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OPERATIONAL MANUAL
for the
CERTIFICATION
of
AIR FILTERS

OM-11-2017

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1	*Sampling procedure is described*	*IV.2*	*7*
2	*Transition period for adaptation to the new testing standard is described for 2017 and 2018*	*IV.2c*	*9*
3	*Editorial revisions*	*VARIOUS*	

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I. PURPOSE

The purpose of this Operational Manual is to prescribe procedures for the operation of the Eurovent Certified Performance Programme for Medium and Fine Air Filters.

Participation in this programme is open to:

- Original Equipment Manufacturers (OEM)
- Brand Name Manufacturers (BNM) selling products already certified by OEM
- Distributors purchasing and selling products non-certified by OEM

Random tests are conducted under this programme. These tests shall be conducted at the independent test facilities approved by Eurovent Certita Certification and in accordance with the relevant Rating Standard: RS 4/C/001.

II. SCOPE

This Certification Programme applies to Air Filter elements rated and sold as “Medium and Fine Filters Class M5, M6, F7 – F9” as defined in EN 779:2012, with a front frame size of 592x592mm according to standard EN 15805:2010 and with a nominal airflow between 0.24 and 1.5 m^3/s. When a company joins the programme, all relevant medium and fine air filter elements shall be certified.

As manufacturers may produce a large number of filters with different length/depth there is a tolerance for the declaration of filters belonging to the same filter family as already certified filters with the same nominal airflow and with different length/depth of the overall filter element within a tolerance of +/- 10% or 50 mm (whatever is the smaller). Outside of this tolerance the filters shall be declared.

III. BASIC OUTLINE OF PROGRAMMES

Participation in this Certification Programme consists of the following:

III.1 Application

The company shall be certified for having a quality management system according ISO 9001.

All manufacturing places for the products within the scope of the certification programme shall be declared to Eurovent Certita Certification and shall be covered by an ISO 9001 certificate:

- issued by a certification body accredited by an accreditation body member of the European co-operation for Accreditation (EA, see list in www.european-accreditation.org)
- whose scope covers at least “production” of all products within the scope of the certification programme
- valid:
    - on the day of the first selection by Eurovent Certita Certification for qualification test campaign
    - on the 30th of November year n-1 for repetition test campaigns (see Appendix A Certification schedule)

A Manufacturing place is the address of the factory where the finished product is assembled.

For brand name manufacturer, an ISO 9001 certificate for “sales and after sales” is required (mandatory starting from 1st January 2015).

The company shall have a calibrated test facility for testing pressure drop of air filters. A proficiency test report of the testing of a standard perforated plate with an independant test laboratory shall be provided as evidence.[1]

The applicant, after signing the Licence Agreement, provides Eurovent Certita Certification with brochures, technical data sheets, literature etc. for each “Medium and Fine Filter - according to EN 779:2012” he is selling on the market.

III.2 Requested information

Eurovent Certita Certification will only certify published technical data for filters sold under EN 779:2012 – Medium and Fine filter class. The applicant/participant has to categorize all his Medium and Fine Filters intofilter family, as defined in the relevant Rating Standard.

Sales documentation shall be supplied for each filter family as an Excel file containing the following information (see Appendix D):

- Model/type code
- Product category (e.g. Bag, V-type)
- Filter media
- Basic construction details, number of pockets or “V-shaped” related to a front frame with a size of 592x592 mm according to EN 15805:2010,
- filter depth
- Face dimensions
- Nominal flow rate
- Initial pressure drop at nominal air flow rate
- Medium or Fine Filter class according to EN 779:2012
- Initial Efficiency according to EN 779:2012 (for F7 to F9 filters only)
- Minimum Efficiency according to EN 779:2012 (for F7 to F9 filters only)
- Eurovent Energy Efficiency Class according to RS 4/C/001 - 2015 [2] (for filters rated at 0.944 m^3/s only)
- Annual Energy Consumption according to Eurovent Document 4/21 (for filters rated at 0.944 m^3/s only).
- Filter frame material within a filter family may differ.

