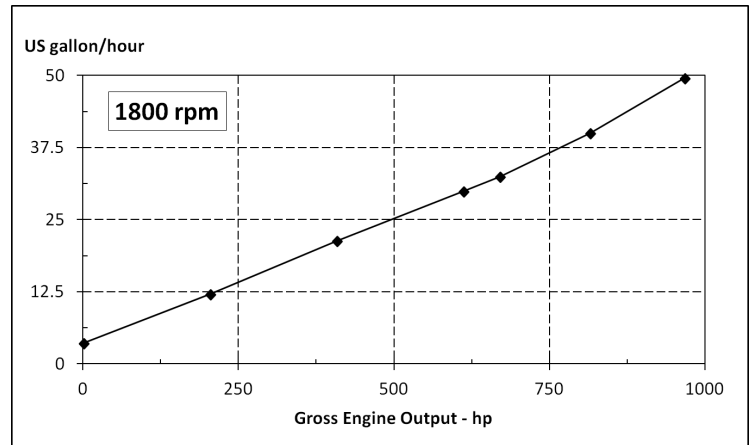
	<b>康明斯公司</b> 印第安纳哥伦布 47202-3005 <b>发动机性能数据单</b>	发动机型号: <b>QSK19-G8</b>	曲线号: <b>FR4582</b>	<b>G-驱</b> <b>QSK</b> <b>1</b>
		发动机重要零件清单: <b>CPL : 3866</b>	日期: <b>2013/02/01</b>	

压缩比: <b>15.0 : 1</b>	排量: <b>1,150 in<sup>3</sup> (18.9 L)</b>
燃油系统: <b>Cummins MCRS</b>	进气方式: <b>涡轮增压, 空空中冷</b>
排放认证: <b>U.S. EPA Tier 2</b>	

发动机转速		备用功率		常用功率		持续功率	
RPM	bhp	kWm	bhp	kWm	bhp	kWm	kWm
1800	967	721	815	608	670	500	


## 发动机性能数据 @ 1800 rpm

输出功率			燃油消耗			
%	bhp	kWm	lb/ hp·h	kg/ kWm·h	US gal/ hour	litre/ hour
<b>备用功率</b>						
100	967	721	0.364	0.221	49.5	188
<b>常用功率</b>						
100	815	608	0.349	0.212	40.0	151
75	611	456	0.347	0.211	29.9	113
50	408	304	0.371	0.226	21.3	81
25	204	152	0.422	0.257	12.1	46
<b>持续功率</b>						
100	670	500	0.344	0.209	32.4	123

