

Directions of Gulf Technical Regulations and Energy Rationalization labels for AC in GCC Member States

Mr. Basem Salameh,
Senior Technical Regulation Specialist, GSO

Dubai 13th September 2022.

GSO... in brief



- Regional Standardization Organization (RSO)
(Standards, Conformity Assessment and Metrology systems)
- Inter-governmental organization (IGO)
- Established in December 2001
- Operated in May 2004
- Has GCC Member States (UAE, BH, SA, OM, QA, KW) and Yemen
- Headquarter: Riyadh, Kingdom of Saudi Arabia

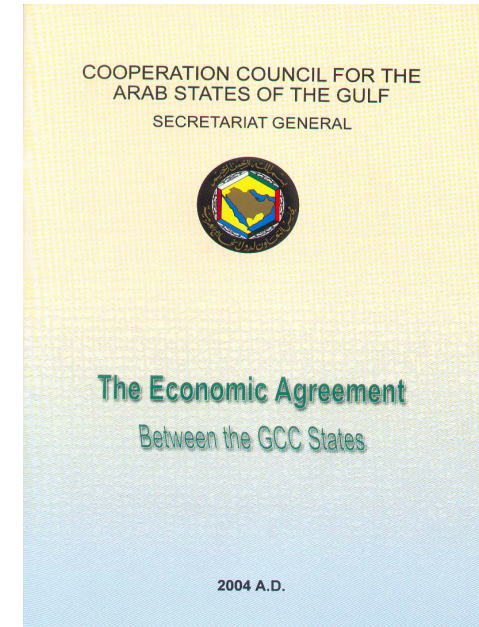
Headquarter: Riyadh, Saudi Arabia



<https://goo.gl/maps/eTKt3kTb6aSNXX6V9>

GSO's Mandates

- Support The GCC Economic Agreement,
- in accomplishing GCC Common Market,
- a regional single market & a customs union, and single-entry point
- intra/ inter TRADE facilitation and Free product circulation, by:
 - ✓ avoiding **or removing technical barriers** to trade.
 - ✓ setting up the **ESSENTIAL REQUIREMENTS**
 - ✓ providing effective technical tools for implementation
 - ✓ consumers protection



Strategic Objectives

- Meeting GCC economic objectives
- Capacity building.
- **Participation of all stakeholders.**
- Spreading “Standardization” awareness.
- Positive participation in various international forums & activities

GSO Mission

To achieve integration and interdependence between the member states of the Gulf Cooperation Council in the areas of organizing and unifying standardization activities and following up on their implementation to ensure the safety of products, efficiency of services and ease of transfer in the Gulf common market, in addition to consumer protection to improve the quality of life in GCC member states and strengthen their economies to compete in global markets.

GSO Vision

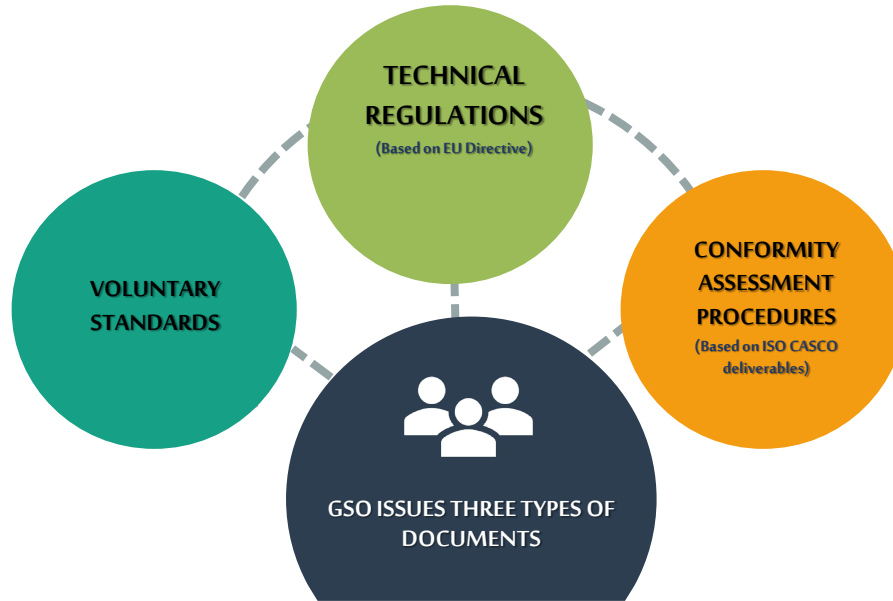
- To be the trusted regional center of excellence in standardization activities, and the first enabler for the Gulf common market.