If a medium or fine filter cannot reach the minimum dust holding capacity defined in Eurovent Document 4/21 – 2014, “>XXX” will be displayed on the Eurovent Certified Performance website with “XXX” the threshold between energy class D and energy class E corresponding to the filter class of the filter[3]. If this filter is selected for test the energy efficiency calculation according to Eurovent Document 4/21 – 2014 is not performed.

All actual printouts of the brochures as published on the participant’s homepage have to be sent to Eurovent Certita Certification. Eurovent Certita Certification will check if

[1] See minutes of the compliance committee meeting held on 15 March 2012.
[2] Eurovent Document 4/21 – 2014 can be dowloaded free of charge on Eurovent association website: www.eurovent-association.eu .
[3] See minutes of the compliance committee meeting held on 15 March 2012.

the data for the excel list are identical to the ones published in the brochures. In addition, an actual certificate for the applicant's quality management system has to be supplied.

III.3 Qualifying and repetition procedure

The qualifying process of a participant starts with the first tests of air filter elements from different filter families (as defined in the relevant Rating Standard) chosen by Eurovent Certita Certification.

Products are tested in the Independent Laboratory and the performance data obtained are compared with the published values. If all the test results are in accordance with the requirements of the relevant Rating Standard, the certification is granted **(**see Appendix A).

Every year, Eurovent Certita Certification checks whether the certified products still meet the requirements. For that purpose, other air filter elements from different filter families are selected for testing.

If the participants fulfilled all previous test campaigns and provided all the necessary elements and delivered all the filters for the current campaign, the certification is renewed for another campaign (see Appendix A).

III.4 Failure treatment

When the test result fails to comply with the requirements of the relevant Rating Standard the failure treatment is applied (see §IV.3 Failure treatment).

III.5 Complaint Procedure

Under special conditions a complaint procedure may be carried out as described in the Certification Manual.

IV. OPERATION OF THE PROGRAMME

IV.1 Declaration of data

a. Certification Forms

Submittal of models shall be made by filling the Excel forms provided by Eurovent Certita Certification.

Original Equipment Manufacturer (OEM): For models submitted by an original equipment manufacturer a dedicated form will be used. Copy of this form is issued by Eurovent Certita Certification on request and cannot be altered by the Participant/Applicant.

Brand Name Manufacturer (BNM): For models submitted by a private brand manufacturer a dedicated form will be used to identify the corresponding model number of the original equipment manufacturer. Copy of this form can be issued by Eurovent Certita Certification on request.

Reporting of test results: For models tested, results are sent by Eurovent Certita Certification, showing the deviations between declared and measured data.

Response form after failure: For models which failed the test, the list of products affected is sent by Eurovent Certita Certification.

Confidentiality of Certification Data: All data submitted to Eurovent Certita Certification is confidential except for information authorised to be published on the Eurovent Certified Performance website.

b. Reporting of Models

In reporting models for certification and for publication on the Eurovent Certified Performance website, certified ratings shall be given for all Air Filters which meet the requirements of Rating Standards 4/C/001.

Besides current models, the Participants shall provide Eurovent Certita Certification the list of (see Appendix D of the Certification Manual):

- new models
- deleted models,
- obsolete models.

The participant shall inform Eurovent Certita Certification of all modifications of products that have relevance to the published data. Updated literature shall be sent to Eurovent Certita Certification as soon as available.

It is authorized to declare the performance of one filter for different air volume flows.[4]

Changes on performances of models never tested or rerated[5] can be authorized. Eurovent Certita Certification will check the consistency of the new data and validate them or not. Such changes shall always be justified by the manufacturer in order to be authorized. The units concerned will be tested in priority during the following test campaign.

IV.2 Selection of units to be tested

Within the programme, tests may be conducted under the following procedures:

- Scheduled tests in qualifying procedure
- Scheduled tests in repetition procedure
- Penalty test
- Complaint test

Eurovent Certita Certification retains the right to make anticipated tests in case of:

- Modification of the declared list out of the certification schedule (additional units or modification of already listed units; see Appendix A);

Eurovent Certita Certification retains the right to make additional tests in case of:

- Complaint from a Participant's customer;
- Complaint from a non-certified manufacturer;
- Following an internal checking of the declaration list or of the manufacturer's commercial documentation.

