



PURON ADVANCE™ COILS AND UL FACTORY MARKING REQUIREMENTS UPDATE:

UL vote moves to confirm that indoor coils must be permanently marked with coil refrigerant type when leaving the factory

Carrier Corporation is dedicated to providing timely updates throughout the transition from A1 to A2L refrigerants. Recently, UL announced the results of a vote regarding the clarity of UL standard 60335-2-40, which specifies the requirements manufacturers must meet to certify products for market release. **The vote moves to confirm that the standard requires manufacturers to permanently mark the indoor coil with the refrigerant that the coil is certified with when leaving the factory and that coils are prohibited from being listed with alternative refrigerants from different safety classes per ISO 817.**

REGULATORY LANDSCAPE AND UL REQUIREMENTS

Based on this vote, UL has indicated that they will provide guidance shortly to address any need for additional clarification in the standard. The current proposed clarification to UL 60335-2-40, as of this writing, which was open for public comment, is as follows:

PROPOSAL

7.1DV.3 DR *Modification of Clause 7.1 of the Part 2 by replacing the third dashed item in the "Addition" with the following:*

- refrigerant or refrigerants as designated under ISO 817. The appliance shall be permanently marked at the factory A means shall be provided to permanently to identify the approved refrigerants, installed. Appliances using ~~flammable~~ refrigerants shall not be marked with alternative refrigerants of different safety classification per ISO 817;

22.135DV D2 *Add sub-clause 22.135DV to Clause 22 of the Part 2:*

If an appliance is marked for use with alternative refrigerants of the same safety class, the appliance shall comply with all of the requirements of this standard for each refrigerant. The refrigerants shall be the same safety class in accordance with ISO 817.

As **UL** highlighted in their recently released document,¹ **"Products that do not permanently mark the refrigerant type at the factory are not considered in compliance with the requirements of UL 60335-2-40. Specifically, for A2L refrigerants, this helps ensure that all applicable safety requirements are met before the product leaves the factory."**

WHY IS PERMANENT, FACTORY COIL MARKING IMPORTANT?

Carrier designed our Puron Advance™ coils to comply with these requirements by permanently marking them with the type of refrigerant in which they have been tested. Adhering to standards and regulations such as these support our mission to deliver products with the highest level of safety and reliability and position our customers for success in the market. In addition, permanent, factory coil markings help address the risk of project delays and disruptions for potential noncompliance with UL standards along with the potential for mislabeling, where opportunities for error exist that may result in missing A2L safety components and reliability concerns:

Project Delays and Disruptions

Using a coil that complies with a factory marking standard reduces the potential for noncompliance and disruption caused by failed inspections from building code writers, inspectors, and other safety enforcement entities enforcing these standards.

Reliability

Incorrectly selecting and installing a TXV meant for an R-410A unit on an R-454B unit, or vice versa, may have a negative impact on performance and compressor reliability resulting in less efficiency, early compressor failures, and voiding Carrier's manufacturer's warranty.²

Missing UL Required A2L Safety Components

Failing to properly order and install A2L leak detection system components and any mandated safety labels – or incorrectly using R-454B refrigerant in an R-410A system – may result in a non-compliant system that does not contain the UL mandated A2L safety features.

Carrier continually strives to prepare you for a successful transition from A1 to A2L refrigerants, which is why Carrier Puron Advance evaporator coils and fan coils are factory marked with the refrigerant type and, as an added benefit, also include all the industry required components needed for an A2L refrigerant setup: a refrigerant sensor, wire harnesses, detection control board, factory installed R-454B TXV, and regulatory mandated warning labels.

¹ Marking Guidance for Air Conditioners with Low GWP Refrigerants -

https://collateral-library-production.s3.amazonaws.com/uploads/asset_file/attachment/62830/Infosheet_Marking_guidance_AirCon_LowGWP_AHL24CS1708345_EN.pdf

² Carrier's warranty does not cover, among other items, "failure, damage or repairs due to faulty installation or misapplication" or failures caused by "parts or equipment not supplied or designated by" Carrier. Carrier Warranty, <https://www.carrier.com/residential/en/us/homeowner-resources/warranty/>