



**CHONGQING CUMMINS ENGINE  
PERFORMANCE CURVE**

Engine Model  
**QSNT-G**

Curve No.  
**FR11390**

Date  
**2014.09**

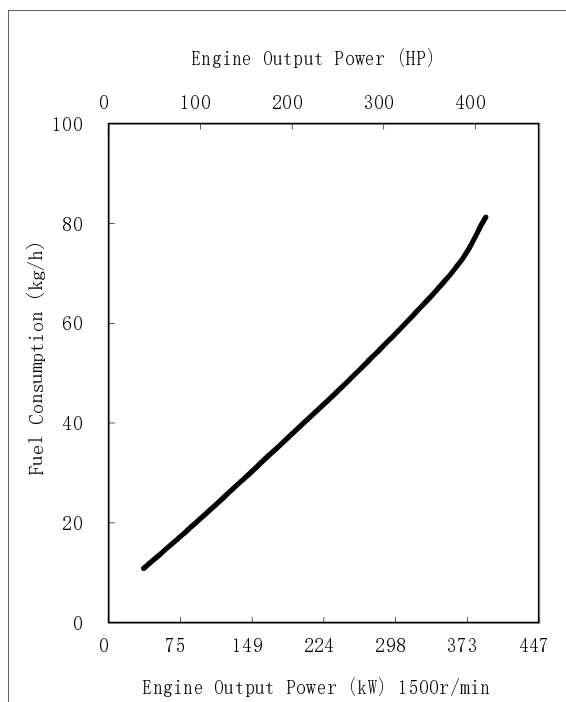
CPL Code  
**4691**

Data Sheet

Emission Level  
**stage 3**

Displacement: **14L** [855 in.<sup>3</sup>]      Cylinders: **6**      Fuel System: **PT**  
 Bore: **140mm** [5.50 in.]      Speed: **1500r/min**      Cfg. Number: **D093677GX03**  
 Stroke: **152mm** [6.00in.]      Aspiration: **Turbocharged and Charged Air Cooled**

Standby Power		Prime Power		Continuous Power	
kW	HP	kW	HP	kW	HP
<b>392</b>	<b>525</b>	<b>358</b>	<b>480</b>	<b>291</b>	<b>390</b>



	Output Power		Fuel Consumption
	HP	kW	kg/h
Standby100%	525	392	81.3
Prime100%	480	358	70.5
75%	360	269	52.3
50%	240	179	35.8
25%	120	90	20.0
10%	48	36	10.9
Cont.100%	390	291	56.9

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, optional equipment and driven components.

--Engine operating with fuel corresponding to grade No.2-D per ASTM D975.

--ISO 3046, Part1, Standard Reference Conditions of : Barometric Pressure:100kPa(29.5in.Hg); Air Temperature: 25°C (77°F) ; Relative Humidity: 30% .

Tolerance is certified within 5%.

**CHIEF ENGINEER:**



# Chongqing Cummins Engine Co. Ltd.

## Engine Data Sheet

**MODEL: QSNT-G** **DATA SHEET: FR11390**  
**CONFIGURATION NO.: D093677GX03** **PERFORMANCE CURVE:**  
**CPL NUMBER: 4691** **INSTALLATION DIAGRAM:**  
**PRIME POWER 358kW(480HP)/1500r/min@50Hz** **DATE: 2016.6.27**  
**STANDBY POWER: 392kW(525HP)/1500r/min@50Hz** **EMISSION LEVEL: stage 3**

### GENERAL ENGINE DATA

Type.....	6-Cylinder;In-line;4-Cycle	
Aspiration .....	Turbocharged and Charge Air Cooled	
Bore x Stroke - in. × in. (mm × mm).....	5.5 × 6	( 140 × 152 )
Displacement - in. <sup>3</sup> (L).....	855	( 14 )
Compression Ratio .....	16.3:1	
Firing Order .....	1-5-3-6-2-4	
Dry Weight		
--Including Flywheel and Generator		
Excluding other Electrical Component - lb. (kg).....	3219	( 1460 )
Wet Weight		
--Engine Only - lb. (kg).....	3330	( 1510 )
Moment of Inertia of Rotating Components		
- With FW2141 flywheel - lb. ·ft. <sup>2</sup> (kg·m <sup>2</sup> ).....	62.4	( 4.99 )
Center of Gravity from Front Face of Block - in.(mm) .....	17.7	( 575.7 )
Center of Gravity Above Crankshaft Centerline - in.(mm) .....	7.5	( 164.6 )

