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APPENDIX

Table 4. Appendix for simulation broken bar

Symbol	Definition	Value	
Pn	output power	1.1	kW
Vs	stator voltage per phase	220	V
Fs	stator frequency	50	Hz
p	poles pair number	1	
Rs	stator resistance	7.58	Ω
Rr	rotor resistance	6.3	Ω
Rb	rotor bar resistance	0.15	m Ω
Re	resistance of end ring segment	0.15	m Ω
Lb	rotor bar inductance	0.1	μ H
Le	inductance of end ring	0.1	μ H
Lsf	leakage inductance of stator	0.0265	H
Nr	number of rotor bars	16	
Ns	number of turns per stator phase	160	
J	moment of inertia	0.0054	kg m ²
e	Air-gap mean diameter	2	mm

Table 5. Appendix for simulation short-circuit between coils

Symbol	Definition	Value	
Rs	stator resistance	1.633	Ω
Rr	rotor resistance	0.93	Ω
Lr	inductance of rotor	0.076	H
Ls	inductance of stator	0.142	H
J	moment of inertia	0.0111	kg m ²
Ms	mutual inductance stator nets	0.099	H