

---

# **The Hong Kong Voluntary Energy Efficiency Labelling Scheme for**

## **Dehumidifiers January 2023**

Energy Efficiency  **EMSD**

Electrical and Mechanical Services Department  
3 Kai Shing Street, Kowloon, Hong Kong  
Homepage: <http://www.emsd.gov.hk>

## Preface

The Hong Kong Voluntary Energy Efficiency Labelling Scheme for Dehumidifiers (cited as “the Scheme”) was revised to cover the types of dehumidifiers not regulated under the Energy Efficiency (Labelling of Products) Ordinance (cited as “the Ordinance”) since March 2010. Basically, it includes dehumidifiers with daily water removal capacities over 35 litres but not exceeding 87 litres, which are not covered by the Ordinance.

For the scope of the dehumidifiers to be covered by the Scheme, please refer to section 3 of the Scheme for details.

For the dehumidifiers under the Ordinance, please refer to the requirement under the Ordinance.

The importers or local manufacturers of the dehumidifiers are welcome and encouraged to participate in the Scheme if their products fall into the classification of the Scheme.

## **Contents**

1.	Purpose	1
2.	Background	1
3.	Scope	2
4.	Definitions	3
5.	Classification of Dehumidifier	4
6.	Test Methodology and Technical Standard	5
7.	Energy Efficiency Requirement	6
8.	Performance Requirements	7
9.	Energy Label	8
10.	Testing Facilities, Laboratories & Accreditation Bodies	8
11	Registration and Participation	10
12	Legal Provisions	14
13	Compliance, Monitoring and Inspection	14
14	Complaints and Appeal	17
15	Maintenance of Scheme	18
16	Future Development	18

## Tables

1. Test condition for the determination of dehumidifying capacity..... 5
2. Minimum Allowable Energy Factor for High Capacity Dehumidifiers ..... 6

## Annexes

- 1 The Hong Kong Voluntary Energy Efficiency Labelling Scheme for Dehumidifiers  
– Energy Label Format
- 2 Proforma Letter of Invitation
- 3 Proforma Letter of Application
- 4 Information to be submitted to Energy Efficiency Office
- 5 Proforma Letter of Acceptance of Application
- 6 Proforma Letter of Rejection
- 7 The Hong Kong Voluntary Energy Efficiency Labelling Scheme for Dehumidifiers  
– Flow Chart for Registration Procedures

## **1. Purpose**

- 1.1 This set of document is intended to give a general description to the Hong Kong Voluntary Energy Efficiency Labelling Scheme for Dehumidifiers. For dehumidifiers regulated under the Energy Efficiency (Labelling of Products) Ordinance, please refer to the Ordinance.

## **2. Background**

- 2.1 The Energy Efficiency Labelling Scheme (EELS) is an energy conservation initiative that the Government of the Hong Kong Special Administrative Region has adopted. Under the EELS, some common types of household appliances/ gas appliances and office equipment will incorporate an energy label that serves to inform consumers of the product's energy consumption and efficiency. Consumers should then be able to take those factors into account in making their purchasing decision.
- 2.2 The concept of EELS has been implemented in several forms and in different stages of development in many countries. The EELS generally aims to achieve:
- greater public awareness of energy conservation and environmental improvement needs;
  - provision of readily available, pre-purchase information on energy consumption and efficiency data to enable ordinary consumers to select more energy efficient products;
  - stimulation to the manufactures/market for phasing out less energy efficient models; and
  - motivation of the actual energy savings behaviours and environmental improvements.
- 2.3 Hong Kong aims at achieving the above objectives. At present, the Hong Kong Voluntary Energy Efficiency Labelling Scheme covers 22 types of household appliances/ gas appliances and office equipment. Amongst them, 13 types are household appliances, 7 types are office equipment and 2 types are gas appliances.

### 3. Scope

3.1 The Scheme will only apply to the manufacturers and importers (i.e. local agents, retailers and the related parties) who are interested to or have participated in the Scheme.

3.2 The Scheme commenced on 30 December 2002. It is further revised on 1 January 2023. The existing and newly registered labels will remain valid till 31 December 2025. By then, renewal of the application may be required subject to the review of the Scheme.

Remarks: The scheme will be under review with respect to the latest international/national standards.

3.3 Unless the Director provides otherwise, the Scheme applies to dehumidifier defined and specified in clauses 3.3.1 and 3.3.2.

3.3.1 “Dehumidifier”, subject to clause 3.3.2 –

- (a) means an encased assembly for removing moisture from its surrounding atmosphere; and
- (b) includes self-contained, electrically operated and mechanically-refrigerated dehumidifiers that
  - (i) use mains electricity as the primary power source;
  - (ii) operate by using the vapour compression cycle;
  - (iii) consist of a refrigerated surface (“evaporator”) that condenses moisture from the atmosphere; a refrigerating system, including an electric motor; an air circulating fan; and a drain system for collecting or disposing of the condensate; and
  - (iv) have a rated dehumidifying capacity over 35 litres but not exceeding 87 litres per day.

