

Onan Marine QD 40-65 kW



Product Dimensions and Weight MDDCW, MDDCU

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

MDDCY, MDDCS, MDDCT

| | | Housed | | Unhoused | |
|-----------------------|---------|-------------|-------------|-------------|-------------|
| Overall Length | mm (in) | 1738 (68.4) | 1734 (68.3) | 1734 (68.3) | 1734 (68.3) |
| Overall Width | mm (in) | 840 (33.1) | 822 (32.4) | 822 (32.4) | 822 (32.4) |
| Overall Height | mm (in) | 1039 (40.9) | 994 (39.1) | 994 (39.1) | 994 (39.1) |
| Weight | kg (lb) | 1167 (2572) | 1067 (2352) | 1067 (2352) | 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 | 110 220 115 230 120 240 | 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

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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 | 120 208 127 220 120 240 139 240 240 416 255 440 277 480 | 190.8 180.4 165.4 165.4 95.4 90.2 82.7 | 5.5 (1.4) | 9.3 (2.4) | 13.0 (3.4) | 16.8 (4.4) | EPA Tier 3 |
| 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 | 120 208 127 220 120 240 139 240 240 416 255 440 277 480 | 225.5 213.2 195.5 195.5 112.8 106.6 97.7 | 5.8 (1.5) | 10.7 (2.8) | 14.3 (4.0) | 19.7 (5.2) | 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-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.



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