

Rating definition - High-speed Propulsion (diesel) engines

Rating EMEAR area	Overload operation	Required condition for warranty (*1)			Recommend Operating hour per year	Typical Application (*6) (REFERENCE)	Rating original description
		Load/operating hour (*2)					
		Allowable average load factor	Allowable average speed (*5)	Allowable continuous operation with over 90% load			
Unrestricted Continuous Duty (UCD)	Not possible	100% or lower	100% or lower	Unlimited	Unlimited	Fishing Boats, Cargo Boats Pusher Boats	D-rating Heavy Duty (HD)
Heavy Duty (HD)	Not possible	83% or lower	94% or lower	Up to 8 hr per 24 hr	(5000-7000 hr)	Tug Boats, Working Boats Passenger Boats, Ferry Boats	C-rating Medium Duty (MD)
Medium Duty (MD)	Not possible	75% or lower	91% or lower	Up to 1 hr per 6 hr	(3000-5000 hr)	Pleasure Boats, Yachts Patrol Boats, Tug Boats Fire Fighting Boats	B-rating Light Duty (LD)

(*1) This condition constitutes a part of required conditions for warranty. Atmospheric condition as per ISO 15550:2002 (JIS B 8003:2005) (Barometric pressure: 100kPa, ambient temperature: 298K, Relative humidity: 30%).

(*2) Average load factor shall be calculated as per the formula in ISO 8528:2005 'Average power output (Ppp)'.

(*3) Refer to operation manual for more information regarding inspection and maintenance including items and descriptions.

(*4) Completion of Top overhaul is not a condition to receive warranty. However, it is desirable to inspect the engine condition.

(*5) This applies to FPP (Fixed Pitch Propellers). For CPP (Controllable Pitch Propeller), allowable average load factor shall be as per the required conditions for warranty of the average load factor.

(*6) 'Typical application' is only for reference. The selection of rating be due to "Required condition for warranty".

★ This document is based on condition of "T0102-0002E" (for SB-, SA- & SR models).

★ Use technical data based on the original rating name.

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