## **IRM 311 A** Technical data and Installation dimensions

	REDUCTION RATIOS	SAE HORSEPOWER (KILOWATTS)								
		CONTINUOUS		MED	MEDIUM		LIGHT		PLEASURE	
		1600 RPM	2100 RPM	1900 RPM	2300 RPM	2100 RPM	2500 RPM	2100 RPM	2500 RPM	
	1.092, 1.501 1.759, 2.033	258 (193)	339 (253)	364 (272)	440 (329)	506 (377)	602 (449)	575 (429)	684 (511)	
	2.492	237 (176)	311 (232)	328 (245)	397 (296)	466 (348)	555 (414)	518 (386)	616 (460)	

## POWER/SPEED RATIOS (KW/RPM)

1.092- 1.501	0.1204	0.1429	0.1797	0.2042
2.492	0.1103	0.1287	0.1655	0.1838

Max./Min. engine speed:

3000/400 rpm

approx. oil capacity: 9 liter (9.5 qt)

approx. dry weight\*: 139 kg (306 lbs)

Max. limit for continuous duty:

2600 rpm

 $H_2$ 

\* without bell housing

Metric Horsepower = SAE Horsepower x 1.014 L<sub>2</sub>

Standard input rotation is for engines which rotate in an anticlockwise direction when looking on the flywheel end.

						$B_1 \rightarrow B_2 \rightarrow B_2$						
Dimensions	A	B <sub>1</sub>	B <sub>2</sub>	H <sub>1</sub>	H <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub> (SAE 1)	L <sub>3</sub> (SAE 2)	OY.	
mm	36.5	255	255	184.5	305.4	528.4	345.6	85.1	80	76	7°	
inches	1.44	10.04	10.04	7.26	12.02	20.80	13.61	3.35	3.15	2.99	7°	

## TORSIONAL RESPONSIBILITY:

The responsibility for ensuring torsional compatibility rests with the assembler of the drive and driven equipment.

ZF can accept no liability for gearbox noise caused by vibrations or for damage to the gearbox, the flexible coupling or to other parts of the drive unit caused by this kind of vibration. Contact ZF for further information and assistance.

Ratings apply to marine transmissions currently in production and are subject to change without prior notice

## SAFE OPERATION NOTICE:

The safe operation of ZF products depends upon adherence to technical data presented in our brochures. Safe operation also depends upon proper installation, operation and routine maintenance and inspection under prevailing conditions and recommendations set forth by ZF. Damage to transmissions caused by repeated or continuous emergency manoeuvres or abnormal operation is not covered under warranty. It is the responsibility of users and not ZF to provide and install guards and safety devices which may be required by recognized safety standards of the respective country (e.g. for U.S.A. - the Occupational Safety Act of 1970 and its subsequent provisions).

Subject to technical change without notice. For installation purposes, please request installation drawings.

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