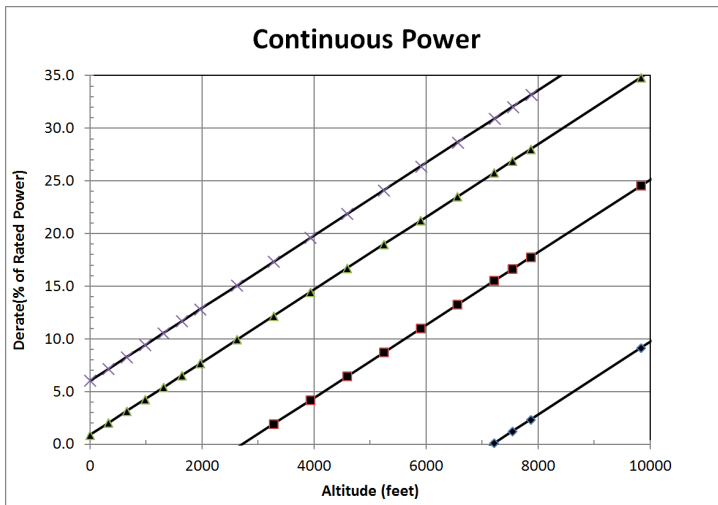
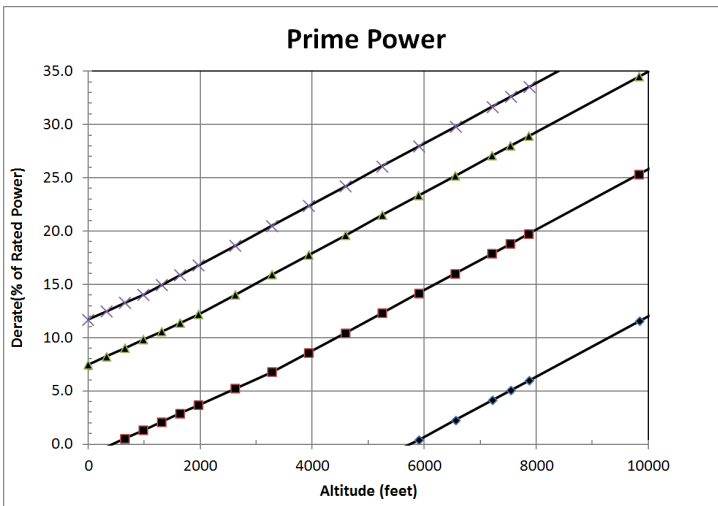
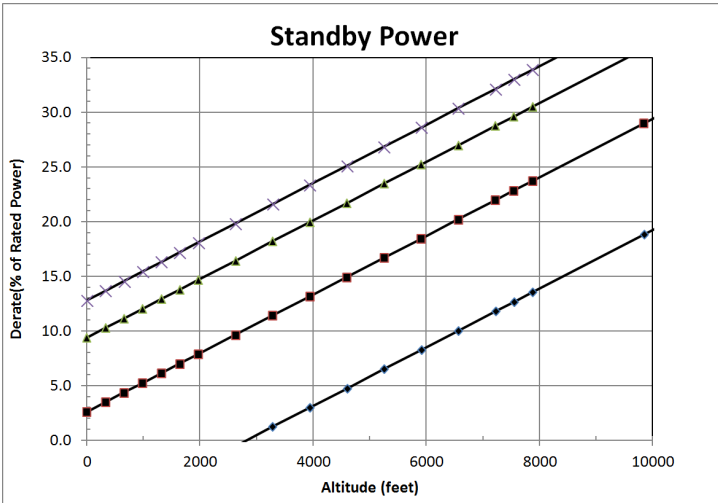


单位换算: (litres = US Gal x 3.785) (US Gal = litres x 0.2642)

数据如有更改, 恕不另行通知

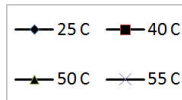
<p>以下准则阐明了确保G驱动发动机应用于交流发电机组的正确使用规范。 <b>备用功率标定:</b> 适用于在市电停电期间提供应急电源。该标定无超负荷能力, 且该备用功率标定不能与市电并网运行。此标定的发动机安装在有效电网覆盖区域内。备用功率标定的发动机按平均负荷率为80%来使用, 一年不超过200小时。在备用功率点使用时每年不超过25小时。备用功率标定的发动机只能在断电时作为应急电源使用。电网预先通知的断电不属于应急电源使用范畴。 <b>常用功率标定:</b> 是以替代商业电网电力使用的功率。常用功率必须按下列两种类型之一来使用:</p> <p><b>无时限运行常用功率:</b> 按常用功率标定的发动机, 可有效地变负荷无时限使用。在每250小时的运行周期内, 可变负荷的均值不能超过所标定常用功率的70%。在一年内, 100%常用功率的整个运行时间不超过500小时。在12小时运行周期内, 有1小时有效超负荷0%的能力。在一年内, 超负荷10%运行的整个时间不超过25小时。 <b>限时运行常用功率:</b> 限时常用功率在不变负荷应用中可以使用有限的小时数。它适用于预先通知的断电情况, 如电网限电。在功率决不会超过常用功率标定的前提下, 每年内可与市电并网运行750小时。但客户应该意识到, 长期高负荷运行将缩短发动机寿命。一年内并网运行超过750小时时, 请按持续功率标定运行。 <b>持续功率标定:</b> 可以恒定按100%标定负荷, 无时限连续使用的功率。按此标定的发动机无超负荷能力。</p>	<p>如需发电输出数据, 请参见应用公告AEB 10.47。</p> <p>上述代表发动机整体性能数据的获得和修正均是基于ISO-3046 标准规定的标准条件: 大气压力100 kPa (29.53 in Hg), 海拔 [110 m (361 ft)], 进气温度25 °C (77 °F), 相对湿度30%, 使用标准2#柴油或符合ASTM D2的柴油。</p> <p>降功率数据是基于 15 in H<sub>2</sub>O 的进气阻力和 2.0 in Hg 的排气背压给定的。</p> <p>燃油消耗数据是基于比重为0.85kg/(7.1 lbs/US gal)的No.2柴油而得到的。功率输出曲线是基于发动机带燃油系统、水泵和机油泵试验时获得的, 而不包括交流发电机、风扇、其它选用设备和被驱动的部件。</p>
	<p>数据状态: --小批量--</p> <p>数据公差: ± 5%</p>
	<p>总工程师:</p> 

