EUROMONITOR INTERNATIONAL

MIDEA R290 SERIES PRODUCTS HAVE SOLD MORE THAN 7.65 MILLION SETS[1]

We are committed to bringing R290 everywhere to ensure a sustainable future.

Based on these sales figures, 4 million tons of greenhouse gas (GHG) emissions have been avoided. This is the equivalent of what 4.57 million hectares of Amazonian rainforest can absorb in one year.[2]

Portable Air Conditioners

Split Air Conditioners

Dehumidifiers

Heat Pump Water Heaters

(1) Date source: Sales volume of R290 air conditioners (including OEM brands) measured by Euromonitor International (Shanghai) Ltd. in 2023, based on research conducted in Jul.-Aug. 2024. R290 air conditioners refer to air conditioner using propane refrigerants, including residential and commercial air conditioners.
(2) The data is calculated based on the sales volume of each R290 product sold during the period from January 2018 to June 2024 and the carbon avoided reduction of refrigerant per unit. The carbon reduction of refrigerant per unit = (GWP of refrigerant before R290 replacement x the refrigerant charge of product before replacement - GWP of R290 refrigerant x the charge of R290).

R290

Natural Organic Refrigerant

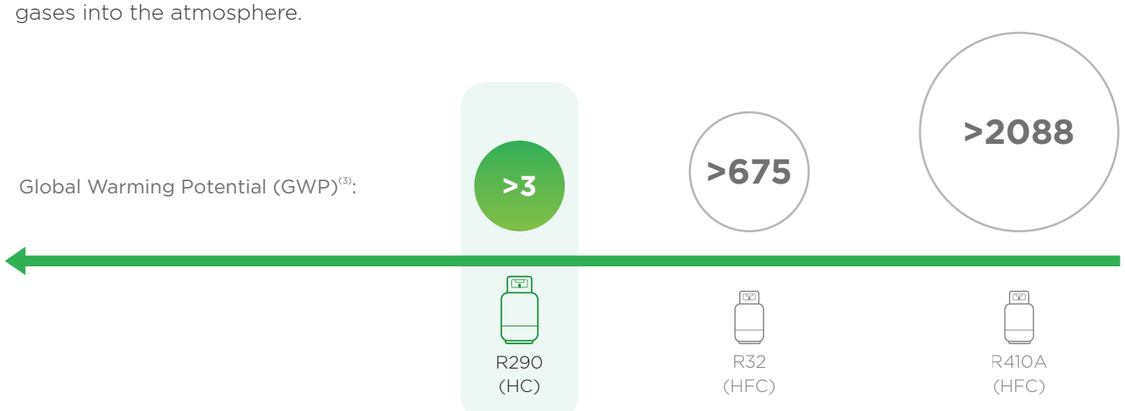
Portable Air Conditioners | Split Air Conditioners | Dehumidifiers | Heat Pump Water Heaters

PRODUCT DECISION PHASE

NATURAL AND LOW GWP

R290 has a low Global Warming Potential (GWP), making it a more sustainable and natural option compared to other refrigerants.

R290 is a natural refrigerant with a low GWP. Its impact on global warming is the lowest among the existing refrigerants due to the fact that as a pure gas it does not contain chemical agents that emit greenhouse gases into the atmosphere.



R290 leads to more efficient machines and is more environmentally friendly than R32, but it is a highly flammable gas (classified as A3) that increases the cost of the air conditioner and heat pump.

DISPOSAL PHASE

F-GAS FREE

Despite a greater awareness of health and safety issues and impact on the environment, society continues to use thousands of synthetic chemicals. These chemicals contaminate ground and surface water as well as soil. There is a clear link to negative effects on human health. However, R290 is a hydrocarbon (HC) refrigerant and not part of the hydrofluorocarbons (HFC) class, meaning that its process of degradation is non-toxic, and does no harm to the environment.

Refrigerant	Molecular Formula	Fluorine %
R22	CHF_2Cl	22%
R410A	R32/R125	26.16%
R32	CH_2F_2	36.49%
R290	C_3H_8	0%

(3) IPCC, 2021: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change[Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. P é an, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, In press, doi:10.1017/9781009157896.

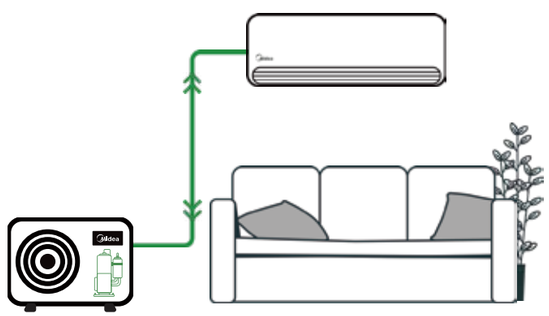
Be A Responsible HVAC user, choose R290

R290 refrigerant, also known as propane, is a pure hydrocarbon that is in a gaseous state at ambient temperature and pressure. R290 is a more sustainable and environmentally friendly alternative to other refrigerants.

USAGE PHASE

ENERGY EFFICIENCY

With excellent thermal properties and lower condensing pressure, R290 AC requires less energy[4] to reach and maintain the desired indoor temperature.



(4) According to tests conducted by Midea's internal laboratory, under the same operating conditions, the energy efficiency of R290 compressors is 3-4% higher than that of R32 and R410A compressors.