EMF TEST REPORT

Report Ref. No.: **UK210101070R**

Name of Product: **Heat/Energy Recovery Ventilator**

Model: **EHR-S 1000**

Testing Institute: **Guangdong U.K Standard Testing Co., Ltd.**

U.K Standard Testing

NOTICE

1. The report is invalid without the “Test report specialized stamp” or “the common seal of the testing institute” stamped.
2. The copy of the report is invalid without the “Test report specialized stamp” or “the common seal of the testing institute” restamped.
3. The report is invalid without the signature or stamp of the chief tester, verifier and ratifier.
4. The report is invalid if altered.
5. The result of the testing is only for the tested sample.
6. Different opinions about the report should be informed to the testing institute within 15 days from the date on which the report is received.

COMPANY NAME:	U.K Standard Testing Co., LTD
LABORATORY:	Building E, Nanpu Technology Innovation Center, Banshi Village, Changping Town, Dongguan City, Guangdong Province.
POST CODE:	523573
TEL:	4008559559
E-MAIL:	ukservice@163.com

Report ref. No.: UK210101070R

EMF TEST REPORT

Name of product:	**Heat/Energy Recovery Ventilator**	Applicant:	**ENING d.o.o.**
Model:	**EHR-S 1000**	Address:	**Straševina bb, P.fah 112, 81400 Nikšić, Montenegro.**
Quantity:	**Two sets**	Manufacturer:	**ENING d.o.o.**
Sample source:	**Sample is provided by applicant according to test requirements.**	Address:	**Straševina bb, P.fah 112, 81400 Nikšić, Montenegro.**

Test result:

PASS

Introduction of other products which fall into the range requested by applicant and related information:

Name of product: Heat/Energy Recovery Ventilator

Unit model: EHR-S 1000

Covering range which applied by applicant: EHR-S 250, EHR-S 500, EHR-M 2000, EHR-M 3000

Approved on: **Feb. 04, 2021** By: **Ivy Zhang**

Signature: 

Remarks: 1. The test results presented in this report relate only to the item(s) tested.

2. The test report is converted from the original report UK171201111, except that the manufacturer and models are different, others are the same.

Composition of the Report

Items	Pages	No.
Front cover	1	No.: UK210101070R
Head page	1	No.: UK210101070R
Composition of the report	1	No.: UK210101070R
EC type approval test report	6	No.: UK210101070R
Back cover	1	

Test case verdicts

Test case does not apply to the test object: **N(A)**

Test item does meet the requirement : **P(ass)**

Test item does not meet the requirement : **F(ail)**

EC Type Approval Test Report

Name of product:	**Heat/Energy Recovery Ventilator**	Applicant:	**ENING d.o.o.**
Model:	**EHR-S 1000**	Address:	**Straševina bb, P.fah 112, 81400 Nikšić, Montenegro.**
Quantity:	**Two Set**	Manufacturer:	**ENING d.o.o.**
Production No.:	**N/A**	Address:	**Straševina bb, P.fah 112, 81400 Nikšić, Montenegro.**

Standards for test:

EN 62233: 2008 Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure

Test result:

PASS

Tested On **Dec. 04~25, 2017** By **James Tang**

Signature: 

Verified On **Feb. 04, 2021** By **Eddie Ma**

Signature: 

Issue Date: 2021.02.04

U.K Standard Testing Co., Ltd.

Remarks: 1. The test results presented in this report relate only to the item(s) tested.

2. The test report is converted from the original report UK171201111, except that the manufacturer and models are different, others are the same.

