

<b>Generator Set Data Sheet</b>	<b>Model: DQKH</b> <b>Frequency: 50</b> <b>Fuel Type: Diesel</b> <b>Emissions Level: Non Regulated</b>
---------------------------------	---

<b>Exhaust Emission Data Sheet:</b>	<b>EDS-1015</b>
<b>Measured Sound Performance Data Sheet:</b>	<b>MSP-1002</b>
<b>Measured Cooling Performance Data Sheet:</b>	<b>MCP-126</b>
<b>Prototype Test Summary Data Sheet:</b>	<b>PTS-155</b>
<b>Standard Set-Mounted Radiator Cooling Outline:</b>	<b>500-3781</b>
<b>Optional Remote Radiator Cooling Outline:</b>	<b>500-3782</b>

Fuel Consumption	Standby				Prime				Continuous	
	Ratings	kW (kVA)				kW (kVA)				kW (kVA)
		2000 (2500)				1800 (2250)				N/A
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full		
US gph	36.9	66.6	97	131.8	35.1	61.3	88.6	117.7		
L/hr	140	252	368	500	133	232	336	446		

Engine	Standby Rating	Prime Rating	Continuous Rating
Engine Manufacturer	Cummins		
Engine Model	QSK60-G8		
Configuration	Cast Iron, 60°V 16 cylinder		
Aspiration	Turbocharged and Low Temperature Aftercooled		
Gross Engine Power Output, kWm (bhp)	2145 (2875)	1942 (2603)	
BMEP at Set Rated Load, kPa (psi)	2848 (413)	2575 (373)	
Bore, mm (in.)	159 (6.25)		
Stroke, mm (in.)	190 (7.48)		
Rated Speed, rpm	1500		
Piston Speed, m/s (ft/min)	9.5 (1869)		
Compression Ratio	14.5:1		
Lube Oil Capacity, L	176		
Overspeed Limit, rpm	1850 ±50		
Regenerative Power, kW	146		
<b>Fuel Flow</b>			
Maximum Fuel Flow, L/hr (US gph)	1515 (400)		
Maximum Fuel Inlet Restriction, kPa (in. Hg)	8.4 (2.5)		
Maximum Fuel Inlet Temperature, °C (°F)	70 (160)		
<b>Air</b>			
Combustion Air, m <sup>3</sup> /min (scfm)	156 (5515)	145.2 (5130)	
Maximum Air Cleaner Restriction, kPa (in. H <sub>2</sub> O)	6.2 (25)		
Alternator Cooling Air, m <sup>3</sup> /min (cfm)	150 (5297)		
<b>Exhaust</b>			
Exhaust Gas Flow at Set Rated Load, m <sup>3</sup> /min (cfm)	379 (13375)	344.1(12150)	
Exhaust Gas Temperature, °C (°F)	485 (905)	460 (855)	
Maximum Exhaust Back Pressure, kPa (in. H <sub>2</sub> O)	6.7 (27)		

<b>Standard Set-Mounted Radiator Cooling</b>	<b>Standby Rating</b>	<b>Prime Rating</b>	<b>Continuous Rating</b>
Ambient Design, °C (°F)	40 (104)		
Fan Load, KW <sub>m</sub> (HP)	38 (51)		
Coolant Capacity (with Radiator), L (US Gal.)	492 (130)		
Cooling System Air Flow, m <sup>3</sup> /min (scfm)	1869 (66000)		
Total Heat Rejection, kW (BTU/min)	1476 (84241)	1305 (74217)	
Maximum Cooling Air Flow Static Restriction, kPa (in. H <sub>2</sub> O)	0.12 (0.5)		
Maximum Fuel Return Line Restriction, kPa (in. Hg)	23.7 (7)		

<b>Optional Remote Radiator Cooling<sup>1</sup></b>	<b>Standby Rating</b>	<b>Prime Rating</b>	<b>Continuous Rating</b>
Set Coolant Capacity, L (US Gal.)		193 (51)	
Max Flow Rate @ Max Friction Head, Jacket Water Circuit, L/min (US Gal/min)		1438 (380)	
Max Flow Rate @ Max Friction Head, Aftercooler Circuit, L/min (US Gal/min)		413 (109)	
Heat Rejected, Jacket Water Circuit, kWm (BTU/min)	620 (35215)	535 (30380)	
Heat Rejected, Aftercooler Circuit, kWm (BTU/min)	545 (30785)	465 (26295)	
Heat Rejected, Fuel Circuit, kWm (BTU/min)		35 (2000)	
Total Heat Radiated to Room, kWm (BTU/min)	286 (16279)	270 (15368)	
Maximum Friction Head, Jacket Water Circuit, kPa (psi)		48 (7)	
Maximum Friction Head, Aftercooler Circuit, kPa (psi)		35 (5)	
Maximum Static Head, Jacket Water Circuit, m (ft)		18.3 (60)	
Maximum Static Head, Aftercooler Circuit, m (ft)		18.3 (60)	
Maximum Jacket Water Outlet Temp, °C (°F)	104 (220)	100 (212)	
Maximum After-Cooler Inlet Temp, °C (°F)		71 (160)	
Maximum Fuel Flow, L/hr (US gph)		1515 (400)	
Maximum Fuel Return Line Restriction, kPa (in. Hg)		30.5 (9)	

<b>Weights<sup>2</sup></b>	
Unit Dry Weight kgs (lbs.)	16690 (36795)
Unit Wet Weight kgs (lbs.)	17217 (37956)

**Notes:**

- For non-standard remote installations contact your local Cummins Power Generation representative
- Note: Weights represent a set with standard features. See outline drawing for weights of other configurations

<b>Derating Factors</b>	
<b>Standby</b>	Engine power available up to 800 m (2625 ft) at ambient temperatures up to 25°C (77°F). Above these conditions derate at 3% per 305 m (1000 ft) and 6.7% per 10°C (18°F) between 25°C (18°F) and 40°C (104°F), 8.5% per 10°C (18°F) between 40°C (104°F) and 50°C (122)°F and 10.9% per 10°C (18°F) above 50°C (122)°F.

**Ratings Definitions**

<b>Standby:</b>	<b>Prime (Unlimited Running Time):</b>	<b>Base Load (Continuous):</b>
Applicable for supplying emergency power for the duration of normal power interruption. No sustained overload capability is available for this rating. This rating is applicable to installations served by a reliable normal utility source. This rating is only applicable to variable loads with an average load factor of 80 percent of the standby rating for a maximum of 200 hours of operation per year and a maximum of 25 hours per year at 100% of its standby rating. The standby rating is only applicable to emergency and standby applications where the generator set serves as the back up to the normal utility source. No sustained utility parallel operation is permitted with this rating. (Equivalent to Fuel Stop Power in accordance with ISO3046, AS2789, DIN6271 and BS5514). Nominally Rated.	Applicable for supplying power in lieu of commercially purchased power. Prime power is the maximum power available at a variable load for an unlimited number of hours. A 10% overload capability is available for limited time. (Equivalent to Prime Power in accordance with ISO8528 and Overload Power in accordance with ISO3046, AS2789, DIN6271, and BS5514). This rating is not applicable to all generator set models.	Applicable for supplying power continuously to a constant load up to the full output rating for unlimited hours. No sustained overload capability is available for this rating. Consult authorized distributor for rating. (Equivalent to Continuous Power in accordance with ISO8528, ISO3046, AS2789, DIN6271, and BS5514). This rating is not applicable to all generator set models.

## Alternator Data

Voltage	Connection <sup>1</sup>	Temp Rise Degrees C	Duty <sup>2</sup>	Single Phase Factor <sup>3</sup>	Max Surge kVA <sup>4</sup>	Alternator Data Sheet	Feature Code
380-440	Wye, 3 Phase	167/27	S	N/A	4237	ADS-515	B613
380-440	Wye, 3 Phase	150	S	N/A	4585	ADS-516	B615
380-440	Wye, 3 Phase	125	S	N/A	4585	ADS-516	B614
380-440	Wye, 3 Phase	105	S	N/A	5014	ADS-517	B364
400-415	Wye, 3 Phase	150	S	N/A	4459	ADS-515	B616
400-415	Wye, 3 Phase	105	S	N/A	4883	ADS-516	B617
400-415	Wye, 3 Phase	80	S	N/A	5338	ADS-517	B618
3300	Wye, 3 Phase	150	S	N/A	4373	ADS-518	B619
3300	Wye, 3 Phase	125	S	N/A	4373	ADS-518	B470
3300	Wye, 3 Phase	105	S	N/A	4785	ADS-519	B373
3300	Wye, 3 Phase	80	S	N/A	5115	ADS-520	B620
6600	Wye, 3 Phase	125	S	N/A	4662	ADS-522	B621
6600	Wye, 3 Phase	105	S	N/A	4662	ADS-522	B622
6600	Wye, 3 Phase	80	S	N/A	5031	ADS-523	B623
11000	Wye, 3 Phase	125	S	N/A	4527	ADS-522	B476
11000	Wye, 3 Phase	105	S	N/A	4527	ADS-522	B477
11000	Wye, 3 Phase	80	S	N/A	4970	ADS-523	B624

### Notes:

- Limited single phase capability is available from some three phase rated configurations. To obtain single phase rating, multiply the three phase kW rating by the Single Phase Factor<sup>3</sup>. All single phase ratings are at unity power factor.
- Standby (S), Prime (P) and (C) Continuous ratings.
- Factor for the *Single Phase Output from Three Phase Alternator* formula listed below.
- Maximum rated starting kVA that results in a minimum of 90% of rated sustained voltage during starting.

### Formulas for calculating full load currents:

Three Phase Output	Single Phase Output
$\frac{kW \times 1000}{\text{Voltage} \times 1.73 \times 0.8}$	$\frac{kW \times \text{SinglePhaseFactor} \times 1000}{\text{Voltage}}$



See your distributor for more information.

**Cummins Power Generation**  
 1400 73<sup>rd</sup> Avenue N.E.  
 Minneapolis, MN 55432 USA  
 Telephone: +1 (763) 574-5000  
 Fax: +1 (763) 574-5298  
 E-mail: [pgamail@cummins.com](mailto:pgamail@cummins.com)  
 Web: [www.cumminspowergeneration.com](http://www.cumminspowergeneration.com)

**Cummins Power Generation**  
 Manston Park, Columbus Avenue  
 Manston, Ramsgate  
 Kent CT12 5BF, UK  
 Telephone: +44 (0) 1843 255000  
 Fax: +44 (0) 1843 255902  
 E-Mail: [cpg.uk@cummins.com](mailto:cpg.uk@cummins.com)  
 Web: [www.cumminspower.com](http://www.cumminspower.com)

**Cummins Power Generation**  
 8 Tanjong Penjuru  
 Singapore 609019  
 Telephone: +65 265-0155  
 Telefax: +65 264-0664 or 265-6909  
 E-Mail: [mktg@sing.cummins.com](mailto:mktg@sing.cummins.com)

Cummins and PowerCommand are registered trademarks of Cummins, Inc. AmpSentry is a trademark of Cummins, Inc.

**Important:** 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.