3.3.2 “Dehumidifier” does not include dehumidifiers that

- (a) may also operate by using desiccant materials; or
- (b) are room air conditioners having dehumidifying function.

3.4 The scope of the Scheme covers all new dehumidifiers, imported to or manufactured in Hong Kong with effect from the date that is declared by the

participant but does not cover the second-hand products, products already in use, under trans-shipment or manufactured for export, etc.

- 3.5 The Scheme is operated as a 'Recognition Type' labelling system. All participating dehumidifiers will be recognised and registered under this scheme provided that they have met the energy factor and performance requirements as stipulated in the Scheme.

## 4. Definitions

Unless otherwise specified, the following definitions shall apply throughout this document:

<i>ANSI / AHAM</i>	means American National Standards Institute / Association of Home Appliance Manufacturers (the latest edition of the standard shall be followed for test methodology).
<i>Authority</i>	means the Electrical & Mechanical Services Department, the Government of the HKSAR.
<i>CAN/CSA</i>	means Canada / Canadian Standards Association (the latest edition of the standard shall be followed for test methodology).
<i>dehumidifying capacity</i>	means a measure of the ability of a dehumidifier to remove moisture from its surrounding atmosphere, measured in litres of moisture removed per 24 hours of period.
<i>Director</i>	means the Director of Electrical & Mechanical Services Department.
<i>energy factor</i>	means the energy efficiency of a dehumidifier that is measured in litres of water removed per kilowatt-hour (kWh) of energy consumed at standard test condition.
<i>Government</i>	means the Government of the HKSAR.
inspecting officer	means the officer authorized by the Director to carry out inspection on dehumidifiers.
label	means the energy label as described in Section 9 of this document.

mains electricity	means the electricity that is supplied in Hong Kong at a voltage of 380/220 V and a frequency of 50 Hz
participant	means the manufacturers, importers or the retailers of dehumidifier participating in the scheme.
<i>rated dehumidifying capacity</i>	means the dehumidifying capacity of a dehumidifier as determined and declared by the manufacturer or importer of the dehumidifier.
rated frequency	means the frequency marked on the nameplate or declared as such by the manufacturer or responsible distributor for the dehumidifier.
rated voltage	means the voltage marked on the nameplate or declared as such by the manufacturer or responsible distributor.
rated wattage	means the wattage marked on the nameplate or declared as such by the manufacturer or responsible distributor
recognized laboratory	means a laboratory that complies with the requirements as stated in Section 10 of this document and is acceptable to the Authority for carrying out tests and issuing test reports on dehumidifiers.
<i>the/this Scheme</i>	means the Hong Kong Voluntary Energy Efficiency Labelling Scheme for Dehumidifiers
<i>vapour compression cycle</i>	means a mechanism employed by a dehumidifier throughout which the refrigerant undergoes alternate compression and expansion to achieve the cooling or heating function.

## 5. Classification of Dehumidifier

- 5.1 The dehumidifier which has the rated dehumidifying capacity ( $D_R$ ) over 35 litres but not exceeding 87 litres per day (i.e.  $35 < D_R \leq 87$  litres/day) is classified as a high capacity dehumidifier in this Scheme.



## 6. Test Methodology and Technical Standard

### General

- 6.1 All test standards and specifications specified in this document are only related to checking compliance with the energy efficiency and general performance requirements. It is not the intention of this document to detail out the test standards and requirements for checking compliance with the Electrical Products (Safety) Regulation of the HKSAR. The participant should conduct appropriate tests, where necessary, in addition to those specified in this document in order to obtain Certificates of Safety Compliance for his dehumidifiers.

### Test Required to be Carried Out

- 6.2 The tests specified in this clause are required to be carried out, in accordance with ANSI/AHAM DH-1 or other equivalent international standards approved by the Director, in order to find out the energy efficiency and performance characteristics of a dehumidifier. A test report required to be submitted to the Director under clause 11.4 shall contain the results of these tests –
- (a) Dehumidifying capacity test for measuring dehumidifying capacity and corresponding energy consumption; and
  - (b) Maximum operating conditions test.

### Test Condition for the Determination of Dehumidifying Capacity

- 6.3 With respect to the measurement of the dehumidifying capacity of a dehumidifier, the requirements of ANSI/AHAM DH-1 standard test condition as shown in Table 1 shall apply.

**Table 1 – Test condition for the determination of dehumidifying capacity**

Parameter	Standard test conditions
Dry-bulb temperature	26.7 °C
Wet-bulb temperature	20.9 °C
Relative humidity	60 %

## Measurement of Dehumidifying Capacity and Energy Consumption

- 6.4 The testing methodology for measurement of the dehumidifying capacity and the corresponding energy consumption of a dehumidifier shall follow ANSI/AHAM DH-1 or other equivalent international standards approved by the Director. The dehumidifier shall be tested at a voltage and frequency of mains electricity in Hong Kong with tolerances as specified in the standard.