In these cases the complainer (that is the participant's customer, the non-certified manufacturer or Eurovent Certita Certification) shall pay for the test. If the test confirms the non-compliance of one of the certified performance, the re-rating procedure shall apply and the certified manufacturer has to pay for the test.

[4] See minutes of the compliance committee meeting held on 15 March 2012.
[5] See minutes of the compliance committee meeting held on 15 March 2012.

a. Number of units to be tested

Note: Due to the introduction of a new testing standard, the number of filters selected in 2017 is indicated in the section IV.2c.

1. During the qualification test campaign

The excel file filled by the Applicant shall be submitted to the Compliance Committee for a review of the declared performances. The file submitted shall be in anonymous format, with no reference to the Applicant name, trade name, range name, or product reference.

Based on this review, Eurovent Certita Certification shall select six air filters elements from different filter families. Eurovent Certita Certification allocates an Identification Number (ID) for each filter to be tested before sending it to the laboratory. Eurovent Certita Certification is the only one deciding the random distribution of the test filters to the independent laboratories.

When results of tests are within the allowed tolerances defined in the Rating Standard, the laboratory shall provide Eurovent Certita Certification with a test report (which includes the name of the manufacturer).

In any case the report shall contain a table presenting all claimed, measured and allowed performance values.

If all the test results are in accordance with the requirements of the Rating Standard, all products sold under EN 779:2012 classes M5, M6, F7 - F9 are certified by Eurovent Certita Certification: Certification is granted until the date defined in Appendix A.

Whenever results of a test are not in accordance with the requirements defined in the relevant Rating Standard, the laboratory shall generate a corresponding test report related to the ID Number. Manufacturer and participant number must not be stated on that report. It is provided only to Eurovent Certita Certification who shall inform the participant. In that case, the procedure for failure treatment shall be applied.

The following statement shall appear on all the test reports: "Determination of filtration performance for certification of medium and fine filters"

2. During repetition test campaigns

This procedure is repeated annually. However the files shall not be submitted to the Compliance Committee for review. Eurovent Certita Certification shall select four air filters elements from different filter families. When the test results are according to the published data Eurovent Certita Certification renew the certification for another campaign, if not, the procedure for failure treatment shall be applied.

b. Acquisition of unit

1. *Planning*

A representative person of ECC shall contact the manufacturer before end of November in order to plan the sampling date in one of the storage location or production place declared by the manufacturer. A date shall be planned before the end of January.

2. *Sampling on-site*

Introduction meeting: The ECC representative shall present the aim of the sampling. The manufacturer representative shall list all the areas on the site where certified filters can be sampled.

Sampling: ECC will select 2 filter elements from 3 certified filter references each in order to sample filters for the second test if needed. In case bag filters are selected 4 filters elements shall be sampled in order to be able to test the discharge efficiency. In case of other filter types, the media pieces necessary to test the discharge efficiency shall also be sampled.

The selected filter elements (and media piece(s), if applicable) will be packed in a box and marked and sealed by the ECC representative and photos of the marked/sealed boxes will be taken. These photos will be sent by ECC to the selected independent laboratory.

Conclusion meeting: The manufacturer representative signs a sampling sheet detailing the place and date of the sampling, the name of the ECC representative and the manufacturer representative, the references and serial numbers of the filters sampled, the address of the independent laboratory selected by ECC and the deadline for delivery. The ECC representative will report how the sampling proceeded and this report will be signed by both ECC and manufacturer representatives.