GSO Members



National Standards Bodies (NSBs)

GSO... Issues three types of documents



GSO... in figures



2021 GSO Report

Technical Regulation Development

- **Existing Technical Regulations**
- **Comprise Horizontal TRs applicable to all Types of products or risks:**
 - General Safety of products,
 - Gulf Conformity Marking,
 - Notified Bodies,
- **Comprise Sectorial TRs applicable to Specific Types of products or risks:**
 - Toys
 - LV Electrical Equipment & Appliances

Gulf LV TR-Conformity

- Ⓞ Gradual Implementation for 13 groups of products
- Ⓞ Presumption of conformity with Gulf Standards.
- Ⓞ Presumption of conformity with International Standards (IEC).
- Ⓞ Latest version of IEC Standards apply, **however TWO years considered for** a transition period.
- Ⓞ Manufacturer Declaration of Conformity / Importer Declaration of Conformity.
- Ⓞ Electrical equipment made available on the market shall bear the **Gulf Conformity Marking (GC Marking)**.



Gulf LV TR-Conformity Assessment

- Ⓞ Electrical equipment with the IECEE CB SCHEME certificate of conformity, which must take into account the national deviations of Member states including Gulf Conformity Marking).

GSO NOTIFIED BODIES







WWW.GSO.ORG.SA/NB

GSO Notified Bodies

www.gso.org.sa/nb

- ④ Designation and notification by GSO
- ④ Applicable Technical requirements on competency (derive from ISO/CASCO Standards).
- ④ Designation open to CABs situated outside of member states territory.
- ④ provided they have a legal representation in member states territory) and liability insurance.

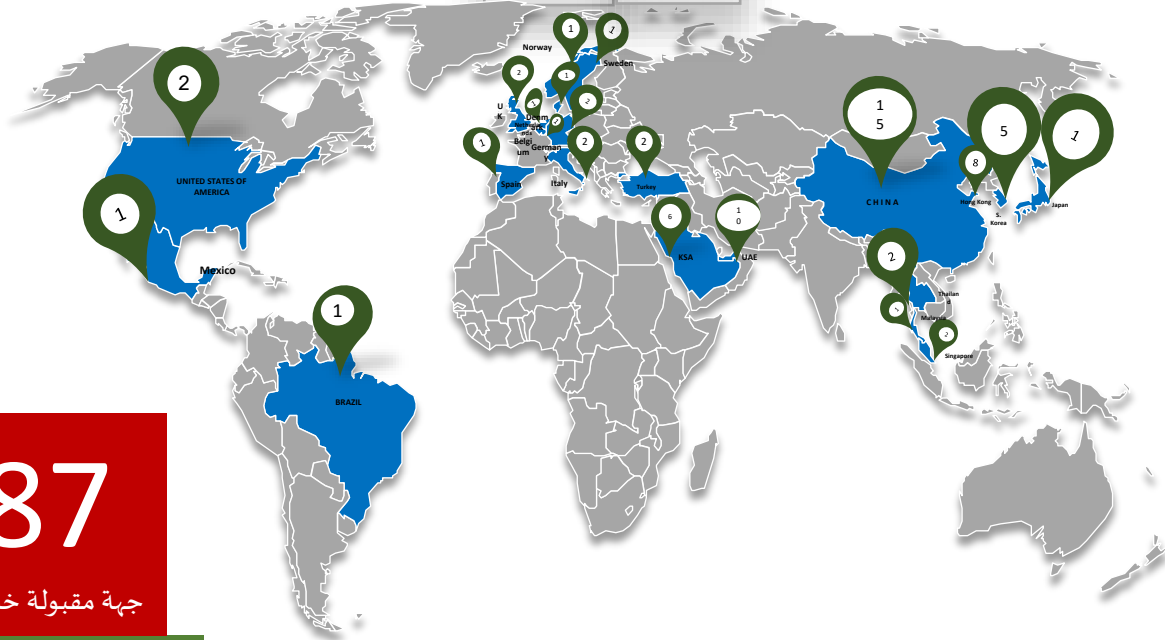
- Notified Bodies are accessible on-line
- www.gso.org.sa/nb

