

**Model: GGMC**  
**KW rating: 29.0 natural gas standby**  
**30.0 propane standby**  
**Frequency: 60**  
**Fuel type: Natural gas/propane**

➤ **Generator set data sheet**



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<b>Exhaust emission data sheet:</b>	<b>EDS-1069</b>
<b>Exhaust emission compliance sheet:</b>	
<b>Sound performance data sheet:</b>	<b>MSP-1045</b>
<b>Cooling performance data sheet:</b>	<b>MCP-162</b>
<b>Prototype test summary data sheet:</b>	<b>PTS-270</b>
<b>Standard set-mounted radiator cooling outline:</b>	<b>0500-4510</b>
<b>Optional set-mounted radiator cooling outline:</b>	
<b>Optional heat exchanger cooling outline:</b>	
<b>Optional remote radiator cooling outline:</b>	

<b>Fuel consumption</b>	<b>Natural gas Standby</b>				<b>Prime</b>				<b>Propane Standby</b>				<b>Prime</b>			
	<b>kW (kVA)</b>				<b>kW (kVA)</b>				<b>kW (kVA)</b>				<b>kW (kVA)</b>			
<b>Ratings</b>	29.0 (36.0)				26.0 (32.5)				30.0 (38.0)				26.0 (32.5)			
<b>Load</b>	<b>1/4</b>	<b>1/2</b>	<b>3/4</b>	<b>Full</b>	<b>1/4</b>	<b>1/2</b>	<b>3/4</b>	<b>Full</b>	<b>1/4</b>	<b>1/2</b>	<b>3/4</b>	<b>Full</b>	<b>1/4</b>	<b>1/2</b>	<b>3/4</b>	<b>Full</b>
<b>scfh</b>	181.2	259.3	338.1	420	172.6	255	313.6	385.3	64	91.7	119.6	148.3	60	84.5	108.3	132.9
<b>m<sup>3</sup>/hr</b>	5.1	7.3	9.6	11.9	4.9	6.9	8.9	10.9	1.8	2.6	3.4	4.2	1.7	2.5	3.1	3.8

<b>Engine</b>	<b>Natural gas Standby rating</b>	<b>Prime rating</b>	<b>Propane Standby rating</b>	<b>Prime rating</b>
Engine model	GM3.0 L			
Configuration	Cast iron, in-line 4 cylinder			
Aspiration	Naturally aspirated			
Gross engine power output, kWm (bhp)	36.9 (49.5)	33.5 (45)	41 (55)	37.3 (50)
BMEP at rated load, kPa (psi)	765 (110.8)	688.8 (99.9)	802.6 (116.4)	688.8 (99.9)
Bore, mm (in)	101.6 (4.0)			
Stroke, mm (in)	91.4 (3.6)			
Rated speed, rpm	1800			
Piston speed, m/s (ft/min)	11.4 (2243)			
Compression ratio	10.5:1			
Lube oil capacity, L (qt)	4.3 (4.5)			
Overspeed limit, rpm	2250 ± 50			
Regenerative power, kW				

<b>Fuel flow</b>	
Minimum operating pressure, kPa (in H <sub>2</sub> O)	1.7 (7.0)
Maximum operating pressure, kPa (in H <sub>2</sub> O)	3.4 (13.6)

<b>Air</b>	<b>Natural gas Standby rating</b>	<b>Prime rating</b>	<b>Propane Standby rating</b>	<b>Prime rating</b>
Combustion air, m <sup>3</sup> /min (scfm)	2.2 (77)	2.0 (69)	2.1 (73)	1.8 (64)
Maximum air cleaner restriction, kPa (in H <sub>2</sub> O)	2.5 (10.0)			
Alternator cooling air, m <sup>3</sup> /min (scfm)	7.8 (275)			

## Exhaust

Exhaust flow at rated load, m <sup>3</sup> /min (cfm)	6.51 (230)	5.9 (207)	6.2 (217)	5.4 (189)
Exhaust temperature, °C (°F)	590 (1094)	574 (1065)	609 (1128)	589 (1092)
Maximum back pressure, kPa (in H <sub>2</sub> O)	3.5 (14)			

## Standard set-mounted radiator cooling

Ambient design, °C (°F)				
Fan load, kW (HP)	1.1 (1.5)			
Coolant capacity (with radiator), L (US gal)	11.4 (3.0)			
Coolant system air flow, m <sup>3</sup> /min (scfm)				
Total heat rejection, MJ/min (Btu/min)				
Maximum cooling air flow static restriction, kPa (in H <sub>2</sub> O)				

## Optional set-mounted radiator cooling

Ambient design, °C (°F)				
Fan load, kW <sub>m</sub> (HP)				
Coolant capacity (with radiator), L (US gal)				
Cooling system air flow, m <sup>3</sup> /min (scfm)				
Total heat rejection, MJ/min (Btu/min)				
Maximum cooling air flow static restriction, kPa (in H <sub>2</sub> O)				

## Optional remote radiator cooling<sup>1</sup>

Set coolant capacity, L (US gal)				
Max flow rate @ max friction head, jacket water circuit, L/min (US gal/min)				
Heat rejected, jacket water circuit, MJ/min (Btu/min)				
Total heat radiated to room, MJ/min (Btu/min)				
Maximum friction head, jacket water circuit, kPa (psi)				
Maximum static head, jacket water circuit, m (ft)				
Maximum jacket water outlet temp, °C (°F)				

## Weights<sup>2</sup>

Unit dry weight kgs (lbs)	507 (1117)
Unit wet weight kgs (lbs)	522 (1151)

### Notes:

<sup>1</sup> For non-standard remote installations contact your local Cummins Power Generation representative.