3. *Delivery*

The manufacturer will deliver the selected filters (and media piece(s), if applicable) not later than 2 weeks after the sampling date.

c. Transition between EN779:2012 and ISO16890:XXXX

Due to the adoption of a new testing standard which replaces the EN779:2012, the following transition period shall be applied:

In 2017:

- *3 filters (5 for Applicants) will be sampled onsite and tested according to EN779:2012*
- *4 filters will be selected by ECC, sent by the Participant to the laboratory, and tested according to ISO16890:XXXX.*

<table>
<tr><td colspan="2">- October 2016: During the annual update of the list of certified filters, participants will submit for each certified range at least one storage location or one production place where ECC would be able to sample filters from this range.</td></tr>
<tr><td colspan="2">- November 2016: During the selection, ECC will select:</td></tr>
<tr><td>- 4 filters rated according to ISO 16890:XXXX to be delivered directly by the manufacturer to the independent test laboratory chosen by ECC.</td><td>- 3 filters rated according to EN779:2012 to be sampled in a storage location or production place.</td></tr>
<tr><td>- February 2017: Delivery of the filters rated to ISO 16890:XXXX to the independent laboratories by the manufacturers.</td><td>- December 2016 – March 2017: Sampling of the filters rated according to EN 779:2012 by ECC.</td></tr>
<tr><td>- March-May 2017: test of the filters rated to ISO 16890:XXXX</td><td>- May-July 2017: test of the filters rated to EN 779:2012</td></tr>
</table>

Table 1: 2017 transition schedule

In 2018, the usual testing rate of 4 filters (6 for Applicants) will be applied again.

d. Eurovent Certita Certification tests at the laboratory

Eurovent Certita Certification scheduled tests shall be performed at the Independent Laboratory selected by Eurovent Certita Certification.

The independant laboratory has to check that the filter delivered by the Participant/Applicant corresponds to the declaration (e.g. filter type, number of pockets, filter area, filter class and nominal air flow rate written on the filter).

- Only the independent laboratory personnel shall be permitted to handle the test units.

  The laboratory shall be responsible for correct storing, unpacking, handling, and testing. Filters that passed the test will be disposed of by the laboratory in agreement with Eurovent Certita Certification. The laboratory personnel may make repairs of the test filter elements unit only in agreement with the Participant/Applicant.
- No Participant/Applicant's personnel are allowed to be present in the test facility during the test.

e. Report of tests results

Upon completion of the tests on each filter, the Laboratory will render its complete report as PDF file to Eurovent Certita Certification and the Participant/Applicant. Eurovent Certita Certification will transmit a copy of the report together with reporting test result to the Participant/Applicant.

IV.3 Failure treatment

a. Reasons of failure

The Participant/Applicant shall be authorised by Eurovent Certita Certification to examine the reasons of the failure on location or to have the filter returned back. The laboratory must not dispose off the filters that failed.

b. Component failure

Prior to the test, the laboratory has to visually inspect each filter. Should the aspect be suspect, the Participant/Applicant and Eurovent Certita Certification are contacted by the laboratory.

In case of a damaged filter element, the laboratory shall inform Eurovent Certita Certification immediately and make a notice to the Participant/Applicant. The Participant/Applicant shall then send a new unit of the same model.

c. General

A unit failure is automatically confirmed when the test results are not in accordance with claimed data, according to tolerances specified in the Rating Standard, except if there is an error of the test laboratory or a damage of the unit the Participant/Applicant is not responsible for.

In case of a unit failure occured, the Participant/Applicant has within 4 working weeks after notification of failure to select one of the following alternatives:

1) Re-rate the product in accordance with the re-rating rules;

2) Ask for a second test. In case this second test is successful, no re-rating will be required. In case the second test is unsuccessful, the Participant/Applicant shall comply with point 1).

During the first test, when the filter does not meet the claimed performance, the laboratory shall inform the Participant/Applicant and Eurovent Certita Certification and ask whether the test shall be continued or not. If the Participant/Applicant doesn't want the test to continue then he has to send to Eurovent Certita Certification a written note. Then a second test is mandatory. In case this second test is successful, no re-rating will be required. In case the second test is unsuccessful, the Participant/Applicant shall comply with point 1) above.