Notification Number	Notified Body/Branch Name	Country	Technical Regulation	Notification Status
0002	Emirates Authority for Standardization and Metrology (ESMA)		LVD	Notified
			Toys	Notified
0003	SGS Gulf Limited		LVD	Notified
			Toys	Notified
0004	UL VS Hong Kong Limited		Toys	Notified
0005	Intertek Testing Services Hong Kong Ltd		LVD	Notified
			Toys	Notified
0006	China Quality Certification Center (CQC)		LVD	Notified
			Toys	Notified
0007	TUV Rheinland Hong Kong		LVD	Notified

GSO NOTIFIED BODIES MAP

EUROPE

- Germany (2)
- UK (2)
- Italy (2)
- Denmark (1)
- Netherlands (1)
- Sweden (1)
- Norway (1)
- Spain (1)
- Belgium (1)



87

جهة مقبولة خليجياً

2021-08-19

GSO Conformity Tracking System
GSO Conformity Tracking Symbol
GCTS
Rules - Tools

GSO Conformity Tracking Symbol (GCTS)



GCTS for Products

A symbol provided by the GSO, consisting of (1) the Gulf Conformity Marking, and (2) the QR Code. This symbol is generated by GSO Certificate Tracking System

- GCTS is not a quality mark.
- GCTS is not registration system

GCTS is a result of CAPs as in GSO Technical Regulation

[https://www.gso.org.sa/wp-content/uploads/2017/11/\"Gulf-Conformity-Tracking-Symbol\"-GCTS.pdf](https://www.gso.org.sa/wp-content/uploads/2017/11/\)

GSO Conformity Tracking Symbol (GCTS)



Certificate Tracking
Number

XXXX-YYYY

ID number of the
Notified Body

Progressive
number assigned
to the certificate

GCTS for Certificates

GSO Conformity Tracking Symbol (GCTS)

Affixing GCTS for certificates is mandatory on Gulf Type Examination Certificates first/front page



GSO Conformity Tracking Symbol (GCTS)

- Quick and in-time information available for all product bearing GCTS in the GCC market.
- A DATA BASE covering all products bearing GCTS which circulation in GSO member states markets including up-to-date information about the current situation of conformity
- Efficient co-operation and communication with CUSTOMS authorities and Market Surveillance authorities through GPPT group.
- Make the GCT System available for public.
- An effective means to inform the competent authorities about unsafe products.

GSO Certificate Tracking System:

- Platform for NBs to document all products which subject to its procedures.
- GSO Conformity Tracking Symbol (GCTS) will generated by this system.
- Competent authorities in GSO member states has the right to use this system by scanning the GCTS.

Harmonized Standards


Help English

Harmonized Standards

هيئة التقييس
للدول مجلس التعاون دول الخليج العربية
GCC Standardization Organization


ROLES
PROCEDURE
GUIDELINE
REGULATION
REQUIRE
STANDARDS
COMPLIANCE
POLICY
LAW

Harmonized Standards for GSO Technical Regulations



Low Voltage Electrical Equipment & Appliances

> View All Harmonized Standards



Children Toys

> View All Harmonized Standards

<https://www.gso.org.sa/harmonized-standards/>



Low Voltage Electrical Equipment & Appliances

Standards requirements of GSO Technical Regulations

[Download Guidance](#)

