

# KTA50-M2

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## ENGINE SPECIFICATIONS

Configuration	V-16 Cylinder, 4-Stroke Diesel
Bore & Stroke	159 mm x 159 mm (6.25 in x 6.25 in)
Displacement	50 L (3067 in <sup>3</sup> )
Compression Ratio	13.8:1
Rotation	Counterclockwise facing flywheel
Oil Pan Capacity	152 L (40 gallons) Standard Capacity 246 L (65 gallons) High Capacity

## POWER RATINGS

Rating	Continuous Duty*		Heavy Duty*		Medium Duty*
	1600	1800	1800	1900	1950
Rated RPM	1600	1800	1800	1900	1950
kW (BHP)	1044 (1400)	1194 (1600)	1268 (1700)	1343 (1800)	1399 (1875)
Max Torque N-m (ft-lb) RPM	6530 (4816) 1300	6683 (4929) 1400	7235 (5336) 1400	7061 (5208) 1500	7334 (5409) 1500

\*Ratings are IMO emissions compliant.

## STANDARD FEATURES

### Engine Design

Four cycle design for quiet and fuel-efficient operation. Low profile for ease of installation and service. Replaceable wet cylinder liners for longer life and lower rebuild cost. Gallery cooled pistons for maximum durability.

### Cooling System

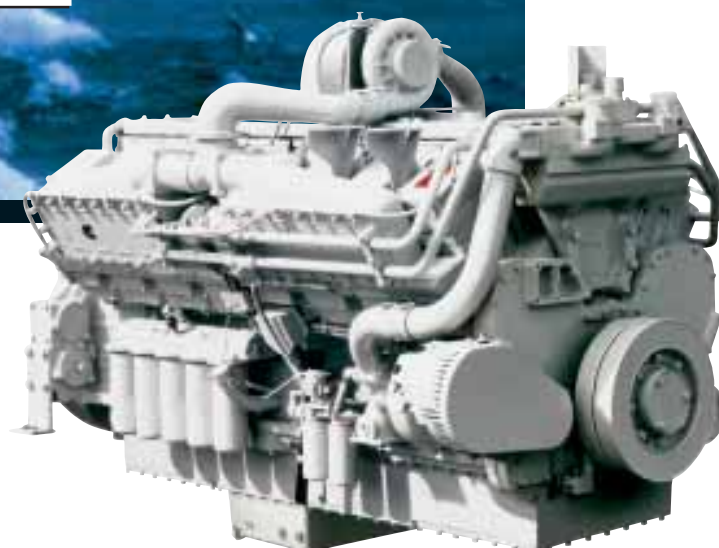
Keel cooled or engine mounted heat exchanger for reduced installation cost and complexity. Spin-on Fleetguard® water treatment filter.

### Air System

Twin Holset turbochargers optimized for marine use. Marine grade air filters with air inlet restriction included. Dry exhaust manifold with water shielding for reduced fuel consumption and improved emissions.

### Fuel System

Dependable Cummins PT® fuel system can be operated mechanically or with CENTRY® electronics for enhanced engine fueling. Step Timing Control (STC) allows for smooth engine acceleration under load. Spin-on Fleetguard filters or optional duplex Fleetguard fuel filters.



### Lubrication System

Marine-grade oil pan (151 L [40 gal]) or high capacity (246 L [65 gal]) available. Fleetguard spin-on filter cartridge for simplified service.

### Electrical System

24-volt standard electrical system with 12-volt available. Standard alarm/switches for low oil and high water temperature for safe operation. Marine grade wiring harness.

### IMO Emissions Certified

Certificates of compliance are available from the U.S. EPA and Lloyd's Register of Shipping.

## AVAILABLE ACCESSORIES

### Front Power Take-Off

**Available Accessory Drives** belt or gear driven

**Centinel Oil Management System** reduces oil and filter disposal costs

**Eliminator System** replaces all lube oil cartridges

**Prelub® Starter** protects engine against damage from dry starts and extends engine life

**Classification Society Approvals:** consult your local Cummins professional for a complete listing of current marine agency approvals for this engine

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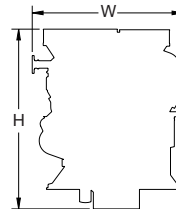
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## ENGINE DIMENSIONS

	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
Keel Cooled	2603.4	102.5	1488.6	58.61	1930.6	76.01	4858	10700
Heat Exchanger	2618	103.07	1466.2	57.73	1930.6	76.01	5178	11405



## PERFORMANCE DATA

Rating	Continuous Duty 1400 bhp*				Continuous Duty 1600 bhp*				Heavy Duty 1700 bhp*			
rpm	1600	1400	1200	1000	1800	1600	1400	1200	1800	1600	1400	1200
kW	1044	700	441	255	1194	839	562	354	1268	923	644	424
g/kW-hr	204	210	211	212	207	205	210	217	203	201	196	191
L/hr	253.9	175.2	111	64.5	295.2	205.3	140.4	91.6	307.5	221.5	150.2	96.6
bhp	1400	938	591	342	1600	1124	753	474	1700	1237	863	569
lb/hp-hr	.336	.346	.347	.348	.341	.338	.345	.357	.334	.331	.322	.314
gal/hr	67.1	46.3	29.3	17.0	78	54.2	37.1	24.2	81.2	58.5	39.7	25.5

Rating	Heavy Duty 1800 bhp*				Medium Duty 1875 bhp*			
rpm	1900	1700	1500	1300	1950	1700	1500	1300
kW	1343	994	709	482	1399	966	689	468
g/kW-hr	199	200	195	190	209	199	195	193
L/hr	318.1	236.6	165.1	108.9	348	229	160.1	107.5
bhp	1800	1333	951	646	1875	1295	923	627
lb/hp-hr	.327	.328	.321	.312	.343	.327	.321	.317
gal/hr	84	62.5	43.6	28.8	91.9	60.5	42.3	28.4

\*Ratings are IMO emissions compliant.

Above data represents performance along a 3.0 fixed pitch propeller curve. Fuel consumption has a tolerance of + 5% and is based on fuel of 35 ° API gravity at 16 °C (60 °F) having an LHV of 42, 780 KJ/KG (18,390 BTU/lb) when used at 29 °C (85 °F) and weighing 838.9 g/liter (7.001 lb/U.S. gal) with LTA. Observed power output is certified within ± 3% of rated power. Cummins has always been a pioneer in product improvement. Thus specifications may change without notice. Consult your local Cummins professional for further information.

### Rating Definitions

Ratings are based on ISO 8665 conditions of 100kPa(29.612 in Hg) and 25 °C (77 °F) and 30% relative humidity. Propeller shaft power represents the net power available after typical gear losses and is 97% of rated power. Power rated in accordance with IMCI procedures.

### Medium Continuous Duty

Intended for continuous use in variable load applications where full power is limited to six hours out of every twelve hours of operation. Also, reduced power operations must be at or below 200 rpm of the maximum rated rpm. This rating is an ISO 3046 fuel stop power rating and is for applications that operate less than 3,000 hours per year.

### Continuous Duty

Intended for continuous use in applications requiring uninterrupted service at full power. This rating is an ISO 3046 standard power rating.

### Heavy Duty

Intended for continuous use in variable load applications where full power is limited to eight hours out of every ten hours of operation. Also, reduced power operations must be at or below 200 rpm of the maximum rated rpm. This rating is an ISO 3046 fuel stop power rating and is for applications that operate less than 5,000 hours per year.



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