## Determination of Dehumidifying Capacity

- 6.5 The dehumidifying capacity of a dehumidifier shall be determined by using the test results of the test as measured in accordance with clause 6.4 and the relevant clause of ANSI/AHAM DH-1. In conversion of the dehumidifying capacity to litres per day, reference shall be made to the relevant clause of CAN/CSA-C749.

## 7. Energy Efficiency Requirement

### Determination of Energy Factor (EF)

- 7.1 The energy factor (litres/kWh) is used to measure the energy efficiency of a dehumidifier at the test condition and is calculated as follows –

$$\text{Energy Factor (EF)} = \frac{V}{E} \dots\dots\dots (\text{eq.1})$$

*Where V = amount of water removed (litres) measured in dehumidifying capacity test.*

*E = corresponding energy consumption (kWh) measured in dehumidifying capacity test.*

### Specific Energy Efficiency requirement

- 7.2 For the high capacity dehumidifiers as specified in clause 5.1, the energy factor should be equal to or greater than the corresponding minimum allowable value as indicated in Table 2:

Table 2 - Minimum Allowable Energy Factor for High Capacity Dehumidifiers

Rated Dehumidifying Capacity (D <sub>R</sub> ) (Litre/day)	Minimum Allowable Energy Factor (EF) (Litre / kWh)
35 < D <sub>R</sub> ≤ 87	2.35 ≤ EF

- 7.3 On top of the minimum allowable energy factor requirement, the dehumidifier concerned shall also pass the maximum operating conditions test as stipulated in clause 8.1.

## **8. Performance Requirements**

- 8.1 In the test report submitted to the Director under clause 11.4, the results of the tests carried out in accordance with the relevant clauses of ANSI/AHAM DH-1 or other equivalent international standards approved by the Director shall show that the concerned dehumidifier model conforms with the following performance requirements –
- (a) The measured dehumidifying capacity shall not be less than 95% of the rated dehumidifying capacity.
  - (b) The measured energy consumption shall not be greater than 105% of the rated energy consumption.
  - (c) The dehumidifier shall pass the maximum operating conditions test.
- 8.2 The rated dehumidifying capacity and the rated energy consumption as declared by the manufacturer or importer shall meet the requirements specified in clauses 8.1(a) and 8.1(b).

### **Safety Requirements**

- 8.3 In addition to the energy efficiency performance requirements, all dehumidifiers shall comply with the Electrical Products (Safety) Regulation, Chapter 406G of the Laws of Hong Kong, and the safety standards specified under the Regulation, and all other legislation concerning the safety of the dehumidifiers, e.g. the Gas Safety Ordinance and its subsidiary legislations, as appropriate.

### **Number of Samples to be Tested**

- 8.4 For submission of product information of a dehumidifier model under clause 11.4 of the Scheme, a test report on one sample of the model shall be submitted.

## **9. Energy Label**

- 9.1 The specification of the energy label for Dehumidifier is shown in Annex 1. After a reference number has been assigned to a product model in the name of a specified person and included in the Director's record, the specified person shall produce the energy label for his/her products of the listed model showing the information in strict accordance with the requirements in Annex 1.
- 9.2
- (a) Subject to clause 9.2(c), the energy label is to be attached or affixed to a prominent position of the dehumidifier and is to be clearly visible. The participant should ensure that the label appears on every registered dehumidifier on display, sale or hire.
  - (b) For the avoidance of doubt, if only part of the dehumidifier is being exhibited, the energy label is to be attached or affixed to a prominent position of that part and is to be clearly visible.
  - (c) The energy label may be attached to the dehumidifier or its packaging in a manner specified by the Director where the Director has approved its being so attached.
- 9.3 The energy label shall be of cardboard, if it is to be attached as a swing tag, or be self-adhesive and shall be cut to the outline shown in Annex 1 or otherwise approved by the Director. A trim or die cut margin of up to 2 mm around the energy label is acceptable.
- 9.4 The paper used for the energy label shall be durable with good wear and tear characteristics.
- 9.5 The energy label should be printed in both Chinese and English. Soft copy of the energy label can be obtained from Energy Efficiency Office, Electrical and Mechanical Services Department.

## **10. Testing Facilities, Laboratories & Accreditation Bodies**

- 10.1 The testing shall be carried out either by independent test institutes or by the manufacturers or by the importers themselves at their own test facilities. The Authority will accept the results and certificates issued by the test laboratory, which fulfils one of the following criteria as specified in clauses 10.2, 10.3 or 10.4.

