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R&D

Date : 26/06/15

Réf : NE-2015-06-IB

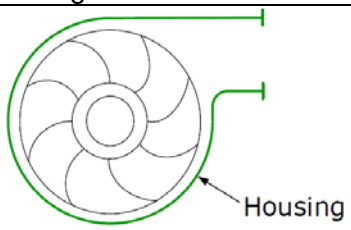
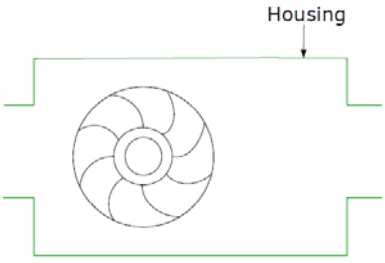
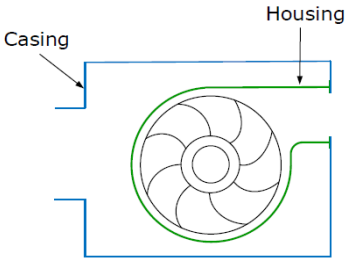
Objet : Scope of Regulation 327/2011 and Regulation 1253/2014 for ventilation products

Dear All

VIM is a French manufacturer of ventilation units. We propose a whole range of ventilation units for several applications.

VIM is member of UNICLIMA, the French association which represents the interests of Heating, Ventilation, Air conditioning and Refrigeration industries.

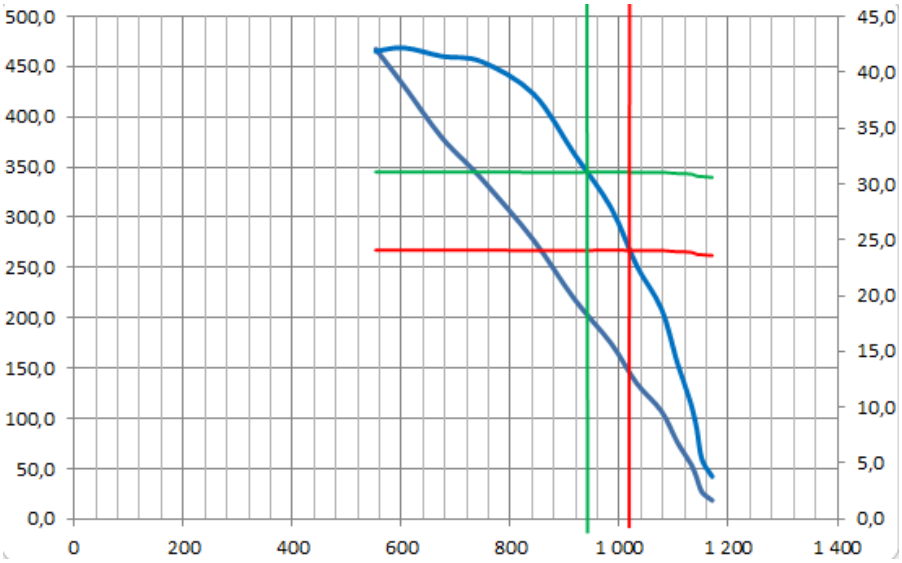
We would like to react due to the first stakeholder meeting about the scope of Regulation 327/2011 and Regulation 1253/2014 for ventilation products.
The following approach was presented:

Example	Configuration	Regulation	VIM Comments
Ex 1		327/2011	We agree
Ex 2		327/2011	We do NOT agree
Ex 3		1253/2014	We agree

According to us, we cannot make a difference of treatment between example 2 and example 3 because both of them are box fans. It will create a confusion on the market and a difference between both design (with or without main housing) for a same application.
In example 2, the housing will create an system effect for the fan and therefore, it will be very difficult to match the efficiency requirement of regulation N°327/2011.

