

# Onan Marine QD **65/80 kW**

# **Product Dimensions and Weight**

		Ho	used	Unhoused					
<b>Overall Length</b>	mm (in)	2146	(84.5)	2142	(84.3)				
<b>Overall Width</b>	mm (in)	840	(33.1)	822	(32.4)				
<b>Overall Height</b>	mm (in)	1039	(40.9)	994	(39.1)				
Weight	kg (lb)	1434	(3161)	1320	(2910)				
Dimensions and weight may vary based on selected configuration.									



## **Power Ratings**

<b>Model kWe kVa* Speed</b> Hz RPM	peed	eed Phase	Voltage	Amps	Fuel Consumption (L/hr (gal/hr)				Emissions		
				1/4 Load	1/2 Load	3/4 Load	Full Load				
K-Coole	d Ratin	gs									
65	65	50	1500	1	110   220 115   230 120   240	590.9   295.5 565.2   282.6 541.7   270.8	5.7 (1.5)	9.9 (2.6)	14.1 (3.7)	18.4 (4.9)	-
65	81.25	50	1500	3	110   190 115   200 120   208 110   220 115   230 120   240 220   380 230   400 240   416 255   440	246.9 234.5 225.5 213.2 204.0 195.5 123.4 117.3 112.8 106.6	5.7 (1.5)	9.9 (2.6)	14.1 (3.7)	18.4 (4.9)	_
80	80	50	1500	1	110   220 115   230 120   240	727.3   363.6 695.7   347.8 666.7   333.3	6.7 (1.8)	11.8 (3.1)	16.9 (4.5)	22.4 (5.9)	-
80	100	50	1500	3	110   190 115   200 120   208 110   220 115   230 120   240 220   380 230   400 240   416	303.9 288.7 277.6 262.4 251.0 240.6 151.9 144.3 138.8	6.7 (1.8)	11.8 (3.1)	16.9 (4.5)	22.4 (5.9)	_
	<b>X-Coole</b> 65 65	<b>X-Cooled Ratin</b> 65 65 65 81.25 80 80	K-Coole Ratify   65 65 50   65 81.25 50   80 80 50	Hz RPM   65 65 50 1500   65 81.25 50 1500   80 80 50 1500	Hz RPM   65 65 50 1500 1   65 81.25 50 1500 3   80 80 50 1500 1	Hz RPM   65 65 50 1500 1 110 220   65 81.25 50 1500 3 110 190   65 81.25 50 1500 3 111 120   65 81.25 50 1500 3 111 120   65 81.25 50 1500 3 111 120   65 81.25 50 1500 3 110 120   65 81.25 50 1500 3 110 120   10 200 120 240 120 240   80 80 50 1500 1 110 220   80 100 50 1500 3 110 120   80 100 50 1500 3 110 120   110 220 115 230 120 240   120 240 120 240 120 240   120 240 220 15 </td <td>Hz   RPM     65   65   50   1500   1   110   220   590.9   295.5     65   65   50   1500   1   110   220   565.2   282.6     65   81.25   50   1500   3   110   190   246.5     120   240   25.5   110   220   234.5     120   208   225.5   110   220   282.6     110   220   283   226.5   110   220   283   225.5     110   220   280   123.2   115   230   204.0     120   240   195.5   220   380   123.4     230   400   117.3   240   416   112.8     255   440   106.6   106.6   106.6   106.6   106.7   33.3     80   100   50   1500   3   110   190   303.9     115   <t< td=""><td>Hz   RPM   1/4 Load     65   65   50   1500   1   110   220 565.2   282.6 220   5.7 (1.5)     65   81.25   50   1500   3   110   190 240   234.5 541.7   270.8     65   81.25   50   1500   3   110   190 240   244.5 5120   5.7 (1.5)     115   230   204.0   125.5   110   220   213.2     115   230   204.0   120.2   213.2   115.2   220.380   123.4     220   380   123.4   230.400   117.3   240.416   112.8     255   440   106.6   120.2   227.3   363.6   6.7 (1.8)     80   80   50   1500   1   110   220   282.7     80   100   50   1500   3   110   190   303.9   6.7 (1.8)     115   230   695.7   347.8   120   240   666.7<td>HzRPM<math>1/4</math> Load<math>1/2</math> Load65655015001110220 565.2590.9295.5 282.65.7 (1.5)9.9 (2.6) 9.9 (2.6)6581.255015003110190 115240.9 2005.7 (1.5)9.9 (2.6) 9.9 (2.6)6581.255015003110190 200234.5 120202 201225.7 (1.5)9.9 (2.6) 9.9 (2.6)6581.255015003110190 200234.5 120204.0 1202013.2 1155.7 (1.5)9.9 (2.6) 9.9 (2.6)68805015001110220 220213.2 115220 230204.0 12011.8 (3.1) 115801005015001110220 202727.3363.6 33.36.7 (1.8)11.8 (3.1) 115801005015003110190 120208.7 201347.8 1206.7 (1.8)11.8 (3.1) 115115200288.7 120200262.4 115115200 203265.0 20111.8 (3.1) 120115200262.4 115115200 203262.4 11511.8 (3.1) 200115200 203261.4 201115230251.0 201240240.6 220220 202262.4 11511.8 (3.1) 200240.6 220262.4 220116230251.0 230400144.3&lt;</td><td><math display="block"> \begin{array}{c c c c c c c c c c c c c c c c c c c </math></td><td>Hz   RPM   1/4 Load   1/2 Load   3/4 Load   Full Load     65   65   50   1500   1   110   220 240   590.9   295.5 565.2   5.7 (1.5)   9.9 (2.6)   14.1 (3.7)   18.4 (4.9)     65   81.25   50   1500   3   110   190   246.9   5.7 (1.5)   9.9 (2.6)   14.1 (3.7)   18.4 (4.9)     65   81.25   50   1500   3   110   190   246.9   5.7 (1.5)   9.9 (2.6)   14.1 (3.7)   18.4 (4.9)     115   200   234.5   120   208   225.5   110   220   213.2     110   220   213.2   152   200   380   123.4   230   400   117.3   204.0   120   240   145.5   220   380   123.4   230   400   117.3   204.0   112.8   204.0   112.8   204.0   147.8   204.0   147.8   204.0   147.8   147.8   147.8   147.4</td></td></t<></td>	Hz   RPM     65   65   50   1500   1   110   220   590.9   295.5     65   65   50   