### 1800 rpm 降功率曲线



**在高海拔和高环境温度下的运行:**

对 **备用功率** 标定, 在超过上图的环境条件时, 海拔每升高 1000 ft (300 m), 再降低功率 3%, 大气温度每升高 18 °F (10 °C), 再降低功率 7%。  
 对 **常用功率** 标定, 在超过上图的环境条件时, 海拔每升高 1000 ft (300 m), 再降低功率 3%, 大气温度每升高 18 °F (10 °C), 再降低功率 9%。  
 对 **持续功率** 标定, 在超过上图的环境条件时, 海拔每升高 1000 ft (300 m), 再降低功率 3%, 大气温度每升高 18 °F (10 °C), 再降低功率 10%。



## 康明斯公司

## 发动机数据单

特征编号: D193103GX03

数据单: FR4582

日期: 2013/01/01

机型: QSK19-G8

## 安装图

- 风扇飞轮: 待定

## CPL号

- 发动机关键零件清单: 3866

## 整机数据

机型 .....	四冲程; 直列; 6 缸	
进气方式 .....	涡轮增压, 空空中冷	
缸径x行程 .....	6.25 x 6.25	159 x 159
排量 .....	1150	18.9
压缩比 .....	15.0 : 1	
干重 (大约)		
带风扇飞轮 .....	— lb (kg)	4190 1901
湿重 (大约)		
带风扇飞轮 .....	— lb (kg)	4350 1973
旋转部件的转动惯量		
• 带飞轮 FW 4023 .....	— lb <sub>m</sub> • ft <sup>2</sup> (kg • m <sup>2</sup> )	194.6 8.2
重心至缸体后端面的距离 .....	— in (mm)	23.55 598
重心在曲轴中心线以上 .....	— in (mm)	11.1 282
后端主轴承允许的最大静载荷 .....	— lb (kg)	2000 907

## 发动机悬置

缸体后端面允许的最大弯矩 .....	— lb • ft (N • m)	1000 1356
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## 排气系统

允许的最大排气背压 @ 1800 RPM .....	— in Hg (kPa)	2 6.8
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## 进气系统

允许的最大进气阻力		
• 带脏滤芯 .....	— in H <sub>2</sub> O (kPa)	25 6.2
• 带普通干净滤芯 @ 1800 RPM .....	— in H <sub>2</sub> O (kPa)	15 3.7

## 冷却系统

冷却液容量—仅发动机 .....	— US gal (litre)	11 41.6
最小压力盖 .....	— psi (kPa)	15 103
冷却液的最大静压在发动机曲轴中心线以上 .....	— ft (m)	60 18.3
最高冷却液温度 (顶部水箱最高温度) - 备用 / 常用功率 .....	— °F (°C)	220 / 212 104 / 100
节温器温度调节范围 .....	— °F (°C)	181 - 203 83 - 95

## 水套回路要求

发动机外部冷却液的最大摩擦阻力 @ 1800 RPM .....	— psi (kPa)	5 34.5
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## 空空中冷器要求

发动机进气与进气歧管之间的最大温升 - 1800 rpm .....	— °F (°C)	53 29
从增压器压气机出口至进气歧管的压降 - 1800 rpm .....	— in Hg (kPa)	4 13.5
最大进气歧管温度 @ 77 °F (25 °C) 环境温度时 - 1800 rpm .....	— °F (°C)	130 54
发动机保护的最大进气歧管温度 (停机阈值) .....	— °F (°C)	180 82

## 润滑系统

机油压力 @ 怠速时 .....	— psi (kPa)	20 138
@ 控制转速时 .....	— psi (kPa)	40 - 60 275.8 - 413.7
最高机油温度 .....	— °F (°C)	250 121
带机油盘 OP 4084 的机油容量: 高 - 低 .....	— US gal (litre)	19 - 17 71.9 - 64.4
系统总容量 (含机油滤清器) .....	— US gal (litre)	22.3 84.4