The tests have to be performed in the following order:

- Initial pressure drop
- Initial efficiency
- Discharge efficiency
- Filter class (dust load)
- Energy class calculation

d. Re-rating rules

The tested filter shall be re-rated according to the test results. For the initial pressure drop, the re-rated value is the measured value rounded to the nearest multiple of 5 Pa.

e. Penalty tests

One (1) additional unit will be selected in case of:

- deviation of more than +(20%+Mt) or +(20 Pa+Mt) which ever is the largest, where Mt = 10 Pa for the initial pressure drop
- deviation of more than +(20%+60 kWh/y) for the Annual Energy Consumption.

If a second test is asked by the participant, only the results of the second test will be considered. Each test leading to a high failure will lead to one penalty test (however there is a maximum of one penalty test per filter tested). Several penalty tests can therefore be asked during one test campaign.

During the qualifying procedure, this additional selection shall be made immediately and the test has to be validated before the certification is granted.

IV.4 Repeated failures along the test campaigns

This section refers to Appendix C.II of the Certification Manual.

The rules regarding Mean Value of Failure (MVF) are described in APPENDIX E. Calculation Method and implementation of Mean Value of Failure (MVF).

IV.5 Non application of procedures

Non-application of procedures and relevant penalties are described in the Certification Manual, Section VIII.

To come back to the certification programme, the suspended participant has to complete the test campaign of the year he has been suspended for (n) and give all the necessary elements for the following test campaign (n+1).

V. PROMOTION OF THE PROGRAMME

This section refers to section VI of the Certification Manual.

V.1 By Eurovent Certita Certification

The certified data of the certified products are published on Eurovent Certified Performance website: www.eurovent-certification.com.

Eurovent Certita Certification will supply, on request, to any interested party, the current status of any participant or of any model (new, deleted or obsolete).

The following information pertaining to each model certified shall be published on the Eurovent Certified Performance website:

- Name of Company
- Trade or brand name of model
- Model name
- Filter media
- Basic design
- Pocket length
- Face dimensions (592x592 according to EN 15805:2010)
- Nb of pockets or “V”’s
- Nominal air flow rate
- Filter efficiency class
- Initial pressure drop
- Initial Efficiency
- Minimum Efficiency
- Eurovent Energy Efficiency Class
- Annual Energy Consumption

V.2 By Participants

a. Display of ratings according to standards other than EN 779:2012

All medium and fine air filters shall be rated at least according to EN 779:2012. If other ratings are given next to ECC mark, it shall be clearly stated that only the EN 779:2012 rating is certified.

b. The Eurovent Certification mark

The Eurovent Certification mark consists of:

- Eurovent Certification mark in conformity with the design as presented in the Certification Manual, Appendix G. The accepted colour combinations consist of green pantone n°341 on white, or black on white. Any size of Eurovent Certification mark may be used.
- Identification number provided by Eurovent Certita Certification when the certification is granted.

c. Display of Eurovent Certified Performance mark on units

The Eurovent Certification mark may be affixed on each production unit or applied as part of the product label.

d. Display of Eurovent Certified Performance mark in literature, selection programmes and advertising

The Participant shall indicate his participation in the Programme by displaying the appropriate Eurovent Certified Performance mark on all specification sheets and in other literature carrying ratings, or claiming certification of certified models, in accordance with the Certification Manual, Appendix G.

The Eurovent Certified Performance mark alone may be used in literature without certified performance data (general leaflets, advertising etc).

When used in literature containing the certified performance data (technical catalogues and leaflets) the Eurovent Certified Performance mark shall be used only once and shall be associated with the following statement (e.g. by footnote):

NAME OF COMPANY participates in the Eurovent Certified Performance Programme for: NAME OF PROGRAMME; Check ongoing validity of certificate online: www.eurovent-certification.com

e. Display of Eurovent Energy Efficiency rating on filters with face dimentsions different from 592x592 according to EN 15805:2010 in literature, selection programmes and advertising

Filters with face dimensions different from 592x592 according to EN 15805:2010 but which dimensions are listed in Table 1 of EN 15805:2010 or in *Table 3* below can be rated according to RS 4/C/001 with the same energy class as the certified filters with the standard size belonging to the same filter family (see definition of filter family in RS 4/C/001).

