start	°F (°C)	10	(-12)

Performance Data

Minimum Low Idle Speed	rpm	700	
Maximum Low Idle Speed	rpm	900	

		STANDBY	PRIME
		50 Hz	50 Hz
Governed Engine Speed	rpm	1500	1500
Gross Engine Power Output	bhp (kWm)	3202 (2388)	2893 (2157)
Brake Mean Effective Pressure	psi (kPa)	462 (3186)	417 (2876)
Friction Power	hp (kWm)	196 (146)	196 (146)
Intake Air Flow	ft³/min (L/sec)	5783 (2730)	5363 (2532)
Exhaust Gas Temp	°F (°C)	896 (480)	865 (463)
Exhaust Gas Flow	ft³/min (L/sec)	14307 (6753)	13053 (6161)
Air:Fuel Ratio		24:1	24.7:1
Radiated Heat to Ambient	BTU/min (kW)	12601 (222)	11350 (200)
Heat to JW Radiator	BTU/min (kW)	37952 (668)	35523 (625)
Heat to Exhaust	BTU/min (kW)	96284 (1694)	84944 (1494)
* Heat to Fuel	BTU/min (kW)	475 (8.4)	475 (8.4)
Heat to Aftercooler Radiator	BTU/min (kW)	35431 (624)	30574 (538)
Charge Air Flow	lb/min (kg/min)	414 (188)	383 (174)
Turbo Comp Outlet Pressure	psi (kPa)	49.6 (342)	45 (311)
Turbo Comp Outlet Temp	°F (°C)	479 (249)	451 (233)

* This is the maximum heat rejection to fuel.

1. The test figures quoted are from a single gen-set test and do not constitute a guarantee of performance for any particular engine. The data is subject to instrumentation, measurement, and engine to engine variability.
2. Test reference procedures ISO 3744 and ANSI S12.54 as applicable.
3. All data are "A" weighted and are rounded to the nearest dB.
4. Engine with "typical Radiator and fan", Sound Power (dB).
5. Engine Exhaust at 1 Meter from open stack, Sound Pressure (dB).

Change Log

<i>Date</i>	<i>Author</i>	<i>Change Description</i>
4/7/2025	QV641- Riya Patel	Releasing latest revision 3