## 燃油系统

	Cummins MCERS		4
喷油系统型式.....			
供油泵的最大阻力 (干净/脏燃油滤清器)..... — in Hg (kPa)	5 / 9	16.9 / 30	
喷油器回油管路允许的最大阻力(包括摩擦阻力和静压)..... — in Hg (kPa)	10	34	
最大进油温度..... — °F (°C)	160	71	
最大供油流量 @ 1800 RPM..... — US gph (litre/hr)	130	492	
最大回油流量 @ 1800 RPM..... — US gph (litre/hr)	78	295	

## 电气系统

起动马达(重载, 正极啮合)..... — volt	24
推荐的最小电池容量	
• 冷态 @ 50 °F (10 °C) 及以上..... — °F CCA	600
• 冷态 @ 32 °F 至 50 °F (0 °C 至 10 °C)..... — °F CCA	640
• 冷态 @ 0 °F 至 32 °F (-18 °C 至 0 °C)..... — °F CCA	900
起动电路允许最大的起动电阻..... — Ohm	0.002

## 冷起动能力

## 无辅助冷起动

最小起动转速..... — RPM	150
无辅助冷起动的最低环境温度..... — °F (°C)	10 -12.2

## 性能数据

- 所有数据均基于:
- 发动机带燃油系统、水泵、机油泵、空气滤清器和排气消声器; 不包括充电机、风扇和选用的被驱动部件。
  - 发动机使用符合ASTM D975标准的2号柴油。
  - ISO 3046, 第1部分, 标准参考条件:  
 大气压力: 100 kPa (29.53 in Hg)      空气温度: 25 °C (77 °F)  
 海拔: 110 m (361 ft)                      相对湿度: 30%

任意恒载下的稳态稳定带..... — %	+/-	0.25
估计的典型的机组自由场声压级: 不含排气噪声; 在额定工况, 距离 7.5 m (24.6 ft)处; @ 1800 RPM..... — dBA		93.3
在排气管出口中心线水平面上距离1米处朝上45°方向的排气噪声 @ 1800 RPM..... — dBA		118.9

发动机控制转速..... rpm	1,800	N/A	1,800	N/A
发动机怠速..... rpm	700 - 900	N/A	700 - 900	N/A
发动机输出总功率..... hp (kW)	967 (721)	N/A	815 (608)	N/A
平均有效压力..... psi (kPa)	370 (2,552)	N/A	312 (2,151)	N/A
活塞平均速度..... ft/min (m/s)	1,875 (9.5)	N/A	1,875 (9.5)	N/A
摩擦损失功率..... hp (kW)	79 (59)	N/A	79 (59)	N/A
在一定外部阻力的情况下的发动机冷却水流量:				
• 在2.5 psi 的流动阻力时..... US gpm (litre/min)	196 (742)	N/A	196 (742)	N/A
• 在最大外部流动阻力时..... US gpm (litre/min)	175 (662)	N/A	175 (662)	N/A

## 发动机数据

进气流量..... cfm (litre/s)	2,225 (1,050)	N/A	1,989 (939)	N/A
排气温度..... °F (°C)	989 (532)	N/A	906 (486)	N/A
排气流量..... cfm (litre/s)	5,815 (2,745)	N/A	4,901 (2,313)	N/A
空燃比..... 空气: 燃油	27.1 : 1	N/A	29.9 : 1	N/A
散失到环境中的热量..... BTU/min (kW)	4,288 (76)	N/A	3,468 (61)	N/A
散失到水套冷却液中的热量..... BTU/min (kW)	14,734 (259)	N/A	10,535 (185)	N/A
散失到排气中的热量..... BTU/min (kW)	33,713 (593)	N/A	29,407 (517)	N/A
散失到 *燃油中的热量..... BTU/min (kW)	252 (4.4)	N/A	252 (4.4)	N/A

## ATACAC

散失到中冷器中的热量..... BTU/min (kW)	13,199 (232)	N/A	8,863 (156)	N/A
增压空气流量..... lb/min (kg/min)	159 (73)	N/A	142 (64)	N/A
增压器压气机出口压力..... in Hg (kPa)	98 (332)	N/A	81 (274)	N/A
增压器压气机出口温度..... °F (°C)	465 (241)	N/A	406 (208)	N/A