Table 2: Filter face dimensions as listed in Table 1 of EN15805:2010

Filter face dimensions (Header dimensions)	
Width (mm)	Height (mm)
592	592
490	592
287	592
592	287
490	287
287	287

Table 3: Additional sizes authorized for labelling according to RS 4/C/001[6]

Filter face dimensions (Header dimensions)	
Height or Width (mm)	Height or Width (mm)
592	490
490	490
592	892
490	892
287	892

V.3 Confidentiality

Each participant agrees to keep all matters regarding the work of the Compliance Committee (CC) strictly confidential, i.e.:

- Not to discuss it outside the CC only with / in his own company / subsidiaries or affiliates as far as it is necessary to handle his participation in the certification programme. In this case all written documentation has to be marked as "CONFIDENTIAL",
- That no CC documents (e.g. minutes of meetings) shall be disclosed to any party not being part of the CC,
- That each written document (mail, fax, letters…) have to be clearly marked as "CONFIDENTIAL"

This confidentiality agreement becomes effective with the signature of the license agreement by the participant and remains in full force even when the participant withdraws from the certification programme for a period of 5 years after his participation has expired.

Each participant is allowed, however, to use his participation in the certification programme as a marketing tool.

[6] See minutes of the Compliance Committee meeting held on 26 February 2015

APPENDIX A. TIME SCHEDULE

For each repetition test campaign (year n), the following schedule shall be applied:

Eurovent Certita Certification asks for up-date of product list	*31/10/n-1*
Participant confirms up-date of products list	*15/11/n-1*
Eurovent Certita Certification sends selection list for test and start sampling planification	*30/11/n-1*
The Participant confirms selection list	*15/12/n-1*
Sampling are all planned	*31/01/n*
Delivery of the ISO16890:XXXX filters + all payments from Participant are completed	*28/02/n*
Sampled filters are all selected	*31/03/n*
Sampled filters are all delivered	*15/04/n*
Diploma are valid until	*31/05/n+1*
The Laboratory carries out all first tests	*31/07/n*
Eurovent Certita Certification sends the test reports	*15/08/n*
The Participant can ask for a second test up to	*15/09/n*
Payments from Participant are completed for second test(s)	*one month*
The Laboratory carries out all second tests	*one month*

APPENDIX B. FORMS

B.I. Form FIL-1: Submittal for certification (1/2)

GENERIC	**Product Number**	
	Master product number	Product number of the master product in OEM list of products (for brandname products only)
	Tested On	
	Rerated on	
	Created on	
	Last update on	
	Status	New / Certified / Deleted / Obsolete
	Participant Name	
	Product Name	Model reference
	Trade Name	
	Type of product	FIL/AIR FILTER
	Range Name	
	BMG	
PERFORMANCES OF THE PRODUCT	**Filter Class**	M5, M6, F7, F8 or F9 • According to EN 779:2012 (certified performance) • Mandatory for all filters
	Initial pressure drop	Initial pressure drop [Pa] • According to EN 779:2012 (certified performance) • Mandatory for all filters
	Minimum efficiency	Minimum efficiency at 0.4 µm [%] • According to EN 779:2012 - clause 11 • Mandatory for F7, F8 and F9 air filters
	Initial Efficiency	Initial efficiency at 0.4 µm [%] • According to EN 779:2012 • Mandatory for F7, F8 and F9 air filters
	Average Efficiency	Average efficiency at 0.4 µm [%] • According to EN 779:2012 • Not mandatory (for internal information only) • Not certified and not displayed on Eurovent Certified Performance website
	Annual Energy Consumption	Annual Energy Consumption [kWh/annum] • As defined in Eurovent Document 4/21 - 2014 • For filters rated at 0,944 m^3/s only
	Annual Energy Consumption (web)	• For filters rated at 0,944 m^3/s only • Calculated automatically
	Energy Efficiency Class	Energy Efficiency Class • A+, A, B, C, D, or E as defined in RS 4/C/001 • For filters rated at 0,944 m^3/s only • Calculated automatically
	Energy Efficiency Class (web)	• For filters rated at 0,944 m^3/s only • Calculated automatically