- 10.2 The laboratory is accredited by the Hong Kong Accreditation Service (HKAS) for the relevant test under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or a scheme with which HKAS has concluded a mutual recognition agreement (MRA) <sup>#</sup>, and the results are issued in a test report or certificate bearing the accreditation mark.
- 10.3 The Authority will also consider the following –
- (a) Self-certification by original manufacturers that the operations of their in-house laboratories satisfy the requirements of ISO/IEC 17025; and
  - (b) The manufacturers are currently operating according to a recognized international quality system (such as ISO 9001); and
  - (c) The manufacturer's in-house laboratories had successfully carried out tests on dehumidifiers based on ANSI/AHAM DH-1, CAN/CSAC749-94, or other equivalent international standards approved by the Director; and these tests had been evaluated and certified by third party internationally recognised certification organisations.
- 10.4 The Authority will also consider the test results issued by a laboratory which is accredited by HKAS (or is under accreditation scheme operated by a laboratory accreditation body with which HKAS has concluded MRA) for the relevant tests on electrical and mechanical appliances other than the tests based on the technical standards stipulated in the Scheme; if the laboratory can demonstrate their capability of carrying out tests on dehumidifiers on the technical standards (i.e. ANSI/AHAM DH-1, CAN/CSAC749-94).

<sup>#</sup> *HKAS has concluded mutual recognition arrangements with overseas accreditation bodies for testing laboratory accreditation. The list of mutual recognition arrangement partners may change from time to time and the up-to-date list is available from the HKAS website of [www.info.gov.hk/itc/hkas](http://www.info.gov.hk/itc/hkas). Partners to these arrangements recognise the accreditations granted by one another as equivalent.*

### **Laboratory Accreditation**

- 10.5 Government takes cognizance of the need to ensure acceptable and compatible quality standards of testing laboratories, and considers that they need to be periodically accredited by some independent bodies.
- 10.6 The criteria of accreditation should be based on ISO/IEC 17025 and the certification body should operate in accordance with ISO/IEC 17011.

- 10.7 The Authority will recognize the accreditation granted by the HKAS under the HOKLAS and by overseas accreditation bodies with which HKAS has concluded MRA. For the accreditation by other certification bodies, the Authority will consider on a case-by-case basis.

### **Energy Efficiency Certification Service**

- 10.8 An increasing number of countries now accept, as proof of product conformance, energy efficiency certification services provided by the organisation that has been accredited as a certification body. In accordance with this trend, the Authority will also consider test results that have been evaluated and certified according to the respective ISO or IEC standards of the Scheme by reputable certification organisations.

## **11 Registration and Participation**

### **Registration Procedures**

- 11.1 All manufacturers, importers and the other parties involved in the dehumidifier distribution network are welcome and encouraged to participate in the Scheme. The Authority will send invitation to those known manufacturers and importers. However, no matter whether invited or not, any interested parties may submit their applications for the registration.

- 11.2 The proforma letter of invitation is shown in Annex 2.

- 11.3 Applicant should submit formal application to

*Chief Engineer/Energy Efficiency A  
Energy Efficiency Office  
Electrical and Mechanical Services Department  
3 Kai Shing Street, Kowloon  
Hong Kong*

by means of an application letter through mail, facsimile or electronic mail. In order to ensure effective implementation of the Scheme, the applicant must commit himself to fully comply with the duties, responsibilities and obligations set out in the Scheme. The proforma letter of application as shown in Annex 3 details the aforesaid obligations and should be used for application. To facilitate the application process, the application form can be downloaded from EMSD website or via online application services.

### **Information/Documents to be Submitted for Registration**

11.4 Each make and model of a dehumidifier participating in the Scheme should be provided with a test report issued by a recognized laboratory. The test report should contain energy consumption tests and performance test results. The details of the technical information to be submitted together with the application are listed as follows: -

a) Information on the company

Name, Address, Telephone number, Fax number, E-mail address, Contact person, Importer, Distributor, etc.

b) Product to apply for participating in the Scheme:

Name of products, types, brand names, models, countries of origin

c) The parties which will be responsible for making and fixing the Energy Labels;

d) Commencement date to affix Energy Label on dehumidifier

Year\_\_\_\_\_, Month\_\_\_\_\_

e) Supporting Technical Information and Calculations

Test reports: -

- Power input and water removal capacity per day
- Energy consumption for 24 hours operation
- Testing conditions (i.e. temperatures and relative humidity)
- Testing method used
- Maximum operating conditions test

Calculations:-

- Dehumidifying capacity test and energy factor

f) Miscellaneous Technical Information:

Product information catalogue

Technical Specification

Others

g) Certificate of Safety Compliance prescribed by the “Electrical Products (Safety) Regulation”.

The above list of information can also be found in Annex 4, Information to be submitted to Energy Efficiency Office.

- 11.5 Company's name and chop should be stamped on all the documents provided. All photocopy test reports submitted to the Authority shall be certified true copy by appropriate organization.

