

## Pressure Equipment Directive 2014/68/EU

On May 29, 1997 the European Parliament and the Council of the European Union adopted Directive 97/23/EC on the approximation of laws of the Member States concerning Pressure Equipment (PED). This Directive has been recast on May 15, 2014 by the Directive 2014/68/EU on the same topic, which introduced substantial innovations in terms of classification of fluids, definition and obligations of the economic operators and applied changes to the conformity assessment procedures.

*With respect to compressors, the provisions of Directive 97/23/EC have been confirmed by Directive 2014/68/EU:*

- According to Article 1, Par. 2 (j) of the Directive, this shall not apply to semi-hermetic and open drive compressors. This exemption is valid under certain conditions<sup>1</sup> and specific documents have to be prepared for these products to justify this case. This has been confirmed by involvement of a Notified Body and by the official guidelines to the interpretation of the PED released by the European Commission's Working Group "Pressure"<sup>2</sup>.
- According to Article 1, Par. 2 (f) of the PED motor-compressors classified as no higher than category I of the PED are excluded from the scope of the Pressure Equipment Directive because these compressors are falling into the scope of other EU Directives such as 2006/42/EC (Machinery Directive) or 2014/35/EU (Low Voltage Directive). This is applying to compressors not exempt from PED according to Article 1, Par. 2 (j) and notably to hermetic compressors.
- For those compressors falling into the scope of the PED, *ASERCOM* has in cooperation with a Notified Body developed guidelines for their members how to establish compliance of these products with this directive.

The following explanations shall serve as guidance to customers of *ASERCOM* members to understand the implications of the PED upon our business:

- The PED differentiates between two GROUPS of fluids<sup>3</sup>:
  - GROUP 1 is for hazardous fluids (toxic, flammable, explosive, oxidising)
  - GROUP 2 is for all other fluids
- Most commonly used HFCs, HCFCs, certain HFOs and HFC/HFO blends fall into Group 2.

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<sup>1</sup> PED 2014/68/EU, Art. 1, Par. 2:

"This Directive shall not apply to:

(j) equipment comprising casings or machinery where the dimensioning, choice of material and manufacturing rules are based primarily on requirements for sufficient strength, rigidity and stability to meet the static and dynamic operational effects or other operational characteristics and for which pressure is not a significant design factor; such equipment may include:

(ii) steam engines, gas/steam turbines, turbo-generators, compressors, pumps and actuating devices;"

<sup>2</sup> See Guidelines A-11 and A-12 in the document "Guidelines related to the Pressure Equipment Directive 2014/68/EU (PED)" available at <http://ec.europa.eu/DocsRoom/documents/23181>

<sup>3</sup> The classification of fluids follows the provisions of the CLP Regulation 1272/2008 (CLP = Regulation on Classification, Labelling and Packaging of substances and mixtures valid from June 1, 2015

# STATEMENT

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- Refrigerants such – for instance – R717 (Ammonia), Propane (R290), R32, R1234yf fall into Group 1.
- The PED differentiates between categories of pressure equipment. Four categories are defined, differentiated by ranges of Pressure x Volume. These ranges are defined separately for each fluid group.
- The category is not indicated on the nameplate, however, this information may be obtained from the manufacturer.
- The category of the equipment is used to establish if equipment is subjected to the scope of the PED or not, and in what way compliance with the PED must be demonstrated.
- For those compressors falling into the scope of the PED, an audit by a Notified Body must be performed at the compressor manufacturers' plants to establish compliance with the requirements of the PED.
- Compressors falling into the scope of the PED will demonstrate the compliance with this directive and a successful audit by putting the CE-marking and the registration number of the notified body, which performed the audit on the nameplate.
- Additionally, a Declaration of Conformity issued by the manufacturer is available if the compressor falls within the scope of the PED.
- For products falling into the scope of PED manufacturers shall keep the technical documentation and the EU declaration of conformity for 10 years after the product has been placed on the market.

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These recommendations are addressed to professionals, industrial, commercial and domestic refrigeration system manufacturers / installers. They have been drafted on the basis of what *ASERCOM* believes to be the state of scientific and technical knowledge at the time of drafting, however, *ASERCOM* and its member companies cannot accept any responsibility for and, in particular, cannot assume any reliability with respect to any measures - acts or omissions - taken on the basis of these recommendations.

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