

INDAR**DFIG W**

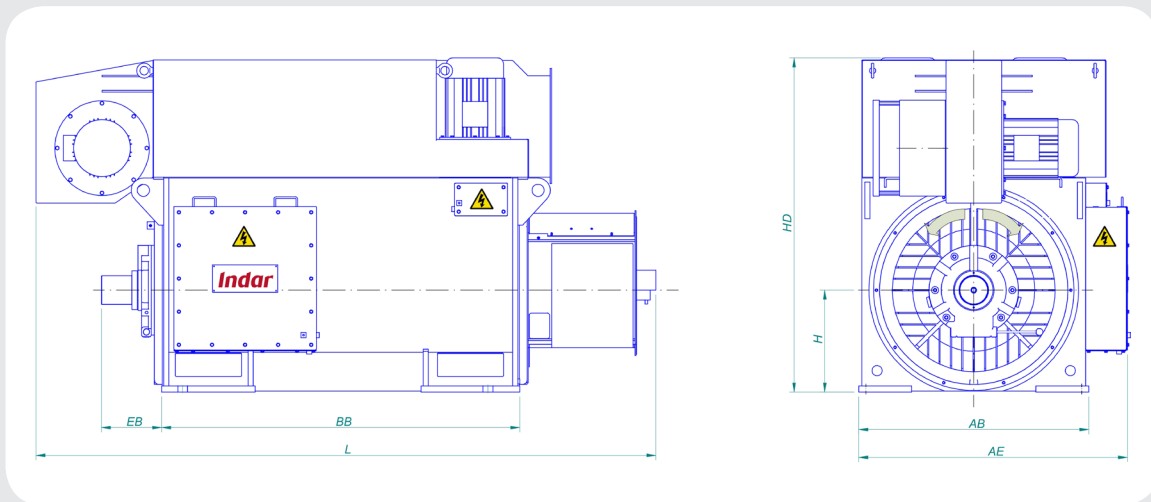
Double Feed Induction Generator

High Speed

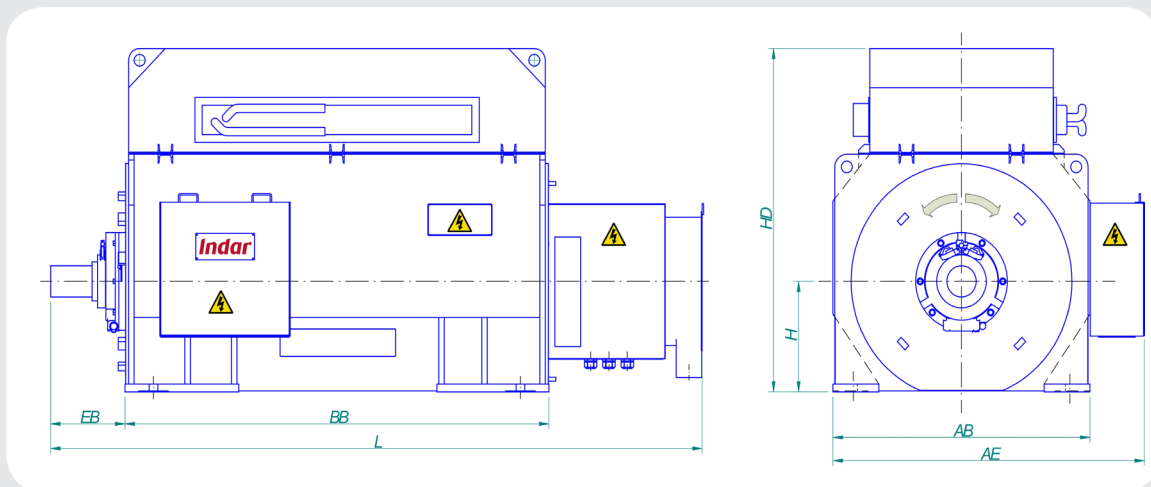
**HS-3000/1100-LV-AC****HS-3000/1100-LV-WC**

Main Data			
WTGS Power	[kW]	3000	
Rated speed (range)	[rpm]	1100 (750 - 1320)	
Available rated speed (*)	[rpm]	1050 -1200	
Rated frequency	[Hz]	50 ± 5%	
Stator Voltage	[V]	690 ± 10%	
Power factor		0.95 cap - 0.95 ind	
Locked rotor voltage	[V]	1815	
Efficiency	[%]	96,5	97
Duty cycle		S1	
Thermal class		H	
Temperature rise		F	
Cooling Data			
Cooling system		IC-666	IC-81W
Coolant		Air (inside nacelle)	Water-Glycol 50%
Coolant temperature	[°C]	≤ 50	≤ 55
Coolant flow-rate	[l/min]	-	170
Coolant pressure-drop	[bar]	-	≤ 1.0
Ambient Conditions			
Temperature range	[°C]	-30 / +50	
Corrosion protection		C3H (C4H or C5M on request)	
Offshore availability		Yes	Yes
Mechanical Data			
Mounting arrangement		IM1001 (tilt angle ≤ 6°)	
Protection degree		IP54 generator / IP23 slip-rings	
Weight	[Kg]	10800	10300
Dimension AB	[mm]	1300	1300
Dimension AE	[mm]	1700	1700
Dimension EB	[mm]	425	425
Dimension BB	[mm]	2100	2150
Dimension L	[mm]	3250	3300
Dimension H	[mm]	560	560
Dimension HD	[mm]	2100	1750

Air - Air Cooled



Air - Water Cooled



* INDAR design shall be used as a guideline. This design will be adjusted to customer requirements in terms of accurate output power, rated speed, voltage, frequency, cooling system or constructional details to perfectly match the integral solution.

The design features are fit for 1,5 MW and 1100 rpm. It is possible to adapt it to the available speed range; this could require dimensions and weight modifications.