### **Acceptance of Registration**

- 11.6 On receipt of the application, the Authority will process the application and verify whether the dehumidifier to be registered falls into the appropriate dehumidifier category, and meets the energy efficiency and performance requirements based on the submitted data. The accuracy of the energy consumption data, their inconsistencies and non-compliance will be dealt with in accordance with clause 13.2.
- 11.7 If the application is accepted, the participants will be notified of the result in writing within 17 working days upon receipt of all necessary information requested. The participants will then be allowed to affix the label onto the 'registered' dehumidifiers. Both manufacturer and importer of the registered dehumidifier should ensure that the energy label is correctly printed and affixed on the dehumidifier in accordance with section 9. The proforma letter of acceptance is shown in Annex 5.
- 11.8 If the application is rejected, the notification letter (proforma letter of rejection as shown in Annex 6) will also be given within 17 working days upon receipt of all necessary information requested.
- 11.9 The flow chart for registration is shown in Annex 7

### **Participant's Duties, Responsibilities and Obligations**

- 11.10 The participant is obliged to:-
- a) submit application and information including test results in accordance with format & procedures set out in clauses 11.4 and 11.5;
  - b) conduct tests via recognized laboratories and to comply with the specified test methodology and classification scheme;
  - c) produce and affix labels at his own costs;
  - d) fully inform other sales agents in his distribution network once the particular make and model of a dehumidifier is registered under the Scheme;
  - e) allow random/ad-hoc inspection to be conducted by persons authorized by the Authority on registered dehumidifier at his premises;



- f) conduct re-test(s) at his own costs at some recognized laboratories, if non-compliance is found on his registered dehumidifier, or if the results of inspection suggest inaccurate energy label information being displayed. The result of re-test(s) shall reach the Authority within the prescribed period of time specified by the Authority; normally three months;
- g) inform the Authority of any change in the technical information and data that were previously submitted to the Authority together with the application letter;
- h) accept the fact that if registered dehumidifier fails to perform in accordance with the required standard performance as given in section 8 and this cannot be readily rectified, the Authority may order it be de-registered from the Scheme; and
- i) remove all labels from the de-registered dehumidifiers immediately.

11.11 The details of the registered dehumidifiers under the Scheme will be kept in a register list maintained by the Authority. The registration records will be regularly uploaded and maintained in the EMSD Internet for public and interested parties for browsing and reference.

### **Termination**

11.12 Under circumstances of poor performance of the participant such as –

- (a) (repeated) failure to fulfil the obligations set out under clause 11.10; or
- (b) false, inaccurate or misleading information is given on the energy label; or
- (c) in any other case where the Director is of the opinion that registration of the particular dehumidifier is contrary to the public interest,

the Authority may de-register the concerned dehumidifier from the Scheme with immediate effect by giving the participant a notice in writing. Once the dehumidifier is de-registered, energy label is not allowed to fix on it. However, participant will normally be given a grace period of three months to remove all labels from the de-registered dehumidifiers.

The concerned dehumidifier could be de-registered even when there is no legal action taken under either the Trade Description Ordinance (Chapter 362) or the Copyright Ordinance (Chapter 528).

11.13 Participant who decides to discontinue participating in the Scheme or to withdraw any registered model from the registered dehumidifiers list shall give at least three months' advance notice to the Authority.

## 12 Legal Provisions

- 12.1 The Scheme is a voluntary scheme. However, a participant who abuses the Scheme by giving false information on an energy label may contravene provisions of the Trade Description Ordinance (Chapter 362).
- 12.2 No one could take advantage of the Scheme by using the energy label on his dehumidifiers without authorization of the Authority as that shall constitute an infringement of copyright under the Copyright Ordinance (Chapter 528).

## 13 Compliance, Monitoring and Inspection

### Purpose

- 13.1 To uphold the credibility of the Scheme and to continue maintaining the confidence of the consumers, compliance check on energy labels on those dehumidifiers participating in the Scheme are needed. Also, to avoid the non-participating parties from taking advantage of the Scheme by using unauthorized labels, suitable form of inspection shall be conducted on those dehumidifiers which have not been registered under the Scheme.

### Scope

- 13.2 The scope of inspection includes sample **checking** and **testing** of the following items:-
- (a) whether the energy label is affixed on the registered dehumidifier;
  - (b) whether the energy label on the registered dehumidifier is affixed to a prominent position in accordance with clause 9.2;
  - (c) whether the energy label being displayed is of correct format in accordance with section 9;
  - (d) whether the information on energy label accords with record;
  - (e) whether the registered refrigerated appliance complies with the energy factor and the performance requirements;
  - (f) whether the data submitted by the participants are correct by random re-testing; and
  - (g) whether the unregistered dehumidifiers display unauthorized energy labels.

- 13.3 The participants will be requested to take immediate remedial action and report of follow-up action taken if non-compliance is found on their dehumidifiers.
- 13.4 For a registered dehumidifier which is found with inaccurate energy performance data (i.e. discrepancy between the registration data record and the test result is more than 10%) on the energy label during random checking, the Authority may request the participant to conduct a separate energy consumption test at his own cost, in accordance with the test methodology as stated in section 6, in one of the testing laboratories agreed by the Authority.
- 13.5 If non-compliance is confirmed and no remedial action is to be taken by the applicant, the Authority may order it be de-registered from the scheme. Failure to remove energy labels from the de-registered appliances after the Director has withheld his authorization for using such labels may contravene the relevant ordinances.