\* 这是散失到燃油的最大热量。

N.A. - Not Available不可用


N/A - Not Applicable to this Engine不适用

TBD - To Be Determined待定

发动机型号: QSK19-G8

数据单: FR4582

日期: 2013/02/01

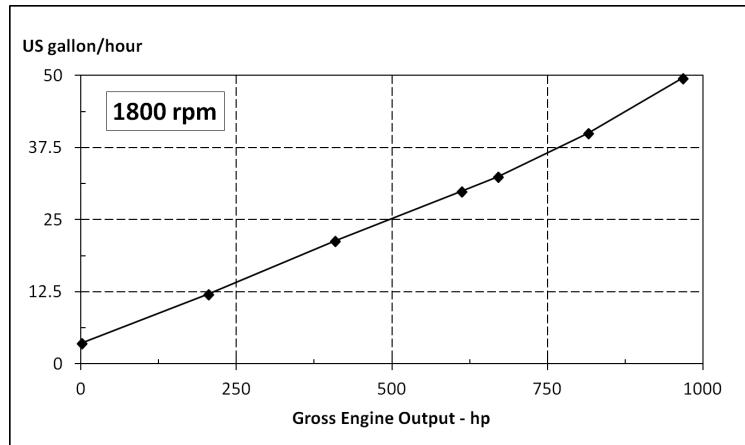
	<b>Cummins Inc.</b> Columbus, Indiana 47202-3005 <b>ENGINE PERFORMANCE DATASHEET</b>	Basic Engine Model: <b>QSK19-G8</b>	Curve Number: <b>FR4582</b>	<b>G-DRIVE QSK 1</b>
		Engine Critical Parts List: <b>CPL : 3866</b>	Date: <b>01 FEB 13</b>	

Compression Ratio : <b>15.0 : 1</b>	Displacement : <b>1,150 in<sup>3</sup> (18.9 L)</b>
Fuel System : <b>Cummins MCRS</b>	Aspiration : <b>Turbocharged and Charge Air Cooled</b>
Emission Certification : <b>U.S. EPA Tier 2</b>	

Engine Speed	Standby Power		Prime Power		Continuous Power	
RPM	bhp	kWm	bhp	kWm	bhp	kWm
<b>1800</b>	967	721	815	608	670	500

## Engine Performance Data @ 1800 rpm

OUTPUT POWER			FUEL CONSUMPTION			
%	bhp	kWm	lb/ hp·h	kg/ kWm·h	US gal/ hour	litre/ hour
<b>STANDBY POWER</b>						
100	967	721	0.364	0.221	49.5	188
<b>PRIME POWER</b>						
100	815	608	0.349	0.212	40.0	151
75	611	456	0.347	0.211	29.9	113
50	408	304	0.371	0.226	21.3	81
25	204	152	0.422	0.257	12.1	46
<b>CONTINUOUS POWER</b>						
100	670	500	0.344	0.209	32.4	123



### CONVERSIONS: (litres = US Gal x 3.785) (US Gal = litres x 0.2642)

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 maximum of an 80% average load factor and 200 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 applications must be in the form of one of the following two categories: **UNLIMITED TIME RUNNING PRIME 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. The total operating time at 100% Prime Power shall not exceed 500 hours per year. 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. **LIMITED TIME RUNNING PRIME POWER:** Limited Time Prime Power is available for a limited number of hours in a non-variable load application. It is intended for use in situations where power outages are contracted, such as in utility power curtailment. Engines may be operated in parallel to the public utility up to 750 hours per year at power levels never to exceed the Prime Power rating. The customer should be aware, however, that the life of any engine will be reduced by this constant high load operation. Any operation exceeding 750 hours per year at the Prime Power rating should use the Continuous Power rating. **CONTINUOUS POWER RATING:** Applicable for supplying utility power at a constant 100% load for an unlimited number of hours per year. No overload capability is available for this rating.

### Data Subject to Change Without Notice


Reference AEB 10.47 for determining Electrical Output.

Data shown above represent gross engine performance capabilities obtained and corrected in accordance with ISO-3046 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 No. 2 diesel or a fuel corresponding to ASTM D2. Derates shown are based on 15 in H<sub>2</sub>O air intake restriction and 2.0 in Hg exhaust back pressure.