In order to explain our proposal, we would like to show you 2 tests where we compare the requirement of regulation N°327/2011 and N°1253/2014

First test:
Box fan with plugan Ø225: design as Example 2:
Max approx. airflow: 1000 m^3/h

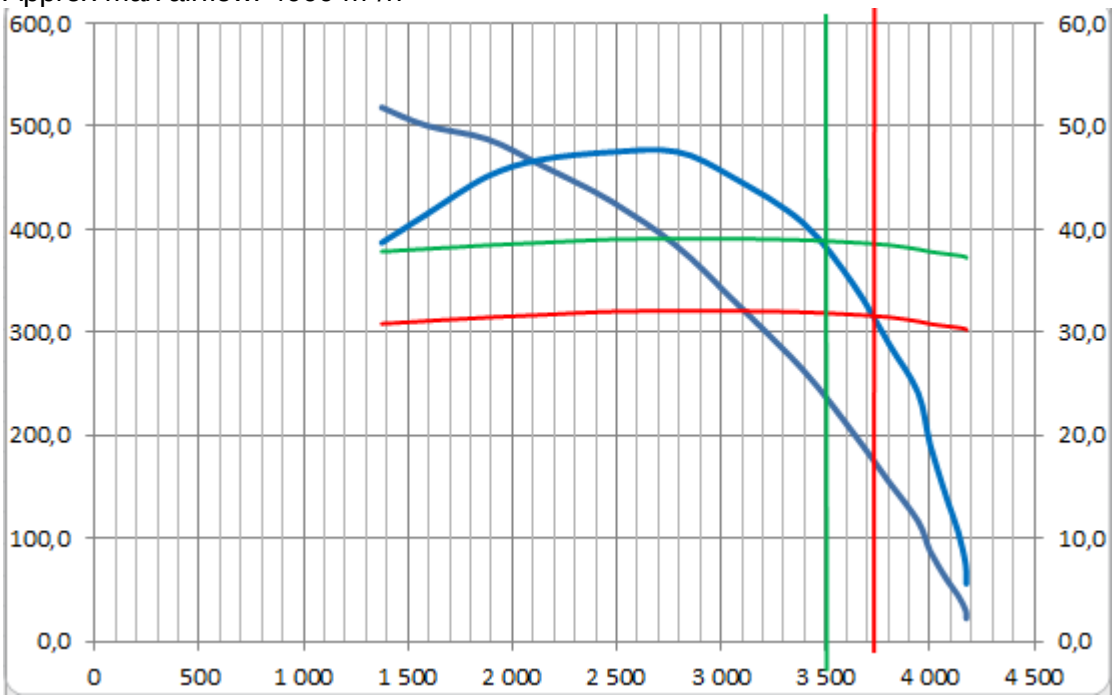


N° 1253/2014:
Compliant with 1253/2014 up to 1030 m^3/h m (2016) and 950 m^3/h (2018)

N° 327/2011:
- Best efficiency point: 42.2% - Pabs: 171.6W.
- Target energy efficiency (2015): 4.56ln(P)-10.5+62= 43.5%

No compliant with 327/2011

Second test:
Box fan with plugan Ø355: design as Example 2:
Approx max airflow: 4000 m^3/h



N° 1253/2014:
Compliant with 1253/2014 up to 3750 m^3/h m (2016) and 3500 m^3/h (2018)

N° 327/2011:
- Best efficiency point: 47.5% - Pabs: 625.4W.
- Target energy efficiency (2015): 4.56xln(P)-10.5+62= 49.4%

No compliant with 327/2011

These 2 examples show that a well-designed box fan with a plugfan without second layer should be compliant with 1253/2014 but could not be placed on the market if it must be compliant with 327/2011.

The same box fan with a housing (scroll) + casing will be compliant.

This fact is not acceptable and this design must absolutely be included in regulation N°1253/2014, so we will have:
- **Plug-fan alone complies with the requirements 2015 of reg. 327**
- **The Plug-fan inside the housing does not complies with the requirements of reg. 327 but it complies with reg. 1253**

Similar as a Fan, Box & roof fans are products that are used to maintain a continuous air flow. Sometimes they are used in a ventilation system to replace utilized air, and sometimes they are used in an industrial, process application, etc, exactly like fans are.
The reason to build a box or a cowl surrounding the fan is to protect the fan's drive transmission from dust and/or for safety and security reasons, and/or for soundproofing reasons, and/or for rain water protection, and/or to guide the air from the ductwork, etc
The fan incorporated in those products is ErP compliant. Then what it has to be regulated only is the impact of the box, cowl, etc. (casing, housing whatever) surrounding the fan.

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