1500   1   110   220   565.2   282.6     65   81.25   50   1500   3   110   190   246.5     120   240   25.5   110   220   234.5     120   208   225.5   110   220   282.6     110   220   283   226.5   110   220   283   225.5     110   220   280   123.2   115   230   204.0     120   240   195.5   220   380   123.4     230   400   117.3   240   416   112.8     255   440   106.6   106.6   106.6   106.6   106.7   33.3     80   100   50   1500   3   110   190   303.9     115 <t< td=""><td>Hz   RPM   1/4 Load     65   65   50   1500   1   110   220 565.2   282.6 220   5.7 (1.5)     65   81.25   50   1500   3   110   190 240   234.5 541.7   270.8     65   81.25   50   1500   3   110   190 240   244.5 5120   5.7 (1.5)     115   230   204.0   125.5   110   220   213.2     115   230   204.0   120.2   213.2   115.2   220.380   123.4     220   380   123.4   230.400   117.3   240.416   112.8     255   440   106.6   120.2   227.3   363.6   6.7 (1.8)     80   80   50   1500   1   110   220   282.7     80   100   50   1500   3   110   190   303.9   6.7 (1.8)     115   230   695.7   347.8   120   240   666.7<td>HzRPM<math>1/4</math> Load<math>1/2</math> Load65655015001110220 565.2590.9295.5 282.65.7 (1.5)9.9 (2.6) 9.9 (2.6)6581.255015003110190 115240.9 2005.7 (1.5)9.9 (2.6) 9.9 (2.6)6581.255015003110190 200234.5 120202 201225.7 (1.5)9.9 (2.6) 9.9 (2.6)6581.255015003110190 200234.5 120204.0 1202013.2 1155.7 (1.5)9.9 (2.6) 9.9 (2.6)68805015001110220 220213.2 115220 230204.0 12011.8 (3.1) 115801005015001110220 202727.3363.6 33.36.7 (1.8)11.8 (3.1) 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204.0   147.8   204.0   147.8   204.0   147.8   147.8   147.8   147.4</td></td></t<>	Hz   RPM   1/4 Load     65   65   50   1500   1   110   220 565.2   282.6 220   5.7 (1.5)     65   81.25   50   1500   3   110   190 240   234.5 541.7   270.8     65   81.25   50   1500   3   110   190 240   244.5 5120   5.7 (1.5)     115   230   204.0   125.5   110   220   213.2     115   230   204.0   120.2   213.2   115.2   220.380   123.4     220   380   123.4   230.400   117.3   240.416   112.8     255   440   106.6   120.2   227.3   363.6   6.7 (1.8)     80   80   50   1500   1   110   220   282.7     80   100   50   1500   3   110   190   303.9   6.7 (1.8)     115   230   695.7   347.8   120   240   666.7 <td>HzRPM<math>1/4</math> Load<math>1/2</math> Load65655015001110220 565.2590.9295.5 282.65.7 (1.5)9.9 (2.6) 9.9 (2.6)6581.255015003110190 115240.9 2005.7 (1.5)9.9 (2.6) 9.9 (2.6)6581.255015003110190 200234.5 120202 201225.7 (1.5)9.9 (2.6) 9.9 (2.6)6581.255015003110190 200234.5 120204.0 1202013.2 1155.7 (1.5)9.9 (2.6) 9.9 (2.6)68805015001110220 220213.2 115220 230204.0 12011.8 (3.1) 115801005015001110220 202727.3363.6 33.36.7 (1.8)11.8 (3.1) 115801005015003110190 120208.7 201347.8 1206.7 (1.8)11.8 (3.1) 115115200288.7 120200262.4 115115200 203265.0 20111.8 (3.1) 120115200262.4 115115200 203262.4 11511.8 (3.1) 200115200 203261.4 201115230251.0 201240240.6 220220 202262.4 11511.8 (3.1) 200240.6 220262.4 220116230251.0 230400144.3&lt;</td> <td><math display="block"> \begin{array}{c c c c c c c c c c c c c c c c c c c </math></td> <td>Hz   RPM   1/4 Load   1/2 Load   3/4 Load   Full Load     65   65   50   1500   1   110   220 240   590.9   295.5 565.2   5.7 (1.5)   9.9 (2.6)   14.1 (3.7)   18.4 (4.9)     65   81.25   50   1500   3   110   190   246.9   5.7 (1.5)   9.9 (2.6)   14.1 (3.7)   18.4 (4.9)     65   81.25   50   1500   3   110   190   246.9   5.7 (1.5)   9.9 (2.6)   14.1 (3.7)   18.4 (4.9)     115   200   234.5   120   208   225.5   110   220   213.2     110   220   213.2   152   200   380   123.4   230   400   117.3   204.0   120   240   145.5   220   380   123.4   230   400   117.3   204.0   112.8   204.0   112.8   204.0   147.8   204.0   147.8   204.0   147.8   147.8   147.8   147.4</td>	HzRPM $1/4$ Load $1/2$ Load65655015001110220 565.2590.9295.5 282.65.7 (1.5)9.9 (2.6) 9.9 (2.6)6581.255015003110190 115240.9 2005.7 (1.5)9.9 (2.6) 9.9 (2.6)6581.255015003110190 200234.5 120202 201225.7 (1.5)9.9 (2.6) 9.9 (2.6)6581.255015003110190 200234.5 120204.0 1202013.2 1155.7 (1.5)9.9 (2.6) 9.9 (2.6)68805015001110220 220213.2 115220 230204.0 12011.8 (3.1) 115801005015001110220 202727.3363.6 33.36.7 (1.8)11.8 (3.1) 115801005015003110190 120208.7 201347.8 1206.7 (1.8)11.8 (3.1) 115115200288.7 120200262.4 115115200 203265.0 20111.8 (3.1) 120115200262.4 115115200 203262.4 11511.8 (3.1) 200115200 203261.4 201115230251.0 201240240.6 220220 202262.4 11511.8 (3.1) 200240.6 220262.4 220116230251.0 230400144.3<	$ \begin{array}{c c c c c c c c c c c c c c c c c 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Ratings below 130 kW are not subject to IMO emission regulations.

\* Single phase output at 1.0 power output; three phase output at .8 power factor

# Onan Marine QD 65/80 kW

#### **Engine Details**

**Design** – 6-cylinder, 4-cycle, turbocharged, watercooled marine diesel. Displacement of 6.8 L (415 in<sup>3</sup>)

**Fuel System** – Mechanical fuel transfer pump with manual priming lever. Max fuel lift of 3 m (10 ft)

**Cooling System** – Freshwater cooling system with keel cooling connections. Coolant overflow bottle to easily maintain coolant level. Coolant flow rate of 116 L/min (31 gal/min)

**Lubrication System** – Marine grade oil pan with a capacity of 19.4 L (20.5 qt), plus an oil drain valve for ease of maintenance

## **Alternator Details**

**Design** – Onan brushless, revolving field, 4-pole alternator, rigidly coupled to engine and permanently aligned

**Voltage Regulator** – Solid state, circuit board encapsulated for corrosion protection

**Stator** – Skewed stator and 2/3 pitch windings minimize field heating and voltage harmonics; resin-coated for corrosion protection

**Rotor** – Dynamically balanced assembly; directcoupled to engine by flexible drive discs; supported by pre-lubricated, maintenance-free ball bearings

Cooling - Direct drive centrifugal blower

Insulation System – Class H per NEMA MG1-1-1.65 and BS 5000

# **Generator Set Performance**

Frequency Regulation – Isochronous

**Steady-State Frequency Band** – Less than 0.5% per ISO 8528-5

Steady-State Voltage Deviation – Less than +/-1% per ISO 8528-5

**Communications Protocol** – SAE J-1939 CAN data link for monitoring generator set status, as well as engine and alternator diagnostics

# **Standards and Testing**

- National Marine Manufacturers Association (NMMA) and American Boat and Yacht Council (ABYC) member
- This generator set was designed and manufactured in facilities certified to ISO 9001
- Lloyd's Register Type Approval for marine, offshore and industrial applications
- Engine and alternator are Type Approved by Det Norske Veritas (DNV)

# **Warranty Policy**

The Cummins express written limited warranty covers virtually everything except routine maintenance for the first two years you own your marine generator set, and covers parts and labor on major power train and generator set parts during the third through fifth years. Optional extended warranty available.



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