<sup>2</sup> Weights represent a set with standard features. See outline drawing for weights of other configurations.

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## Alternator data

<b>Natural gas three phase table<sup>1</sup></b>		<b>105 °C</b>	<b>105 °C</b>	<b>105 °C</b>	<b>125 °C</b>	<b>125 °C</b>	<b>125 °C</b>						
Feature code		B415	B268	B304	B414	B267	B303						
Alternator data sheet		538	538	538	538	538	538						
Voltage ranges		120/208 thru 139/240 240/416 thru 277/480	120/208 thru 139/240 240/416 thru 277/480	347/600	120/208 thru 139/240 240/416 thru 277/480	120/208 thru 139/240 240/416 thru 277/480	347/600						
Surge kW		30.4	30.4	30.4	30.4	30.4	30.4						
Motor starting kVA (at 90% sustained voltage)	Shunt	134	134	134	134	134	134						
	PMG												

Full load current amps at standby rating	120/208 101	127/220 95	120/240 87	139/240 87	240/416 50	255/440 48	277/480 44	347/600 35
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<b>Propane three phase table<sup>1</sup></b>		<b>105 °C</b>	<b>105 °C</b>	<b>105 °C</b>	<b>125 °C</b>	<b>125 °C</b>	<b>125 °C</b>						
Feature code		B415	B268	B304	B414	B267	B303						
Alternator data sheet		538	538	538	538	538	538						
Voltage ranges		120/208 thru 139/240 240/416 thru 277/480	120/208 thru 139/240 240/416 thru 277/480	347/600	120/208 thru 139/240 240/416 thru 277/480	120/208 thru 139/240 240/416 thru 277/480	347/600						
Surge kW		32	32	32	32	32	32						
Motor starting kVA (at 90% sustained voltage)	Shunt	134	134	134	134	134	134						
	PMG												

Full load current amps at standby rating	120/208 104	127/220 98	120/240 90	139/240 90	240/416 52	255/440 49	277/480 45	347/600 36
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<b>Natural gas single phase table</b>		<b>105 °C</b>	<b>105 °C</b>	<b>105 °C</b>	<b>125 °C</b>	<b>125 °C</b>	<b>125 °C</b>						
Feature code		B274	B415	B268	B273	B414	B267						
Alternator data sheet		538	538	538	538	538	538						
Voltage ranges		120/240 <sup>3</sup>	120/240 <sup>2</sup>	120/240 <sup>3</sup>	120/240 <sup>3</sup>	120/240 <sup>2</sup>	120/240 <sup>3</sup>						
Surge kW		30	30	30	30	30	30						
Motor starting kVA (at 90% sustained voltage)	Shunt	100	100	100	100	100	100						
	PMG												

Full load current amps at standby rating	120/240 <sup>2</sup> 80	120/240 <sup>3</sup> 121
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<b>Propane single phase table</b>		<b>105 °C</b>	<b>105 °C</b>	<b>105 °C</b>	<b>125 °C</b>	<b>125 °C</b>	<b>125 °C</b>						
Feature code		B274	B415	B268	B273	B414	B267						
Alternator data sheet		538	538	538	538	538	538						
Voltage ranges		120/240 <sup>3</sup>	120/240 <sup>2</sup>	120/240 <sup>3</sup>	120/240 <sup>3</sup>	120/240 <sup>2</sup>	120/240 <sup>3</sup>						
Surge kW		31.8	31.8	31.8	31.8	31.8	31.8						
Motor starting kVA (at 90% sustained voltage)	Shunt	100	100	100	100	100	100						
	PMG												

Full load current amps at standby rating	120/240 <sup>2</sup> 83	120/240 <sup>3</sup> 125
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### Notes:

- <sup>1</sup> Single phase power can be taken from a three phase generator set at up to 2/3 set rated 3-phase kW at 1.0 power factor. Also see Note 3 below.
- <sup>2</sup> The broad range alternators can supply single phase output up to 2/3 set rated 3-phase kW at 1.0 power factor.
- <sup>3</sup> The extended stack (full single phase output) and 4 lead alternators can supply single phase output up to full set rated 3-phase kW at 1.0 power factor.

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## Derating factors

### Natural gas

Standby/prime	Engine power available up to 0 m (0 ft) at ambient temperatures up to 40 °C (104 °F). Above 0 m (0 ft) derate at 4% per 305 m (1000 ft), and 2% per 10 °C (1.1% per 10 °F) above 40 °C (104 °F).
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### Propane

Standby/prime	Engine power available up to 153 m (500 ft) at ambient temperatures up to 40 °C (104 °F). Above 153 m (500 ft) derate at 4% per 305 m (1000 ft), and 2% per 10 °C (1.1% per 10 °F) above 40 °C (104 °F).
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## Ratings definitions

<b>Emergency standby power (ESP):</b>	<b>Limited-time running power (LTP):</b>	<b>Prime power (PRP):</b>	<b>Base load (continuous) power (COP):</b>
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

## Formulas for calculating full load currents:

### Three phase output

$$\frac{\text{kW} \times 1000}{\text{Voltage} \times 1.73 \times 0.8}$$

### Single phase output

$$\frac{\text{kW} \times \text{SinglePhaseFactor} \times 1000}{\text{Voltage}}$$

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**Warning:** Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

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