

Accepted Manuscript

Energy and exergy analysis of R1234yf as drop-in replacement for R134a in a domestic refrigeration system

J.M. Belman-Flores, V.H. Rangel-Hernández, S. Usón, C. Rubio-Maya



PII: S0360-5442(17)30827-7
DOI: 10.1016/j.energy.2017.05.074
Reference: EGY 10882
To appear in: *Energy*
Received Date: 06 February 2017
Revised Date: 02 May 2017
Accepted Date: 11 May 2017

Please cite this article as: J.M. Belman-Flores, V.H. Rangel-Hernández, S. Usón, C. Rubio-Maya, Energy and exergy analysis of R1234yf as drop-in replacement for R134a in a domestic refrigeration system, *Energy* (2017), doi: 10.1016/j.energy.2017.05.074

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- An energy and exergy study of R1234yf as a drop-in replacement for R134a is presented
- A domestic refrigerator was fully instrumented
- The analysis takes into account the variation of charge of R1234yf compared with R134a
- The condenser temperature has a greater effect on the performance of refrigerator
- R1234yf is not a better alternative to R134a under the conditions assumed in this work

Download English Version:

<https://daneshyari.com/en/article/5475682>

Download Persian Version:

<https://daneshyari.com/article/5475682>

[Daneshyari.com](https://daneshyari.com)