#### **Inspecting Officers**

- 13.6 The Authority will authorize inspecting officers to carry out compliance monitoring and inspection on dehumidifiers. The officers will carry proper identification cards which will be produced upon request during their inspection operations. However, the officer will not inform the participants in advance of their intended inspection operation.
- 13.7 It is the participants' obligation to allow the inspecting officers to gain access to their premises to carry out inspection.

#### **Mode of Inspection**

- 13.8 Inspections will be carried out on registered dehumidifiers under the Scheme on random basis. Based on the record of the registration, random inspection programmes will be developed.
- 13.9 In addition to the random inspections, the inspecting officers will carry out ad-hoc inspections in response to complaints. The items to be inspected in such a case will depend upon the nature of complaint and may include all types of inspection as stated in clause 13.2.
- 13.10 Inspections will normally be carried at the dehumidifiers retail outlets and showrooms. Where necessary, inspection will also be done at warehouses.

- 13.11 The inspection results will be properly recorded for future analysis as well as on evaluation of the effectiveness of the Scheme.

### **Compliance**

- 13.12 During the compliance monitoring testing carried out by the Director, a listed model of dehumidifier will be accepted as conformance if the test results of a single sample of the listed model meet the following criteria :
- (a) The tested dehumidifying capacity being not less than 90% of the rated dehumidifying capacity.
  - (b) The tested energy consumption being not greater than 110% of the rated energy consumption.
  - (c) The dehumidifier passing the maximum operating conditions test.
  - (d) If the energy factor calculated in the compliance monitoring testing being not equal to nor better than the energy factor determined by the test results submitted to the Director due to decrease in energy factor, the tested energy factor calculated in the compliance monitoring testing being not less than 90% of the measured energy factor calculated by the test results submitted to the Director.
- 13.13 The Director may remove from the record the reference number of a listed model of dehumidifier, if he has reasonable grounds to believe that the dehumidifier does not conform with the specified information or a specified document, or their updates if any, submitted to the Director. The specified person may provide explanation on the failure of a product to pass the compliance monitoring testing stipulated in clause 13.12 above and apply for further testing of the concerned model for the Director's consideration.
- 13.14 If further testing is approved to be carried out, three samples of the same model shall be tested at the specified person's own costs. A listed model of dehumidifier will be accepted as conformance if the results of further testing meet the following criteria:
- (a) The tested dehumidifying capacity being not less than 90% of the rated dehumidifying capacity.
  - (b) The tested energy consumption being not greater than 110% of the rated energy consumption.
  - (c) Each sample of dehumidifier passing the maximum operating conditions test.

- (d) If average of the tested energy factors of all the samples calculated in the further testing being not equal to nor better than the energy factor determined by the test results submitted to the Director due to decrease in energy factor, the average of the tested energy factors of all the samples calculated in the further testing being not less than 90% of the measured energy factor calculated by the test results submitted to the Director.

(Remark : The specified person can choose to accept the results of further testing undertaken on fewer than three samples if the results of each sample subsequently tested also do not meet the acceptance criteria as stated above.)

## **14 Complaints and Appeal**

- 14.1 The Authority will be responsible for dealing with the complaints from participant and other parties against matters related to the Scheme.

### **Complaints Handling Procedures**

- 14.2 The Director shall ensure that complaints are properly recorded and handled without undue delay.
- 14.3 The Authority shall carry out preliminary investigation on complaints and reply to the complainants within a reasonable time. For complaints that require site inspection and laboratory test, the complainant shall be notified through an interim reply.
- 14.4 The Authority shall inform the complainant of the results or decisions made on the complaint.

### **Appeal Procedures**

- 14.5 A participant who feels aggrieved by the decision or action given by the Authority according to section 13 may appeal to the Director in writing stating the reason for the appeal.
- 14.6 The Director may decide to suspend the decision or action given by the Authority from the day on which the appeal is made until such appeal is disposed of, withdrawn or abandoned unless such suspension would, in the opinion of the Director, be contrary to public interest.

- 14.7 The Director may by notice to the appellant require that appellant to attend meeting with him or his representative, provide documents and give evidence relevant to the appeal.
- 14.8 The Director shall notify the appellant of his decision and the reasons for it. The decision will be final and binding.

