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Title:	Generalized golden mean and the efficiency of thermal machines
Authors:	Johal, R.S. (/jspui/browse?type=author&value=Johal%2C+R.S.)
Keywords:	golden ratio thermal efficiency thermal machines
Issue Date:	2020
Publisher:	IOP Publishing Ltd
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Abstract:	We investigate generic heat engines and refrigerators operating between two heat reservoirs, for the condition when their efficiencies are equal to each other. It is shown that the corresponding value of efficiency is given as the inverse of the generalized golden mean, ϕ_p , where the parameter p depends on the degrees of irreversibility of both engine and refrigerator. The reversible case ($p = 1$) yields the efficiency in terms of the standard golden mean. We also extend the analysis to a three-heat-reservoir setup
URI:	https://iopscience.iop.org/article/10.1088/1361-6404/aba9f4/meta (https://iopscience.iop.org/article/10.1088/1361-6404/aba9f4/meta) http://hdl.handle.net/123456789/3240 (http://hdl.handle.net/123456789/3240)
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