### ENGINE MOUNTING

Maximum Allowable Bending Moment at Rear Face of Block - lb. ·ft. (N·m).....	1000	( 1356 )
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### EXHAUST SYSTEM

Maximum Allowable Back Pressure - in.Hg (kPa).....	3.0	( 10 )
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### AIR INDUCTION SYSTEM

Maximum Allowable Intake Air Restriction - in. H <sub>2</sub> O (kPa)		
--with Dirty Filter Element.....	25	(6.2)
--with Heavy Duty Air Cleaner and Clean Filter Element.....	15	(3.7)

### COOLING SYSTEM

Coolant Capacity - Engine Only - U.S. gal (L).....	3.4	( 21 )
- With Radiator - U.S. gal (L).....	N/A	
Maximum Coolant Friction Head External to Engine -PSI (kPa).....	5	(34)
Maximum Static Head of Coolant Above Engine Crank Centerline -ft. (m) .....	46	( 14.0 )
Standard Thermostat (Modulating) Range - °F (°C) .....	180 - 202	( 82 - 94 )
Minimum Allowable Pressure Cap -PSI (kPa).....	7	( 69 )
Maximum Top Tank Temperature -for Standby/Prime °F (°C).....	220/212	(104/100)

### LUBRICATION SYSTEM

Oil Pressure @ Idle Speed - PSI (kPa).....	15	( 103 )
@ Governed Speed - PSI (kPa).....	30-50	( 241-345 )
Maximum Allowable Oil Temperature - °F (°C).....	250	( 121 )
Oil Pan Capacity with OP2152 - Low / High - U.S. gal. (L).....	7 / 9	( 28.4/36.0 )
Total System Capacity(with LF9009 Combine Filter) - U.S. gal. (L).....	9.7	( 38.6 )
Angularity of OP2152 OIL PAN		
Rear Down.....	38°	
Front Down.....	38°	
Exhaust Side Down.....	38°	
Fuel Pump Side Down.....	38°	

**FUEL SYSTEM**

Type Injection System.....		CELECT
Maximum Allowable Restriction to Fuel Pump		
-- With Clean Fuel Filter - in.Hg (kPa).....	4.0	( 13.5 )
-- With Dirty Fuel Filter - in.Hg (kPa).....	8.0	( 27.1 )
Maximum Allowable Head on Injector Return Line		
-- With Check Valve - in.Hg (kPa).....	6.5	( 22.0 )
-- Maximum fuel inlet temperature -°F (°C).....	160.0	(71)

**ELECTRICAL SYSTEM**

Standard Cranking Motor (Heavy Duty , Positive Engagement) - volt....	24
Standard Battery Charging System , Negative Ground - ampere.....	35
Maximum Allowable Resistance of Cranking Circuit - ohm.....	0.002
Minimum Battery Capacity-cold soak at -18deg C (0 deg F) or above	
--Engine only-cold cranking amperss: (CCA).....	900
--Engine only-reserve capacity: (RC).....	320

**CRANKING SYSTEM (Cold Starting Capability)**

-- Minimum Cranking Speed for Unaided Cold Start -r/min.....	150
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**PERFORMANCE DATA**

All data is based on :

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--Engine operating with fuel corresponding to grade No.2-D per ASTM D975.

--ISO 3046, Part1, Standard Reference Conditions of : Barometric

Pressure:100kPa(29.5in.Hg); Air Temperature: 25°C (77°F) ; Relative Humidity: 30% .

Steady State Stability Band at any Constant Load -%.....	+/-0.25
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	Standby Power	Prime Power
Governed Engine Speed -rpm .....	1500	1500
Engine Idle Speed -rpm .....	700-800	700-800
Gross Engine Power Output - kW .....	392	358
Engine Water Flow - L/s .....	5	5
<b>Engine Data with Dry Type Exhaust Manifold</b>		
Intake Air Flow - L/s .....	499	430
Exhaust Gas Temperature - °C.....	518	510
Exhaust Gas Flow - kg/h.....	2205	1899
Heat Rejection to Ambient - kW.....	20	18
Heat Rejection to Coolant - kW.....	114	127
Heat Rejection to Exhaust - kW.....	324	293

Engine Model: QSNT-G  
 Data Sheet: FR11390  
 Date: 2016.6.27

**CHONGQING CUMMINS ENGINE CO. LTD.** CHONGQING, CHINA, 400031

Change Log