

**JRAIA’s Proposal regarding First Stakeholder Meeting for
the Ventilation Units Product Group
“Commission Regulation 1253/2014 and Commission Delegated
Regulation 1254/2014”**

July 2015

Executive Summary

This paper summarises JRAIA’s comments related to the First stakeholder meeting of the Technical Assistance Study for the Ventilation Units Product Group" (held on 15 June 2015). JRAIA, representing the heating, cooling and refrigeration industry in Japan, welcomes some of the points discussed in the stakeholder meeting in view of the transitional measurement methods.

However, the discussion mainly focused on the transitional method for “SFPint”. JRAIA would like to raise some concerns about the lack of discussions regarding the transitional measurement method for "NRVU thermal efficiency of HRS and HRS external and internal leakage rates".

While we appreciate that the transitional measurement method for "NRVU thermal efficiency of HRS and HRS external and internal leakage rates" currently refers to EN308:1997 standard, we believe that this measurement method shall also mention ISO16494:2014 as a reference standard.

Therefore, we would like to propose the following addition.

Publication of Titles and references of transitory measurement methods

Measured parameter	Reference	Title
<i>NRVU thermal efficiency of HRS (η_{t_rvu}), HRS external and internal leakage rates</i>	EN 308:1997	Heat exchangers - Test procedures for establishing performance of air to air and flue gases heat recovery devices
	ISO 16494:2014 (new)	Heat recovery ventilators and energy recovery ventilators — Method of test for performance

Detailed Comments

The measurement standard for "NRVU thermal efficiency of HRS and HRS external and internal leakage rates" in the transitional methods only refers to EN308:1997 as reference standard (see below).

Publication of Titles and references of transitory measurement methods

Measured parameter	Reference	Title
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However, considering the internal leakage rate measurement for RVU and NRVU operating at reference air volume flow, the measurement using the pressurized method, i.e. using 100Pa or 250Pa air pressure, is not appropriate. This method carrying out by pressurised air is not a proper method for the small RVU and NRVU unit under operation.

Therefore, we would like to propose to use ISO 16494 alongside EN308 in the transitional methods.

Rationale behind our proposal

By adding ISO16494 as a transitional measurement method, more accurate information on leakage can be available to architects, building owners and installers. This makes it possible for them to select the right RVU and NRVU depending on their specific building design and needs. The tracer gas method defined in ISO16494 offers the measurement under the closer operating conditions to the real one than the method defined in EN308, and the more accurate leakage values can be obtained with the method.

As a result, it becomes easier for the installer to select the proper RVU and NRVU with the appropriate air volume. This encourages saving energy and ensures high efficiency levels thus upholding the concept of ErP.

Additionally, ISO 16494 has the following advantages:

- the internal leakage and external leakage can be measured at the same time;
- there is no need to distinguish between the “recuperator” type and “regenerator” type in the measuring method
- the ventilation unit can be measured at the actual operating conditions.

About JRAIA:

JRAIA, the Japan Refrigeration and Air Conditioning Industry Association, was originally established in February 1949 as the Japan Refrigerating Machine Manufacturers Association which was thereafter reorganized in February 1969 to become an incorporated association and renamed as it is at present.

JRAIA is the trade association representing over 100 manufacturers of refrigeration and air-conditioning equipment in Japan. We, the members of JRAIA, have so far been dedicated to offering quality products to the markets of EU. JRAIA aims to promote and improve production, distribution and consumption of refrigeration and air conditioning equipment and their applied products, as well as auxiliary devices and components, automatic controls and accessories and thereby contribute to the steady development of HVAC&R industry and the improvement in people's standard of living.

For more information, please see our website www.jraia.or.jp