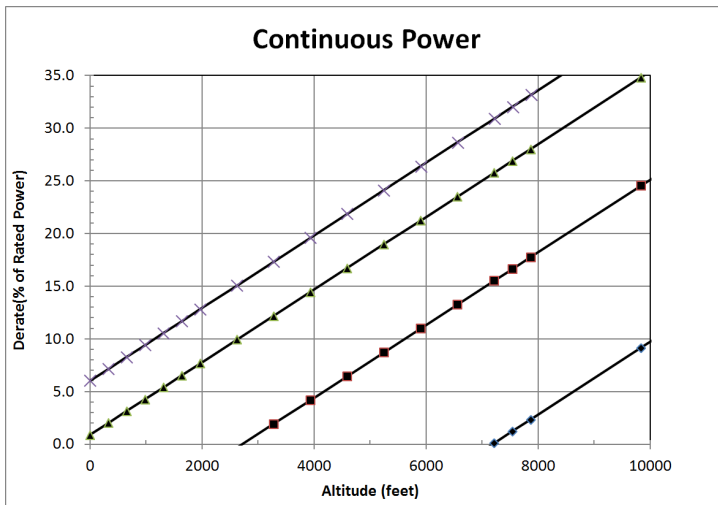
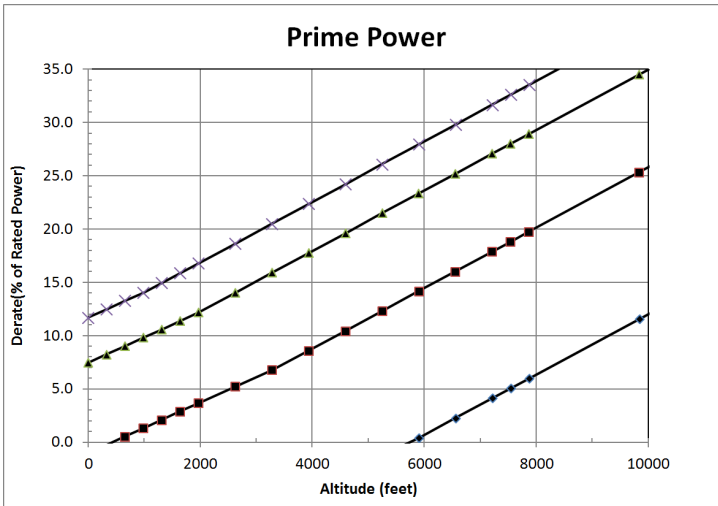
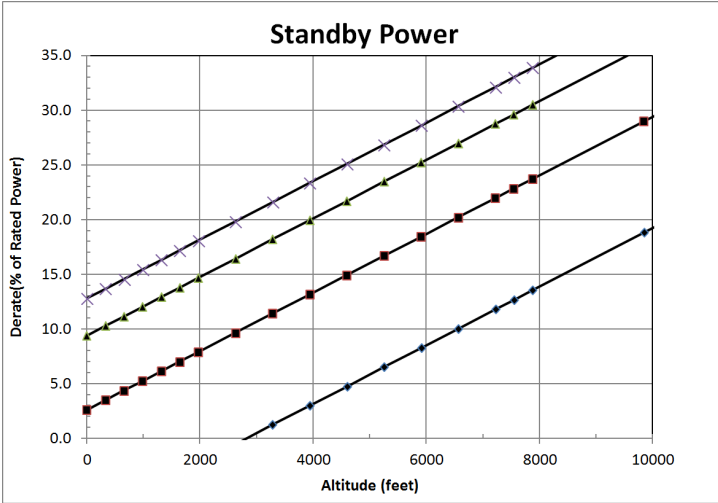
The fuel consumption data is based on No. 2 diesel fuel weight at 0.85 kg/litre (7.1 lbs/US gal). Power output curves are based on the engine operating with fuel system, water pump and lubricating oil pump; not included are battery charging alternator, fan, optional equipment and driven components.