Categories & Scopes

Electric smoothing irons ▾

Household Plugs, Socket outlets, Adaptors,
Cord Extension Sets and chargers ▾

Household air conditioners ▾

Household clothes dryers and clothes
washing machines, including machines which
both wash and dry ▾

Household electric heating apparatus ▾

Household electric instantaneous or storage
water heaters and immersion heaters ▾

Household electrical fans ▾

Household electro-thermic hair-dressing, skin
apparatus and hand dryers ▾

Household food grinders and mixers, fruit or ▾

Electrical air-conditioners

Safety Harmonized Standards

GSO IEC 60335-1

GSO IEC 60335-2-40

EMC Harmonized Standards

GSO CISPR 14-1

CISPR 11

GSO IEC 61000-3-2

GSO IEC 61000-3-3

IEC 61000-6-3

CISPR 14-2

GSO IEC 61000-6-1

GSO IEC 61000-3-12

GSO IEC 61000-3-11



HS Code

84151000

84151010

84151020

Notes

The scope includes air-conditioners suitable for fixing on windows, walls, floors or roof, consisting of a single or separate body with no limitation of capacity.

The following types are considered out of scope:

- Central air conditioning machines covered by HS codes 84 15 82 20 and 84 15 83 20
- Appliances used to change the humidity conditions only

Excluded: all room cooling systems (Vented / Ducted); heat pumps, including sanitary hot water heat pumps; air purifiers

Household air conditioners

In Scope

The scope includes

- electric air conditioners incorporating motor-compressors and hydronic fan coils units
- partial units (e.g. indoor / outdoor units shipped separately)

Out of Scope

The scope excludes

- central air conditioning machines;
- air conditioners for non-residential applications such as industrial and similar use
- evaporative air coolers;
- heat pumps, including sanitary hot water heat pumps;
- dehumidifiers;
- air purifiers;
- fans to be incorporated in air conditioning equipment;
- supplementary heaters to be incorporated in air conditioning equipment;
- humidifiers intended for use with heating and cooling equipment;
- automotive air conditioners.

GSO Strategy 2021-2025



GSO Strategy 2021-2025



GSO upcoming 2025 Strategy

The Technical Council determined three pillars for the upcoming 2025 Strategy:

1. Organization Excellence.
2. Pioneer regional Organization
3. GCC Economic integration enhancement.

So that all strategic goals will be linked to the above pillars.

GSO Thoughts on Participation and Coordination

WAY FOR IMPROVEMENT

GSO & Economic Operators Dialog.

Regulatory Process: Factors for success



- ❖ Affected by Quality of TRs
- ❖ Trade Facilitation
- ❖ Transparency
- ❖ For better Regulation
- ❖ Expertise, Impartiality

- 1st GSO-EOs meeting (Bahrain, January 26th 2017)
- 2nd GSO-EOs meeting (Oman, April 1st 2019)
- 3rd GSO-EOs Online meeting (December 14th, 2020)
- 4th GSO-EOs Hybrid meeting (Riyadh, June 13th 2022)



Participation of Economic Operators

❖ GSO is seeking to enhance cooperation with EOs to ensure:

- Input from EOs at early stage in legislative process
- Effective participation and preparation for TRs development
- Expertise and better alternatives for:
 - Technical Requirements;
 - Conformity Assessment Procedures
- Spreading awareness and Training on Technical Regulations
- Effective and smooth implementation of TRs

