

ONAN® MARINE QD 17/21.5 kW



PRODUCT DIMENSIONS AND WEIGHT

	Housed	Unhoused
Overall Length	1127 mm (44.4 in)	
Overall Width	602 mm (23.7 in)	
Overall Height	698 mm (27.5 in)	672 mm (26.5 in)
Weight	422 kg (930 lb)	395 kg (870 lb)

Dimensions and weight may vary based on selected configuration.



POWER RATINGS

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												
MDKDP	17.0	17.0	60	1800	1	120 240	141.7 70.8	2.6 (0.7)	3.6 (1.0)	4.8 (1.3)	6.1 (1.6)	EPA Tier 3
MDKDP	17.0	21.2	60	1800	3	120 208	59.0	2.6 (0.7)	3.6 (1.0)	4.8 (1.3)	6.1 (1.6)	EPA Tier 3
MDKDR	21.5	21.5	60	1800	1	120 240	179 89.6	2.9 (0.8)	4.1 (1.1)	5.7 (1.5)	8.2 (2.2)	EPA Tier 3
MDKDR	21.5	26.9	60	1800	3	120 208	74.6	2.9 (0.8)	4.1 (1.1)	5.7 (1.5)	8.2 (2.2)	EPA Tier 3

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-cycle, water-cooled Kubota marine diesel. Displacement of 2.0 L on MDKDP 50 Hz ratings and 2.4 L on remaining ratings.

Fuel System – Electric fuel transfer pump for priming and lift capability. Max fuel lift of 1.22 m (4 ft)

Cooling System – Freshwater engine cooling available with keel cooling or a raw water heat exchanger with expansion tank and coolant recovery system. Coolant overflow bottle to easily maintain coolant level. Coolant capacity of 7.6 L (8 qt). Coolant flow rate of 37.9 L/min (10.0 gal/min) for 50 Hz ratings and 53.0 L/min (14.0 gal/min) for 60 Hz ratings.

Lubrication System – Marine grade oil pan with a capacity of 7.6 L (8 qt), plus an oil drain and hose extension 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

Random Frequency Variation – Will not exceed +/-0.5% of its mean value for constant loads from no load to full load.

Voltage Regulation – No load to rated load +/-1%

Communications Protocol – SAE J1939 CAN data link for monitoring generator set status as well as engine and alternator diagnostics. NMEA 2000 Converter optionally available.

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.

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.