B.II. Form FIL-1: Submittal for certification (2/2)

TECHNICAL CHARACTERISTICS OF THE PRODUCT	**Basic design**	• **Bag**: Glass or synthetic media bags in a metal, plastic or wooden frame; • **Panel**: Glass media pleat or synthetic media pleat in a cardboard, plastic or metal frame(<150 mm depth); • **V-type**: Rigid filter with media pleats in a V-shaped design. 1, 2, 3, 4 … V´s; • **Pleated**: Deep pleated filters in a metal, plastic, aluminium, MDF or wooden frame (> 150 mm depth); • **Filter mats**
	Depth/Length	Depth (or Length) in mm
	Face dimensions	592x592 according to EN 15805:2010
	Filter Media	Type of filter media: Glass, Synthetic, Glass/Carbon, Synthetic/Carbon or Glass/Synthetic.
	No of bags or "Vs"	• Number of bags for bag filters • Number of “Vs” for V-type filters
	Nominal Airflow Rate	Nominal Airflow Rate [m^3/s] • Test volume flow rate as defined in EN 779:2012 • if different from 0.944 m^3/s, the Annual Energy Consumption and the Energy Class will be not defined (see Eurovent Document 4/21 - 2014) •If different from 0.944 m^3/s (3400 m^3/h), Nominal Airflow Rates between 0.833 and 1.111 m^3/s are forbidden (limits included) which corresponds to airflow rates between 3000 and 4000 m3/h.[7]

[7] See minutes of the Compliance Committee meeting held on 02 October 2013

B.III. Form FIL-2: Test result form

REPORTING OF TEST RESULT		
GENERIC	Test key:	0000-0000-00
	Created on:	YYYY/MM/DD
	Last update on:	
	Status:	FAILED / PASSED
MANUFACTURER	Participant key:	0000
	Participant name:	XXXXXXXXXXXXX
MODEL	Model key:	0000000000
	Model name:	XXXXXXXXXXX
	Product type:	FIL/AIR FILTER
	Serial number:	
TEST	Programme - Sub-programmes:	M5-F9 Air Filters
	Date of reception of the unit:	YYYY/MM/DD
	Date of reception of test report:	YYYY/MM/DD
	Unit tested on:	YYYY/MM/DD

RESULT DETAILS

					Measurement		MFV		High failure	
APPLICATION	General	Measured	Declared	Deviation	Limit	Result	Limit	Result	Limit	Result
Filter Class	-	F8	F8			PASSED				
Initial pressure drop	Pa	94	92	2	15	PASSED	15	PASSED	30	PASSED
Minimum efficiency	%	56	70	-14	10	FAILED	10	FAILED		
Initial Efficiency	%	61	70	-9	10	PASSED	10	PASSED		
Average Efficiency	%	94		0		PASSED	-1	PASSED		
Annual Energy Consumption	kWh/annum	1224	1104	120	170	PASSED	170	PASSED	281	PASSED
Annual Energy Consumption (web)	kWh/annum	1224	1104	120		PASSED				
Energy Efficiency Class	-	B	A	B		PASSED				
Energy Efficiency Class (web)	-	B	A	-1		PASSED				

TEST CONCLUSION

Test	MFV	High failure
FAILED	1/5	0 penalty test(s)

Anthony BAILLAU

B.IV. Form FIL-3: Rerate form

PROPOSAL OF RERATE		
GENERIC	Rerate key: Created on: Last update on: Status:	 YYYY/MM/DD
MANUFACTURER	Participant key: Participant name:	0000 XXXXXXXXXXXXXX
TEST	Test key: Unit tested on:	0000-0000-00 YYYY/MM/DD