EMF TEST REPORT

EN62233: 2008

Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure

Report

Report Reference No. ..... :	UK210101070R
Tested by (printed name and signature).....:	James Tang
Approved by (printed name and signature).....:	Eddie Ma
Date(s) of performance of test ..... :	Dec. 04 to Dec. 25, 2017
Date of issue..... :	Feb. 04 , 2021
Total Pages……..... :	6 Pages

Testing Laboratory

Name ……..…….. :	U.K Standard Testing Co., Limited
Address .....:	Building E, Nanpu Technology Innovation Center, Banshi Village, Changping Town, Dongguan City, Guangdong Province.
Test location..... :	**Same as above**

Test Specification

Standard. ..... :	EN62233: 2008
Test procedure ..... :	N/A
Procedure deviation ..... :	N/A
Non-Standard test method..... :	N/A

Test Item

Description..... :	Heat/Energy Recovery Ventilator
Trademark ..... :	NA
Model and/or type reference..... :	EHR-S 1000
Manufacturer ..... :	ENING d.o.o.
Address..... :	Straševina bb, P.fah 112, 81400 Nikšić, Montenegro.
Rating(s)……..:	220Vac, 50Hz, 0.5A 51W

Test Case Verdicts

Test case does not apply to the test object..... :	N(.A.)
Test item does meet the requirement..... :	P(ass)
Test item does not meet the requirement ..... :	F(ail)

EN62233: 2008			
Clause	Requirement – Test	Result - Remark	Verdict
4	**Measuring methods**		--
4.1	Electric fields		--
	In general, there is no need to evaluate electric fields around household appliances. For most appliances, the electric field strength can be deemed to comply with the reference levels wit hout testing. If electric fields are found to be relevant, a test method will be established.	No need to evaluate	N
4.2	Magnetic fields	The requirement is met	P
4.2.1	The frequency range considered is from 10 Hz to 400 kHz.		P
	The frequency range evaluated shall cover all frequencies of magnetic fields produced by an appliance, including a sufficient number of harmonics. If this is not feasible in one measurement, the weighted results of each measured frequency range shall be added.		P
4.2.2	The measuring distances, sensor locations and operating conditions are specified in Annex A.	30cm	P
4.2.3	Measurement values of magnetic flux density are averaged over an area of 100 cm^2 in each direction.		P
	The reference sensor consists of three mutually perpendicular concentric coils with a measuring area of 100 $cm^2 \pm 5$ cm^2 to provide isotropic sensitivity. The outside diameter of the reference sensor is not to exceed 13 cm.	Certificate	P
	For the determination of coupling factors, as s pecified in Annex C, an isotropic sensor having a measuring area of 3 $cm^2 \pm 0{,}3$ cm^2 is used.		P
4.2.4	Appliances have at least one independent magnetic field source, each of which generates a fundamental frequency and possibly harmonics.		P
	The magnetic flux density is measured using the procedure in 4.2.4.1. For appliances producing only line spectra, the procedure described in 4.2.4.2 may be applied instead. The simplified procedure in 4.2.4.3 may be used for appliances producing magnetic fields at mains frequency and its harmonics only.		P
	The magnetic flux density is measured using a suitable instrument. In case of doubt, the reference sensor specified in 4.2.3 is used.		P
	Transient magnetic fields with a duration of less then 200 ms, e.g. during switching events, are disregarded. If a switching action occurs during the measurements, the measurement has to be repeated.		P
	The measuring equipment is to have a maximum noise level of 5 % of the limit value. Any measured value below the maximum noise level is disregarded.		P
	The background level is to be less than 5 % of the limit value.	0.639% of the limit	P
	The response time for the measuring equipment to		P