Data Status: --Limited Production--

Data Tolerance: ± 5%

Chief Engineer: 

### 1800 rpm Derate Curves

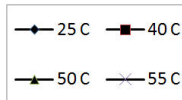


**Operation at Elevated Temperature and Altitude:**

For **Standby** operation above these conditions, derate by an additional 3% per 1000 ft (300 m), and 7% per 18 delta deg F (10 delta deg C)

For **Prime** operation above these conditions, derate by an additional 3% per 1000 ft (300 m), and 9% per 18 delta deg F (10 delta deg C)

For **Continuous** operation above these conditions, derate by an additional 3% per 1000 ft (300 m), and 10% per 18 delta deg F (10 delta deg C)



# Cummins Inc.

## Engine Data Sheet

ENGINE MODEL : QSK19-G8

CONFIGURATION NUMBER : D193103GX03

DATA SHEET: FR4582

DATE : 01 FEB 13

**INSTALLATION DIAGRAM**• Fan to Flywheel: **TBD****CPL NUMBER**

• Engine Critical Parts List: 3866

**GENERAL ENGINE DATA**

Type .....	Four Cycle; Inline; 6 Cylinder
Aspiration .....	Turbocharged and Charge Air Cooled
Bore x Stroke .....	6.25 x 6.25 159 x 159
Displacement .....	1150 18.9
Compression Ratio .....	15.0 : 1
Dry Weight (Approximate), Fan to Flywheel Engine .....	4190 1901
Wet Weight (Approximate), Fan to Flywheel Engine .....	4350 1973
Moment of Inertia of Rotating Components • with FW 4023 Flywheel .....	194.6 8.2
Center of Gravity from Rear Face of Block .....	23.55 598
Center of Gravity Above Crankshaft Centerline .....	11.1 282
Maximum Static Loading at Rear Main Bearing .....	2000 907

**ENGINE MOUNTING**

Maximum Bending Moment at Rear Face of Block .....	1000	1356
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**EXHAUST SYSTEM**

Maximum Back Pressure @ 1800 RPM .....	2	6.8
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**AIR INDUCTION SYSTEM**

Maximum Intake Air Restriction • with Dirty Filter Element .....	25	6.2
• with Normal Duty Air Cleaner and Clean Filter Element @ 1800 RPM .....	15	3.7

**COOLING SYSTEM**

Coolant Capacity — Engine Only .....	11	41.6
Minimum Pressure Cap .....	15	103
Maximum Static Head of Coolant Above Engine Crank Centerline .....	60	18.3
Maximum Coolant Temperature (Max Top Tank Temp) for Standby / Prime Power .....	220 / 212	104 / 100
Thermostat (Modulating) Range .....	181 - 203	83 - 95

**Jacket Water Circuit Requirements**

Maximum Coolant Friction Head External to Engine @ 1800 RPM .....	5	34.5
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**Charge Air Cooler Requirements**

Maximum Temp. Rise Between Engine Air Intake and Intake Manifold - 1800 rpm .....	53	29
Maximum Air Pressure Drop from Turbo Air Outlet to Intake Manifold - 1800 rpm .....	4	13.5
Maximum Intake Manifold Temperature @ 77 °F (25 °C) Ambient - 1800 rpm .....	130	54
Maximum Intake Manifold Temperature for Engine Protection (Shut Down Threshold) .....	180	82

**LUBRICATION SYSTEM**

Oil Pressure @ Idle Speed .....	20	138
@ Governed Speed .....	40 - 60	275.8 - 413.7
Maximum Oil Temperature .....	250	121
Oil Capacity with OP 4084 Oil Pan : High - Low .....	19 - 17	71.9 - 64.4
Total System Capacity (Including Filter) .....	22.3	84.4

**FUEL SYSTEM**

Type Injection System .....	Cummins MCERS	<b>4</b>
Maximum Restriction at Lift Pump(clean/dirty filter)..... — in Hg (kPa)	5 / 9	16.9 / 30
Maximum Allowable Head on Injector Return Line (Consisting of Friction Head and Static Head) ..... — in Hg (kPa)	10	34
Maximum Fuel Inlet Temperature .....	160	71
Maximum Supply Fuel Flow @ 1800 RPM..... — US gph (litre/hr)	130	492
Maximum Return Fuel Flow @ 1800 RPM..... — US gph (litre/hr)	78	295

**ELECTRICAL SYSTEM**

Cranking Motor (Heavy Duty, Positive Engagement) .....	— volt	24
Minimum Recommended Battery Capacity		
• Cold Soak @ 50 °F (10 °C) and above .....	— °F CCA	600
• Cold Soak @ 32 °F to 50 °F (0 °C to 10 °C) .....	— °F CCA	640
• Cold Soak @ 0 °F to 32 °F (-18 °C to 0 °C) .....	— °F CCA	900
Maximum Starting Circuit Resistance.....	— Ohm	0.002