APPLICATION General

DECLARED																									
Product key	Product name	Type of product	Range name	BMG	Perf 1.1																				
0000000	XXXXXXXXXXX	FIL/AIR FILTER	XXXXX	52	70																				
RERATED																									
0000000	XXXXXXXXXXX	FIL/AIR FILTER	XXXXX	52	56																				

LEGEND			
Code	Name	Product type	Component type
Perf. 1.1	Minimum efficiency	FIL/AIR FILTER	

APPENDIX C. EUROVENT CERTIFIED PERFORMANCE MARK

EUROVENT CERTIFIED PERFORMANCE
AIR FILTERS
CLASS M5-F9
www.eurovent-certification.com

APPENDIX D. EUROVENT CERTIFIED PERFORMANCE ENERGY EFFICIENCY LABEL

Rules for the use of Eurovent Certified Performance energy label are given in the Certification Manual.

It is not mandatory to use Eurovent Certified Performance energy labels however it is highly recommended to do so. If an energy label is used by the participant it is mandatory to use the layout described on our website.

High resolution files of these labels, as well as specifications for the layout are available on the website in the manufacturer's restricted area.

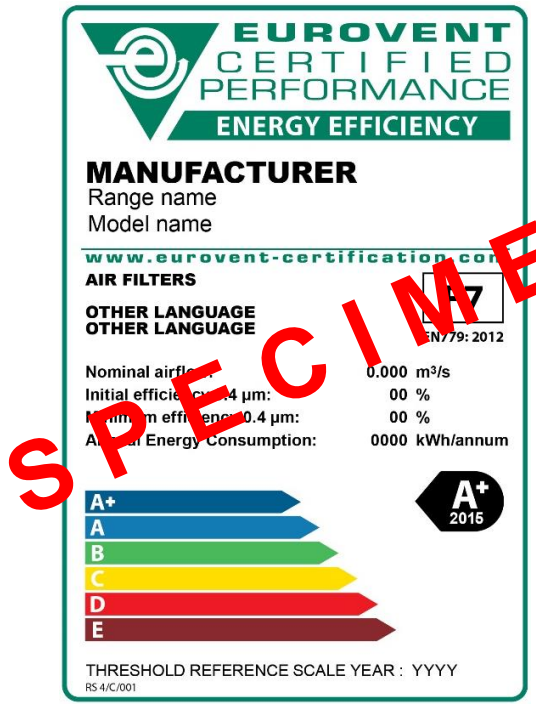

Figure 1: Illustration of the AIR FILTER Energy Efficiency Labels

Figure 2: Illustration of the AIR FILTER Energy Efficiency Mini Labels

APPENDIX E. CALCULATION METHOD AND IMPLEMENTATION OF MEAN VALUE OF FAILURE (MVF)

E.I. General

Mean Value of Failure (MVF) is equal, for each manufacturer, to the ratio between the total number of measurements which failed and the total number of performed measurements in the considered years.

$$MVF_{MeanValue\ of\ Failure} = \frac{\sum_{Number\ of\ consideredyears} Number\ of\ measurements\ failed}{\sum_{Number\ of\ consideredyears} Number\ of\ measurements\ performed}$$

MVF considers the following performances:

- Initial pressure drop
- Filter class according to EN 779:2012
- Initial Efficiency
- Minimum Efficiency
- Annual energy consumption

When there is a second test on a filter, then the first test is not taken into account.

If the MVF is equal to 0%, one less unit will be selected for the next test campaign that is three tests will have to be performed instead of four.

A manufacturer is suspended from the Certification Programme for one year if the MVF is higher than 25%.

E.II. Newcomers and qualifying procedure

During his qualifying procedure, the MVF shall not be higher than 25%. If the MVF is higher than 25%, the Applicant shall not be granted the certification.

After one year the applicant can apply again through the regular qualification procedure.

A manufacturer that leaves the programme and rejoins some years later is considered to be a newcomer if he rejoins after three years. If he rejoins before, all the latest existing test campaigns are considered, with minimum two and maximum three. The same rule applies if the manufacturer has been suspended for one year.