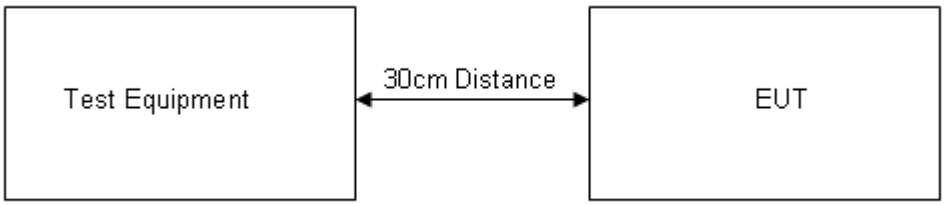
EN62233: 2008			
Clause	Requirement – Test	Result - Remark	Verdict
	reach 90 % of the final value is not to exceed 2 s.		
	The magnetic flux density is determined by using an averaging time of 1 s.		P
4.2.4.1	Time domain evaluation	See attached table	P
	Independent of the type of signal, a time domain measurement of the value of the magnetic flux density can be carried out. For fields having several frequencies, the frequency characteristic of the transfer function takes into account the frequency dependency of the reference levels.		P
	The transfer function is to be established using a first order filter and shall have the characteristics shown in Figure 1.	Transfer function of tester accord with figure 1 of the standard.	P
	- separate measurement of each coil signal - weighting of the signal by the transfer function; - squaring the signals; - adding the squared signals; - averaging the s um of the squared signals; - obtaining the square root of the average..		P
	The result is the r.m.s. value of the magnetic flux density.	r.m.s. value	P
	The measured value shall not exceed the reference level of the magnetic flux density at 50 Hz. However, if this level is exceeded, the value is recalculated taking into account the coupling factor	Coupling factor 0.15	P
4.2.4.2	Line spectrum evaluation	See 4.2.4.1	N
	This method may be used when there are only line spectra, for example magnetic fields having a fundamental frequency of 50 Hz and some harmonics.		N
	The magnetic flux density is measured at each relevant frequency. This can be achieved by recording the time signal of the flux density and using a Fourier transformation for evaluating the spectral components.		N
	The following sequence is used for the measurements: - separate measurement of each coil signal; - Fourier transformation for each coil signal to obtain the estimated spectrum; - vector addition of all three spectra for each discrete frequency.		N
4.2.3	Simplified test methods	See 4.2.4.1	N
	Appliances that are constructed so that they can only produce magnetic fields at mains frequency and its harmonics need only be tested in the frequency range below 2 kHz.		N
	Appliances are considered to meet the requirements of this standard when all the following conditions are fulfilled: - the currents, including the harmonic currents generating the magnetic fields are known;		

EN62233: 2008			
Clause	Requirement – Test	Result - Remark	Verdict
	- all harmonic currents with amplitudes higher than 10 % of the amplitude of the mains frequency decrease continuously over the frequency range; - the magnetic flux density measured at mains frequency is less than 50 % of the reference level specified for the mains frequency; - the magnetic flux density measured during a broadband measurement over the frequency range, with the mains frequency suppressed, is less than 15 % of the reference level specified for the mains frequency.		
	Appliances that are constructed so that they only produce very weak magnetic fields, when the mains frequency is dominating, are considered to meet the requirements of this standard when all the following conditions are fulfilled: - the currents, including the harmonic currents, generating the magnetic fields are known; - all harmonic currents with amplitudes higher than 10 % of the amplitude of the mains frequency decrease continuously over the frequency range; - the magnetic flux density measured over the whole frequency range is less than 30% of the reference level specified for the mains frequency.		
4.3	Measurement uncertainty	Certificated Equipment	P
4.3.1	Inaccuracies of measurement can give rise to errors in the calculated values of magnetic flux density and the weighted result. The total error on the final result shall not exceed 25 %		--
4.3.2	When the result has to be compared with a limit, the measurement uncertainty shall be implemented as follows: - to establish whether an appliance produces only fields below the limit, the measurement uncertainty has to be added to the result and the sum has to be compared with the limit;		--
	- to establish whether an appliance produces fields over the limit, the measurement uncertainty has to be subtracted from the result and the difference has to be compared with the limit		--

4.2.4.1	TABLE: Test Results	P

Test Position	Front	Rear	Right	Left	Top
Test Data	0.00511	0.00509	0.00483	0.00521	0.00508
Limit of this standard	1	1	1	1	1

Configuration diagram of the test:



** THE END *