## **15 Maintenance of Scheme**

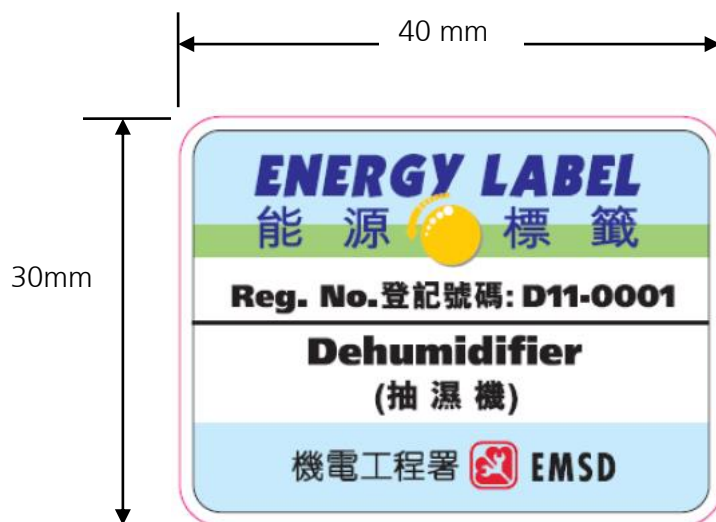
- 15.1 To ensure that the Scheme can continue to operate effectively and efficiently after its introduction, a proper system of maintenance is needed.
- 15.2 The maintenance system consists essentially of -
- (a) Continuous updating of the following relevant information of the participants in the Scheme -
    - i. Details of the registered dehumidifiers such as registration number, date of registration or de-registration if it occurs, energy consumption data, energy factor, performance data, make, model, category and other related information; and
    - ii. Details of the registered importers, manufacturers, local agents, etc.; in the distribution network such as address, date of registration or de-registration if it incurs, etc.
  - (b) Periodic review of the test methodology, and procedures for application of registration and compliance monitoring, etc., to bring them in line with the latest needs of the manufacturers, importers and retailers, etc.
  - (c) Continuous evaluation of the effectiveness of the Scheme and assessment of what changes are necessary.

## **16 Future Development**

- 16.1 It is hoped that following the implementation of the Scheme, the market will phase out models of low efficiency appliances and public awareness of using energy efficient products will be much improved.

- 16.2 To further facilitate the public in choosing energy efficient appliances and raise public awareness on energy saving, the Government has introduced a mandatory Energy Efficiency Labelling Scheme (EELS) through the Energy Efficiency (Labelling of Products) Ordinance.
- 16.3 Under the mandatory EELS, energy labels are required to be shown on prescribed products for supply in Hong Kong to inform consumers of their energy efficiency performance. Eight types of prescribed products covered in the mandatory EELS are room air conditioners, refrigerating appliances, compact fluorescent lamps, washing machines, dehumidifiers, televisions, storage type of electric water heaters and induction cookers.

**The Hong Kong Voluntary Energy Efficiency Labelling Scheme**  
**for Dehumidifiers**  
**Energy Label Format**



(Not to Scale)

Notes : The figure of the energy label is shown not to scale.

Soft copy of this label can be obtained from Energy Efficiency Office,  
Electrical and Mechanical Services Department.



## Proforma Letter of Invitation

Our ref. ( ) EMSD/EEO/LB/12  
Your ref.

Tel.  
Fax.

Date

[ Name and Address of  
Manufacturers/Importers/Agents ]

Dear Sir/Madam,

### **Invitation of Application for Registration in The Hong Kong Voluntary Energy Efficiency Labelling Scheme for Dehumidifiers**

Having gone through the necessary consultations and duly considered the views from various concerned parties, the government has decided to introduce a voluntary energy efficiency labelling scheme for dehumidifiers to Hong Kong with effect from (\_\_\_\_\_). The details of the Scheme<sup>①</sup> have been finalized and I enclose herewith a guide of the Scheme for your reference.

Being one of the major dehumidifiers' manufacturers / importers / agents<sup>②</sup> in Hong Kong, you are invited to participate in the Scheme so as to take part in promoting public awareness in energy conservation and environmental improvement to Hong Kong. If you are interested to participate in the scheme, please apply in accordance with the proforma letter of application (Annex 3) and submit details including technical information in accordance with the attached Annex 4 to the 'Chief Engineer / Energy Efficiency A' at the following address.

Energy Efficiency Office  
Electrical and Mechanical Services Department  
3 Kai Shing Street, Kowloon  
Hong Kong

Please be reminded to submit accurate test data to support your application. Under this Scheme, routine compliance monitoring and checking will be performed and if a registered dehumidifier is found to be non-compliant, we may consider deregistering the dehumidifiers from the Scheme.

Should you need further clarification or information, you are most welcome to contact the undersigned or Mr \_\_\_\_\_, at the telephone number \_\_\_\_\_.

Yours faithfully,

for Director of Electrical & Mechanical Services

(Note : <sup>①</sup> 'Scheme' means 'The Voluntary Energy Efficiency Labelling Scheme for dehumidifiers '  
<sup>②</sup> delete as appropriate)

## Proforma Letter of Application

Your ref. ( ) EMSD/EEO/LB/12

Our ref.

Tel.

