Appendix B: Problem specifications

Table B.1: Design specifications for the Stirling engine

Parameter	***Variable***	***Value***	***Units***
Power piston Crank length Connecting rod length	 A_0A AB		 [m] [m]
Displacer Crank length Connecting rod length Displacer volume	 A_0C CD $\forall_{disp}$		 [m] [m] [m^3]
Cylinder bore (diameter)	ϕ		[m]
Phase shift	ψ		[rad]
Compression ratio	CR		
High temperature	T_H		[K]
Low temperature	T_L		[K]
Gas pressure at BDC	P_{min}		[kPa] abs
Atmospheric pressure	P_{ATM}		[kPa] abs
Regenerator dead volume	$\forall_{regen}$		[m^3]
Working fluid			
Flywheel Width Diameter Rim thickness Material	 w D t	 ??? 	 [m] [m] [m]
Coefficient of fluctuation	C_f		
Average rotational velocity	Ω		[rpm]