

# Tecumseh Outlines Position on Refrigerant Transition

## **Tecumseh does not take any shortcuts, reliability first.**

In follow-up to the Tecumseh's document regarding recommended refrigerants, the Company has continued to test various low GWP options with the objective of determining suitable replacements for R-404A and R-134a.

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Tecumseh Position Includes Approvals for HC and HFO Refrigerants

### Tecumseh Approvals and Recommendations

#### *Remote Condensing Unit Applications*

For commercial refrigeration equipment employing the use of remote condensing units, Tecumseh recommends R-452A. In addition, R-449A/R-448A are authorized as alternatives to refrigerant R-404A. However, due to the higher discharge temperatures prevalent with R-449A/R-448A, compressors used in the above mentioned applications must maintain strict compliance with the requirements outlined in the relevant Tecumseh Policy Bulletins and Application Guidelines. R-452A remains the best alternative solution to replace R-404A in these applications.

#### *Self-Contained / Stand-Alone Equipment*

For self-contained / stand-alone commercial refrigeration equipment with capacities less than ½ HP, Tecumseh continues to support HC refrigerant R-290 (Propane) as the preferred choice. However, because R-290 is classified as an "A3" (highly flammable) refrigerant, charge limitations and safety requirements must be taken into consideration. Typical applications for R-290 include beverage coolers, reach-ins, vending equipment and, commercial refrigerators and freezers.

Tecumseh has also approved R-513A as an acceptable alternative to R-134a and requires that compressors meet the guidelines outlined in the relevant Tecumseh Policy Bulletins and Application Guidelines.

For all self-contained / stand-alone commercial refrigeration equipment applications, Tecumseh recommends R-452A. In addition, R-449A/R-448A are authorized alternatives to refrigerant R-404A. However, due to the higher discharge temperatures prevalent with R-449A/R-448A, compressors used in the above mentioned applications must maintain strict compliance with the requirements outlined in the relevant Tecumseh Policy Bulletins and Application Guidelines. R-452A remains the best alternative solution to replace R-404A in these applications.

### **Tecumseh Continues to Invest in Long-Term Refrigerant Solutions**

Tecumseh is continuing to devote resources in evaluating its products for use with low GWP refrigerants including, the determination of a sustainable long-term solution. We are also continuing to evaluate other interim solutions for R-404A where there are opportunities to deliver higher compressor efficiencies without sacrificing product reliability.

Tecumseh's new TC, AE<sup>2</sup>, AK<sup>2</sup>, and AJ<sup>2</sup> series commercial refrigeration compressors are optimized for use with eco-friendly R-290 (Propane) refrigerant. Some AE<sup>2</sup> models and the new AJ<sup>2</sup> range are optimized for use with HFO refrigerant R-1234yf. The entire range of Tecumseh fractional HP

compressors is compatible with R-134a. All "Next Generation" Tecumseh commercial refrigeration compressors are being designed for use with the best available eco-friendly refrigerants.

Tecumseh has the interest of its customers and the environment in mind by promoting eco-friendly refrigerants that don't have an adverse effect on product reliability. Another key objective is to limit the number of medium term refrigerants that can work across our product range and within commercial refrigeration operating temperatures. In addition, Tecumseh continues to work in conjunction with industry associations AHRI and ASERCOM and affiliated member companies in the evaluation and testing of Low GWP refrigerants.