



ASERCOM – CONDENSING UNIT CERTIFICATION



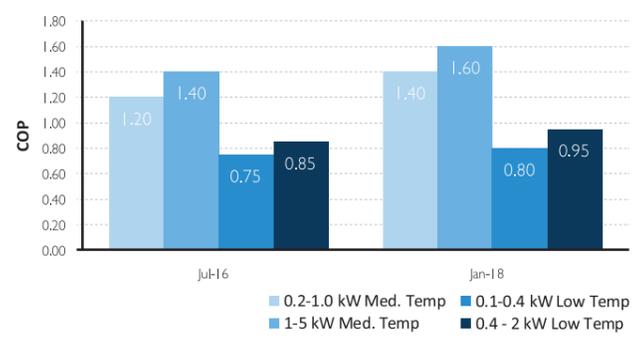
The ASERCOM certification programme for condensing units. A viable response to the EU ecodesign regulation.

The COMMISSION REGULATION (EU) dossier No 11898/14 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for professional storage cabinets, blast cabinets, **CONDENSING UNITS** and process chillers will establish **Minimum Efficiency Performance Standards (MEPS)** for new products being placed onto the EU market as of July 2016.

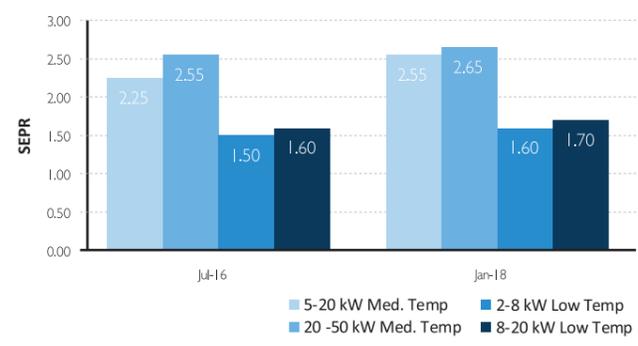
These requirements entail a series of challenges for the manufacturers and importers, just as they do for the EU member states that are legally obligated to implement and verify the measures. Equipment using a refrigerant with a **GWP<150** get a 15% reduction of MEPS in all ranges for July 2016 and 10% as of January 2018. The larger size products SEPR at medium and low temperature with **fixed or staged capacity** are degraded at part-load by a coefficient of 0.25. Rating has to be done according to **Standard EN13215** and considering the temperature profile of Strasbourg.

The related **Product Information Requirements** include instruction manuals for installers and end-users, and free access websites of manufacturers, their authorised representatives and importers. The technical documentation has to follow specific requirements for the purposes of conformity assessment. The **Verification Procedure** for market surveillance purposes accepts a tolerance of 10% to allow for manufacturing tolerance and laboratory measurement inaccuracy.

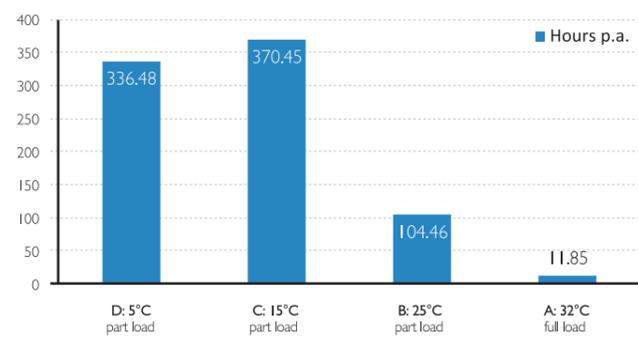
COP Condensing Units



SEPR Condensing Units



Ambient Temperature: Strasbourg



Many components, many manufacturers, a few challenges and one solution. A condensing unit contains numerous components with an influence on the system's energy efficiency, mainly the compressor, the condenser and the fan. There are numerous manufacturers for each of these components, and these manufacturers measure and calculate the performance parameters of their components reference not systematically in a comparable way – which makes them not objectively comparable – which in turn makes it difficult for Customers (Wholesalers; OEMs; Contractors) to select optimal components and implement legislative requirements.

