

# Onan Marine QD 40-65 kW



## Product Dimensions and Weight MDDCW, MDDCU

		Housed		Unhoused	
<b>Overall Length</b>	mm (in)	1738	(68.4)	1734	(68.3)
<b>Overall Width</b>	mm (in)	840	(33.1)	822	(32.4)
<b>Overall Height</b>	mm (in)	1039	(40.9)	994	(39.1)
<b>Weight</b>	kg (lb)	1098	(2420)	998	(2200)

## MDDCY, MDDCS, MDDCT

		Housed		Unhoused	
<b>Overall Length</b>	mm (in)	1738	(68.4)	1734	(68.3)
<b>Overall Width</b>	mm (in)	840	(33.1)	822	(32.4)
<b>Overall Height</b>	mm (in)	1039	(40.9)	994	(39.1)
<b>Weight</b>	kg (lb)	1167	(2572)	1067	(2352)

Dimensions and weight may vary based on selected configuration.



## Power Ratings - 40/50 kW

Model	kWe	kVa*	Speed		Phase	Voltage	Amps	Fuel Consumption (L/hr (gal/hr))				Emissions
			Hz	RPM				1/4 Load	1/2 Load	3/4 Load	Full Load	
<b>KC- and HX-Cooled Ratings</b>												
MDDCW	40	40	50	1500	1	110   220 115   230 120   240	363.6   181.8 347.8   173.9 333.3   166.7	3.9 (1.0)	6.4 (1.7)	9.0 (2.4)	11.5 (3.0)	-
MDDCW	40	50	50	1500	3	110   190 115   200 120   208 110   220 115   230 120   240 220   380 230   400 240   416 255   440	151.9 144.3 138.8 131.2 125.5 120.3 76.0 72.2 69.4 65.6	3.9 (1.0)	6.4 (1.7)	9.0 (2.4)	11.5 (3.0)	-
MDDCU	40	40	60	1800	1	120   240	333.3   166.7	4.5 (1.2)	7.2 (1.9)	9.9 (2.6)	12.7 (3.4)	EPA Tier 3
MDDCU	40	50	60	1800	3	120   208 127   220 120   240 139   240 240   416 255   440 277   480	138.8 131.2 120.3 120.3 69.4 65.6 60.1	4.5 (1.2)	7.2 (1.9)	9.9 (2.6)	12.7 (3.4)	EPA Tier 3
MDDCY	50	50	50	1500	1	110   220 115   230 120   240	454.5   227.3 434.8   217.4 416.7   208.3	4.6 (1.2)	7.6 (2.0)	10.8 (2.9)	14.1 (3.7)	-
MDDCY	50	62.5	50	1500	3	110   190 115   200 120   208 110   220 115   230 120   240 220   380 230   400 240   416 255   440	189.9 180.4 173.5 164.0 156.9 150.4 95.0 90.2 86.7 82.0	4.6 (1.2)	7.6 (2.0)	10.8 (2.9)	14.1 (3.7)	-

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

TECHNOLOGY THAT TRANSFORMS

## Power Ratings - 55/65 kW

Model	kWe	kVa*	Speed		Phase	Voltage		Amps	Fuel Consumption (L/hr (gal/hr))				Emissions
			Hz	RPM		1/4 Load	1/2 Load		3/4 Load	Full Load			
<b>KC- and HX-Cooled Ratings</b>													
MDDCS	55	55	60	1800	1	120   240		458.3   229.2	5.5 (1.4)	9.3 (2.4)	13.0 (3.4)	16.8 (4.4)	EPA Tier 3
MDDCS	55	68.7	60	1800	3	120   208		190.8	5.5 (1.4)	9.3 (2.4)	13.0 (3.4)	16.8 (4.4)	EPA Tier 3
						127   220		180.4					
						120   240		165.4					
						139   240		165.4					
						240   416		95.4					
						255   440		90.2					
277   480		82.7											
MDDCT	65	65	60	1800	1	120   240		541.7   270.8	5.8 (1.5)	10.7 (2.8)	14.3 (4.0)	19.7 (5.2)	EPA Tier 3
MDDCT	65	81.25	60	1800	3	120   208		225.5	5.8 (1.5)	10.7 (2.8)	14.3 (4.0)	19.7 (5.2)	EPA Tier 3
						127   220		213.2					
						120   240		195.5					
						139   240		195.5					
						240   416		112.8					
						255   440		106.6					
277   480		97.7											

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

### Engine Details

**Design** – 4-cylinder, 4-cycle, turbocharged watercooled marine diesel. Displacement of 4.5 L (275 in3)

**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 53 L/min (14 gal/min) for 50 Hz ratings and 94 L/min (25 gal/min) for 60 Hz ratings

**Lubrication System** – Marine grade oil pan with a capacity of 12.6 L (13.3 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; direct-coupled 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

### 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.



Cummins Inc.  
4500 Leeds Avenue – Suite 301  
Charleston, SC 29405-8539  
U.S.A.

Internet: [marine.cummins.com](http://marine.cummins.com)

Bulletin 5410993  
©2018 Cummins Inc.

Cummins is a pioneer in product improvement. Thus specifications may change without notice. Illustrations may include optional equipment.