**COLD START CAPABILITY**

Unaided Cold Start

Minimum Cranking Speed.....	— RPM	150
Minimum Ambient Temperature for Unaided Cold Start.....	— °F (°C)	10 -12.2

**PERFORMANCE DATA**

- All data is based on:
- Engine operating with fuel system, water pump, lubricating oil pump, air cleaner and exhaust silencer; not included are battery charging alternator, fan, and optional driven components.
  - Engine operating with fuel corresponding to grade No. 2-D per ASTM D975.
  - ISO 3046, Part 1, Standard Reference Conditions of:
 

Barometric Pressure	: 100 kPa (29.53 in Hg)	Air Temperature	: 25 °C (77 °F)
Altitude	: 110 m (361 ft)	Relative Humidity	: 30%

Steady State Stability Band at Any Constant Load .....	— %	+/-	0.25
Estimated Free Field Sound Pressure Level of a Typical Generator Set;			
Excludes Exhaust Noise; at Rated Load and 7.5 m (24.6 ft); @ 1800 RPM .....	— dBA		93.3
Exhaust Noise at 1 m Horizontal from Centerline of Exhaust Pipe Outlet Upwards at 45° @ 1800 RPM.....	— dBA		118.9

Governed Engine Speed .....	rpm
Engine Idle Speed.....	rpm
Gross Engine Power Output.....	hp (kW)
Brake Mean Effective Pressure.....	psi (kPa)
Piston Speed .....	ft/min (m/s)
Friction Horsepower.....	hp (kW)
Engine Water Flow at Stated Friction Head External to Engine:	
• 2.5 psi Friction Head.....	US gpm (litre/min)
• Maximum Friction Head .....	US gpm (litre/min)

	<b>STANDBY POWER</b>		<b>PRIME POWER</b>	
	<b>60 hz</b>	<b>50 hz</b>	<b>60 hz</b>	<b>50 hz</b>
Governed Engine Speed .....	1,800	N/A	1,800	N/A
Engine Idle Speed.....	700 - 900	N/A	700 - 900	N/A
Gross Engine Power Output.....	967 (721)	N/A	815 (608)	N/A
Brake Mean Effective Pressure.....	370 (2,552)	N/A	312 (2,151)	N/A
Piston Speed .....	1,875 (9.5)	N/A	1,875 (9.5)	N/A
Friction Horsepower.....	79 (59)	N/A	79 (59)	N/A
Engine Water Flow at Stated Friction Head External to Engine:				
• 2.5 psi Friction Head.....	196 (742)	N/A	196 (742)	N/A
• Maximum Friction Head .....	175 (662)	N/A	175 (662)	N/A
<b>Engine Data</b>				
Intake Air Flow .....	2,225 (1,050)	N/A	1,989 (939)	N/A
Exhaust Gas Temperature .....	989 (532)	N/A	906 (486)	N/A
Exhaust Gas Flow .....	5,815 (2,745)	N/A	4,901 (2,313)	N/A
Air to Fuel Ratio.....	27.1 : 1	N/A	29.9 : 1	N/A
Radiated Heat to Ambient .....	4,288 (76)	N/A	3,468 (61)	N/A
Heat Rejection to Jacket Coolant.....	14,734 (259)	N/A	10,535 (185)	N/A
Heat Rejection to Exhaust .....	33,713 (593)	N/A	29,407 (517)	N/A
Heat Rejected to *Fuel.....	252 (4.4)	N/A	252 (4.4)	N/A
<b>ATACAC</b>				
Heat Rejected to Aftercooler.....	13,199 (232)	N/A	8,863 (156)	N/A
Charge Air Flow.....	159 (73)	N/A	142 (64)	N/A
Turbocharger Compressor Outlet Pressure .....	98 (332)	N/A	81 (274)	N/A
Turbocharger Compressor Outlet Temperature.....	465 (241)	N/A	406 (208)	N/A

\* This is the maximum heat rejection to fuel.

- N.A. - Not Available
- N/A - Not Applicable to this Engine
- TBD - To Be Determined

**ENGINE MODEL : QSK19-G8**  
**DATA SHEET : FR4582**  
**DATE : 01 FEB 13**