



Onan
Marine QD

40-65 kW



Product Dimensions and Weight

MDDCW, MDDCU

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

MDDCY, MDDCS, MDDCT

		Housed		Unhoused	
Overall Length	mm (in)	1738	(68.4)	1734	(68.3)
Overall Width	mm (in)	840	(33.1)	822	(32.4)
Overall Height	mm (in)	1039	(40.9)	994	(39.1)
Weight	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	
KC- and HX-Cooled Ratings														
MDDCW	40	40	50	1500	1	110	220	363.6	181.8	3.9 (1.0)	6.4 (1.7)	9.0 (2.4)	11.5 (3.0)	–
						115	230	347.8	173.9					
						120	240	333.3	166.7					
MDDCW	40	50	50	1500	3	110	190	151.9	3.9 (1.0)	6.4 (1.7)	9.0 (2.4)	11.5 (3.0)	–	
						115	200	144.3						
						120	208	138.8						
						110	220	131.2						
						115	230	125.5						
						120	240	120.3						
						220	380	76.0						
						230	400	72.2						
						240	416	69.4						
						255	440	65.6						
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	138.8	4.5 (1.2)	7.2 (1.9)	9.9 (2.6)	12.7 (3.4)	EPA Tier 3	
						127	220	131.2						
						120	240	120.3						
						139	240	120.3						
						240	416	69.4						
						255	440	65.6						
						277	480	60.1						
MDDCY	50	50	50	1500	1	110	220	454.5	227.3	4.6 (1.2)	7.6 (2.0)	10.8 (2.9)	14.1 (3.7)	–
						115	230	434.8	217.4					
						120	240	416.7	208.3					
MDDCY	50	62.5	50	1500	3	110	190	189.9	4.6 (1.2)	7.6 (2.0)	10.8 (2.9)	14.1 (3.7)	–	
						115	200	180.4						
						120	208	173.5						
						110	220	164.0						
						115	230	156.9						
						120	240	150.4						
						220	380	95.0						
						230	400	90.2						
						240	416	86.7						
						255	440	82.0						

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

Manufacturer reserves the right to make change in the model, technical specifications, color, equipment, accessories and images without prior notice. (20.02.2018)




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		
KC- and HX-Cooled Ratings													
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.