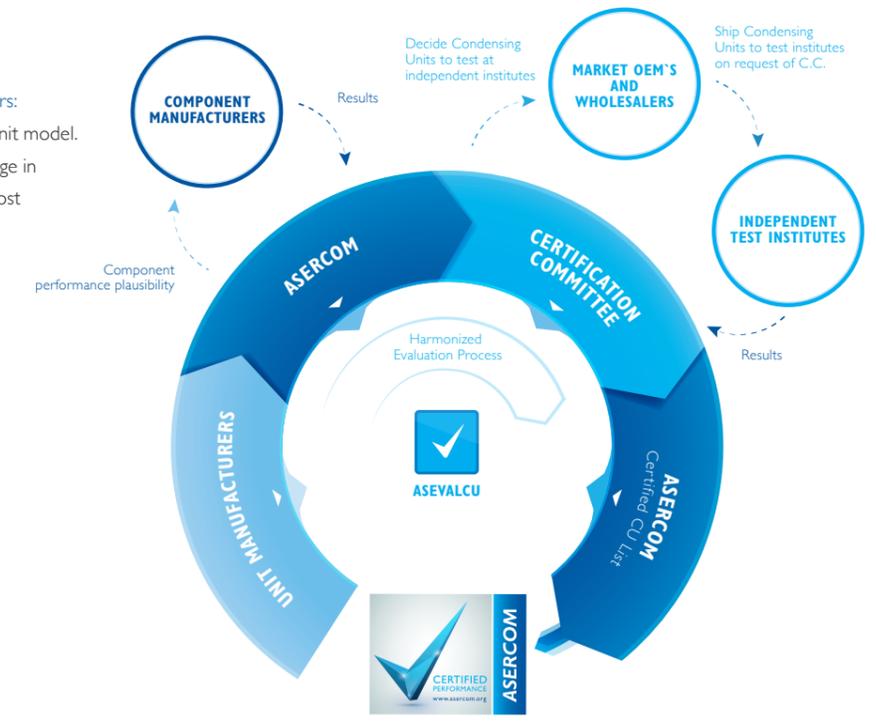
Standardised, voluntary and autonomous: the certification process

To overcome the above challenge there are two options for the manufacturers or importers:

- physically test every individual condensing unit model.
- use the available technical industry knowledge in order to evaluate the configured unit in the most efficient manner.

ASERCOM has decided to approach the second option and has established a proven process in order to certify condensing units based upon the technical data of the key components.

Based on the experience with the compressor certification program ASERCOM has created a certification program that is reliable and based on hard data in combination with actual testing.



Expertise and capacities for the governmental monitoring mandate

The EU ecodesign regulation requires EU member states to implement the prescribed limit values and to monitor compliance on the market. But: There are very few institutions possessing the necessary technical equipment and expertise in Europe – making the government's monitoring mandate more difficult, and subjecting small and medium-sized enterprises (SME's) in particular to disproportionate effort and expense. In view of these challenges, ASERCOM's voluntary certification programme represents a cost-effective, reliable and scalable solution that provides the necessary degree of transparency and comparability. In its present state, the certificate confirms the correctness of data provided by the manufacturer, but is not legally binding with regard to compliance with EU statutory regulations.

Condensing Units Certification Benefits

- COMPLIANCE**
 - Compliant with European Future Eco-design regulation on "professional Refrigeration".
 - Mandatory publication of MEPS being placed on the EU market by July 2016.
- CONFIDENCE**
 - Allow customers to select product with certified performance.
 - Unique European performance certification program.
 - Declaration of performances for Condensing Units according to latest EN13215 standard.
 - List of certified product easily accessible on website.
 - Standardized test procedure (certification process well defined-supervised by 3rd party).
 - Product Passport for Market Surveillance authorities on performances declaration process.
- PERFORMANCE**
 - Improved efficiency of condensing units.
 - European industry will be raised to Best Available Technology.



ASERCOM, the Association of European Refrigeration Component Manufacturers, is the platform in dealing with scientific and technical challenges, promoting standards for performance and safety, focusing on better environment protection, serving the refrigeration and air conditioning industry and its customers.

Further information is available on the Internet at: www.asercom.org

Participants of the certification programme:

