Amendment to the model test report that defines the test conditions to be registered for the determination of air flow volume leaving the evaporator

Transmitted by the Government of France

Summary

Executive summary: Amendment to model test report No. 12 regarding the measurement of air flow volume leaving the evaporator

Action to be taken: Include this amendment in model test report No. 12

Related documents: None

Introduction

1. Official ATP testing stations that measure air flow volumes leaving evaporators in accordance with paragraph 4.3.4 of annex 1, appendix 2 to ATP dated 6 January 2018 record the conditions of those tests in model test report No. 12 using two different interpretations of the same parameter showing influences.

2. Given that the test report must make it possible to interpret the test conditions required by ATP, any such test condition that is subject to interpretation must be clarified.

I. Proposal

3. In model test report No. 12, add “at a static differential pressure measured between the air flows leaving and entering the evaporator, of … Pa” to the test conditions for air flow volume leaving the evaporator.
II. Justification

4. The characteristic curve of the air flow volume circulated by fans with a constant speed of rotation illustrates the relationship between the air flow volume and the fan’s static differential pressure. The shape of that curve depends on other factors, which are taken into account in the test standards recommended by ATP by factoring their effects into the result during processing. Those factors include ambient air temperature and atmospheric pressure, among others. In other words, the sensitivity of the air flow volume to changes in atmospheric pressure, within a normal range, is negligible compared to the fan’s static differential pressure.

5. Controlling test conditions allows us to control the types submitted for testing.

III. Cost

6. There will be no additional costs for official testing stations.

IV. Feasibility

7. There will be no additional constraints for official ATP testing stations.

V. Enforceability

8. No problems are foreseen in introducing the proposed amendment to test report model No. 12, contained in ATP.

VI. Introduction of the proposed amendment to ATP

Section of ATP concerned: annex 1, appendix 2, section 8 – Test reports, Model No. 12.

Proposal:

Model No. 12:

It is proposed to amend the following paragraph of ATP:

Original ATP paragraph:
Air flow volume leaving the evaporator:
value measured ........................................ m³/h
at a pressure of .................................... Pa

Proposed amendment:
Air flow volume leaving the evaporator:
value measured ........................................ m³/h
at a static differential pressure measured between the air flows leaving and entering the evaporator, of .................................... Pa