Date

Chief Engineer/Energy Efficiency A  
Electrical & Mechanical Services Department  
3 Kai Shing Street, Kowloon  
Hong Kong

Dear Sir/Madam,

### **Application for Registration to Participate in The Hong Kong Voluntary Energy Efficiency Labelling Scheme for Dehumidifiers**

Our company is the (manufacturer/importer/agent\*) of \_\_\_\_\_ in Hong Kong. We support the introduction the labelling scheme to Hong Kong and would like to be one of the participants in the Scheme to promote energy efficiency.

I understand fully the obligations and duties stated in the Scheme and will comply with all relevant requirements, in particular those specified below:

- i) conduct tests via recognized laboratories and to comply with the specified test standards;
- ii) produce and affix specified labels at my own costs;
- iii) allow random/ad-hoc inspection to be conducted by persons authorized by the issuing Authority on registered dehumidifier at my premises;
- iv) conduct re-test(s) at my own costs at some recognized laboratories, if the results of inspection suggest inaccurate energy label information being displayed. The result of re-test(s) shall reach the Authority within the prescribed period time specified by the Authority;
- v) inform the Authority of any change in the technical information and data that were previously submitted to the Authority together with the application letter; and
- vi) accept the fact that if dehumidifier fails to perform in accordance with the required energy efficiency standards and performance as given in Sections 6 & 7 and this cannot be readily rectified, the Authority may order it be de-registered from the Scheme.

The details of information of those dehumidifiers which we intend to register with the Authority are shown in the attached document (Annex 4), and are submitted herewith for your vetting.

Yours faithfully,

(Manufacturer/Importer/Agent's Name and Company Chop)

\* *delete as appropriate*

## Information to be submitted to Energy Efficiency Office

1. Information on the Company:  
Name, Address, Telephone number, Fax, Email address, Contact person, Importer, Distributor, etc.
2. Product to apply for participating in the Scheme:  
Name of products, types, make, model references, countries of origin
3. Parties will be responsible for making and fixing the Energy Label.
4. Commencement date to affix Energy Labels on Dehumidifier package  
Year \_\_\_\_\_, Month \_\_\_\_\_
5. Detailed test reports providing at least the following relevant technical data for the participating dehumidifiers:
  - (a) Power input and rated dehumidifying capacity;
  - (b) Energy consumption;
  - (c) Energy factor of the dehumidifier;
  - (d) Testing conditions (i.e. temperatures and relative humidity)
  - (e) Testing method used;
  - (f) Result of dehumidifying capacity test and energy factor; and
  - (g) Result of maximum performance test.
6. Miscellaneous Technical Information:
  - (a) Product information catalogue;
  - (b) Technical Specifications; and
  - (c) Others
7. Certificate of Safety Compliance prescribed by the Electrical Products (Safety) Regulation of HKSAR for the concerned dehumidifiers in the application.

**Note:** *Company's name and chop should be stamped on the all documents provided.  
All test reports submitted to the office should be certified true copy by appropriate organization.*

## Proforma Letter of Acceptance

Your ref.

Our ref. ( ) EMSD/EEO/LB/12

Tel:

Fax:

Date

「

Name and Address of  
Manufacturers/Importers/Agents

」

Dear Sir/Madam,

### **Acceptance of Application for Registration in The Hong Kong Voluntary Energy Efficiency Labelling Scheme for Dehumidifiers**

With reference to your letter of ref. \_\_\_\_\_ dated \_\_\_\_\_, we are pleased to inform you that your application to participate in the captioned scheme has been accepted.

We enclose herewith the registration certificates of Dehumidifiers registered. The registered Dehumidifiers are as follows:

<u>Brand/Make/Model</u>	<u>Registration No.</u>	<u>Effective date</u>
( _____ )	( _____ )	( _____ )

You are allowed to affix a specified energy label onto each and every dehumidifier package registered under the scheme. The contents of the energy label should be based on the information that you have provided in your application ref. \_\_\_\_\_ and dated \_\_\_\_\_.

Should you have any queries regarding the scheme, please contact this office.

Yours faithfully,

for Director of Electrical &amp; Mechanical Services

**Proforma Letter of Rejection**

Our ref. ( ) EMSD/EEO/LB/12  
Your ref.

Tel.  
Fax.

Date

「  
Manufacturers/Importers/Agents  
」

Dear Sir/Madam,

**Rejection of Application for Registration in**  
**The Hong Kong Voluntary Energy Efficiency Labelling Scheme**  
**for Dehumidifiers**

With reference to your letter ref. \_\_\_\_\_ dated \_\_\_\_\_,  
we regret to inform you that your application for registration to participate in the scheme  
has not been accepted for the following reasons:-

1. \_\_\_\_\_,
2. \_\_\_\_\_, etc.

You are most welcome to submit new application again in future, when you  
have the necessary documents / information to support your application.

Yours faithfully,

for Director of Electrical & Mechanical Services

# **The Hong Kong Voluntary Energy Efficiency Labelling Scheme for Dehumidifiers**

## **Flow Chart of Registration**