Thoughts on ways for cooperation

Meet

Periodical meetings, workshops on specific topics

Work

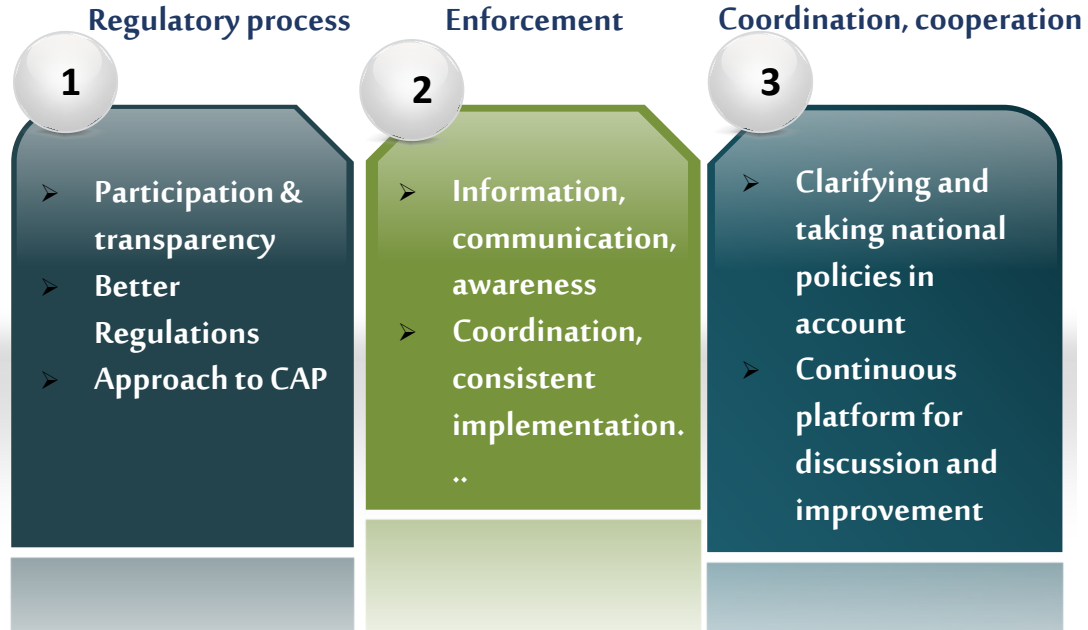
Setting up global or sectorial groups of cooperation
Addressing global, sectorial or specific topics
Forums of discussions, and specific works...

Follow up

Recommendations from cooperation group to be formally forwarded to the GCCA for further actions

COOPERATION & PARTICIPATION WAY FOR IMPROVEMENT

Thoughts on Topics for discussion



Safety and minimum energy performance



For safety and EMC matters:

The product shall fulfill the requirements of GSO Technical Regulation LV



For Energy performances:

The product shall be classified according to the Energy labelling Classification.

Comparison table – domestic air conditioners

	KSA	UAE	Qatar	Bahrain	Kuwait	Oman
Standard	SASO 2663	UAE.S 5510-1	QS 2663	AC Regulation	KWS 1893	GSO 2530
Laboratory	SASO-registered	ISO 17025	ISO 17025	ISO 17025	ISO 17025	ISO 17025
Registration with	SEEC	MOIAT	QS	BTMD	PAI	DGSM
Verification by	SASO	ECAS NB	QS	BTMD NB	KUCAS NB	DGSM NB
Certificate	SL&S	ECAS	QS	BTMD	PAI	DGSM
Validity	1 year	1 year	1 year	3 years	3 years	3 years
Labelling	7-bars (A-G)	5-stars	9-stars	6-stars	10-stars	10-stars
Traceability	QR code	RFID tag	-	QR code	QR code	QR code

Oman Energy Efficiency Plat form

Since July 2019

منصة إصدار بطاقات كفاءة الطاقة للمكيفات في سلطنة عمان

التسجيل
تسجيل المنتجات للحصول على بطاقات تصنيف كفاءة الطاقة.
سجل منتجك

الجهات المقبولة
جهات تقويم المطابقة المقبولة لإصدار بطاقات كفاءة الطاقة
تصفح الجهات المقبولة

المنتجات
المنتجات الحاصلة على بطاقة تصنيف كفاءة الطاقة لسلطنة عمان.
تصفح المنتجات

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نظام كفاءة الطاقة العماني ثمره تعاون ووجه مشترك بين المديرية العامة للمواصفات والمقاييس (DGSM) في سلطنة عمان ، وهيئة التقييس لدول مجلس التعاون لدول الخليج العربية(GSO).

نوع المنتج
مكيف هواء غرفة من النوع المعجزاً بدون مجرى هواء

رقم الموديل
LXAWF6I060G0F6

سعة التبريد
61000 (و.ج.ب / واط)

الاستهلاك السنوي للطاقة
11769.0 (كيلو واط ساعة)

رقم موديل الوحدة الخارجية
LXAWF6O060G0F6

نسبة كفاءة الطاقة المقاسة
11.762 (و.ج.ب / ساعة / واط)

التدفئة
لا

Oman EER Label

رقم البطاقة
644-1

تاريخ إصدار البطاقة
20 مايو 2020

تصنيف النجوم
7.0

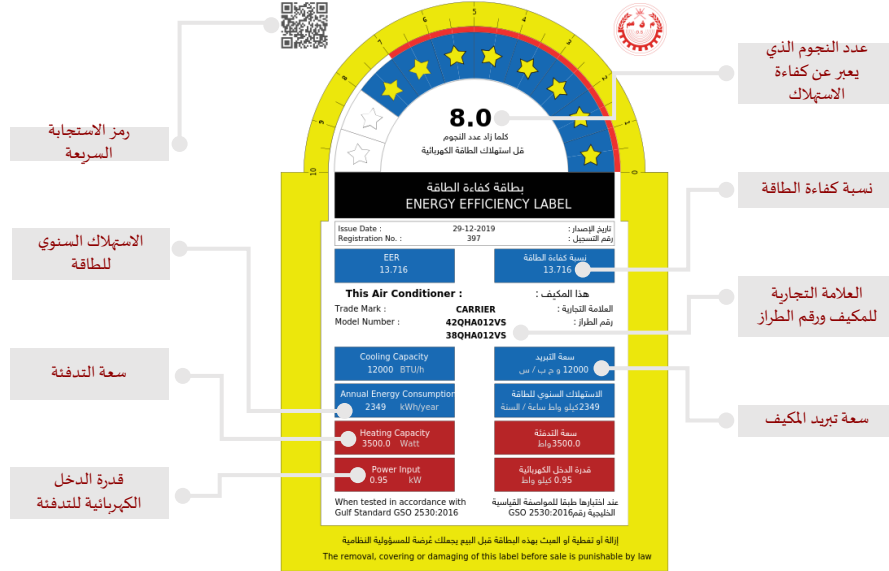
تاريخ إنتهاء البطاقة
13 أبريل 2024

الحد الأدنى
7.0 الحد الأدنى لنسبة كفاءة الطاقة هو 11.5

عرض بطاقة كفاءة الطاقة

صور المنتج





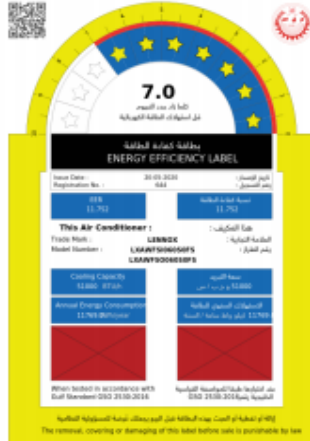


REGISTRATION LETTER

Oman Energy Efficiency Labelling Scheme for Air Conditioners

Registration No:	644	GCTS No:	31370	Issue Date:	2020-05-20	Expiry Date:	2024-04-13
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Manufacturer:	Awal Gulf Manufacturing Co.B.S.C.(C) Building No.429, Road No.108, Entrance No.3, Block 601, Sitra Industrial Area BAHRAIN		
Product:	Non-ducted split type		
Brand:	LENNOX		
Model No.:	LXAWFS060S0FS (Indoor Unit) LXAWFS060S0FS (Outdoor Unit)		
EER Value:	11.752	Star Rating:	7



Approved by	Notified Body No. 2
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SGS SGS Gulf Limited
Dubai- JAFZA - South- Office: S3A1SR01- P.O. Box:
18556, Jebel Ali Free Zone
UNITED ARAB EMIRATES

The product is registered under the Oman Energy Efficiency Labelling Scheme for Air Conditioners based on compliance to GSO 2530/2016

Authorized by

Dr. Ahmed Al-Shamakhi
Director of Conformity Dept., DGSM

This electronically generated approval letter is valid without stamp and signature. Visit the Oman EER website (<https://dgsm.gso.org.sa/eer/>) or scan the QR code to verify this document and the Energy Efficiency label.

- Conditions:**
- This registration grants permission to the manufacturer to use the energy efficiency label according to GSO 2530/2016 for the above-indicated product. The validity of this registration is subject to the related Rules & Regulations of the Sultanate of Oman, and any instructions or amendments issued by DGSM.
 - The label must comply with the dimensions required by GSO 2530/2016 and be adhered on the front of the unit. It shall be visible when the unit is removed from its packaging for display purposes. Additional label may be attached to the exterior of the packaging.
 - The manufacturer shall report any technical changes of the product to the Notified Body for review and approval.
 - The manufacturer shall apply for renewal of this approval by the Notified Body within 3 months prior to expiry.
 - The manufacturer shall conduct annual reconfirmation of this registration per electronic declaration through the Oman EER website (<https://dgsm.gso.org.sa/eer/>). The DGSM will charge annual labeling fees to the manufacturer in order to maintain registration. The declaration shall be submitted within 2 months prior to the below indicated due dates for reconfirmation.

IMPORTANT: Please observe these dates to maintain validity of the Energy Efficiency Labelling

Issue date:	1st reconfirmation due by:	2nd reconfirmation due by:	Renewal of approval due by:
2020-05-20	2022-04-13	2023-04-13	2024-04-13

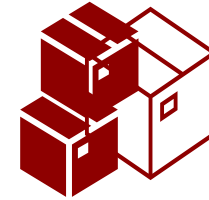
Oman Energy Efficiency Plat form

Since July 2019



15

Notified Bodies

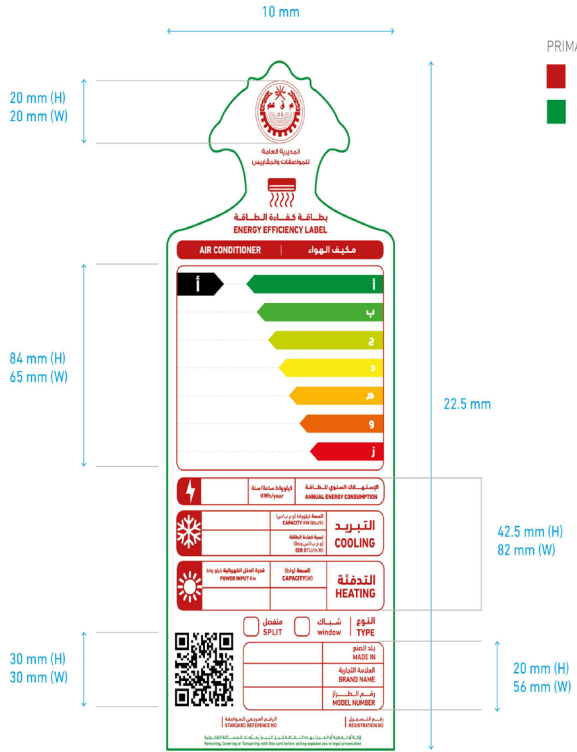


1191

Approved Products

AC new EER Label-under development

AIR CONDITIONER



- PRIMARY COLORS
- C-16, M-100, M-100, K-7
 - C-87, M-15, M-100, K-2

Bahrain Energy Efficiency Platform

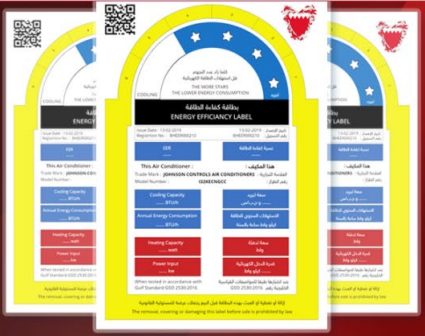
bsmd.moc.gov.bh/eer/

Energy Efficiency Labeling System

Products Activation Notified Bodies

التربية العربية Help Login

Energy Efficiency Labeling System for BSMD, Kingdom of Bahrain



The image shows three Energy Efficiency Labels (EER) for air conditioning units. Each label features a QR code, a star rating (1 to 5), and a color-coded energy efficiency scale. The central label is highlighted with a yellow border and contains the following text:

كود المنتج: 123456789
العلامة التجارية: ABC
نوع المنتج: مكيفات هوائية
الطاقة الكهربائية (Watt): 1000
الطاقة الحرارية (Watt): 2000
الطاقة المبردة (Watt): 3000
الدرجة الحرارية (C): 22
الدرجة الحرارية (F): 72
الدرجة الحرارية (C): 24
الدرجة الحرارية (F): 75
الدرجة الحرارية (C): 26
الدرجة الحرارية (F): 79
الدرجة الحرارية (C): 28
الدرجة الحرارية (F): 82
الدرجة الحرارية (C): 30
الدرجة الحرارية (F): 86

Energy Efficiency Label

العلامة التجارية: ABC
نوع المنتج: مكيفات هوائية
الطاقة الكهربائية (Watt): 1000
الطاقة الحرارية (Watt): 2000
الطاقة المبردة (Watt): 3000
الدرجة الحرارية (C): 22
الدرجة الحرارية (F): 72
الدرجة الحرارية (C): 24
الدرجة الحرارية (F): 75
الدرجة الحرارية (C): 26
الدرجة الحرارية (F): 79
الدرجة الحرارية (C): 28
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الدرجة الحرارية (F): 86

الدرجة الحرارية (C): 22
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الدرجة الحرارية (C): 24
الدرجة الحرارية (F): 75
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الدرجة الحرارية (C): 28
الدرجة الحرارية (F): 82
الدرجة الحرارية (C): 30
الدرجة الحرارية (F): 86



Bahraini EER System is the effort of co-operation between the Bahrain Testing & Metrology Directorate (BTMD), Bahrain Electricity and Water Conservation (EWA), and GCC Standardization Organization (GSO).

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كُلَّمَا زَادَ عِدْدُ النُّجُومِ
قَلَّ اسْتِهْلَاكُ الطَّاقَةِ الكَهْرِبَائِيَّةِ
THE MORE STARS
THE LOWER ENERGY CONSUMPTION
تبريد

بطاقة كفاءة الطاقة
ENERGY EFFICIENCY LABEL

Issue Date : 14-02-2021 : تاريخ الإصدار
Reg. No. : 092 : رقم التسجيل

EER 8.5	نسبة كفاءة الطاقة 8.5
------------	--------------------------

This Air Conditioner : **هذا المكيف :**
Trade Mark : AIR العلامة التجارية :
Model Number : AF-W-18095 (ind) رقم الطراز :

Cooling Capacity 70000 BTU/h	سعة تبريد 70000 و.ج.ب.س
Annual Energy Consumption 0.0 kWh/year	الاستهلاك السنوي للطاقة 0.0 كيلو واط ساعة بالسنة
Heating Capacity 1.0 watt	سعة تدفئة 1.0 واط
Power Input 1.0 kw	قدرة الدخل الكهربائية 1.0 كيلو واط

When tested in accordance
with Gulf Standard عند اختبارها طبقاً للمواصفات
القياسية الخليجية

إزالة أو تغطية أو العبث بهذه البطاقة قبل البيع يجعلك عرضة للمسئولية القانونية
The removal, covering or damaging this label before sale is prohibited by law

- Yellow
CMYK - 10 00 100 00
- Blue
CMYK - 90 60 00 00
- Black
CMYK - 00 00 00 100
- Maroon
CMYK - 20 100 100 10

190 mm

126 mm



LETTER OF APPROVAL

Bahrain Energy Efficiency Labelling Scheme for Air Conditioners

Registration No:	962	GCTS No:	14442	Issue Date:	2021-02-14	Expiry Date:	2024-11-27
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Manufacturer:	New EO 1 test ANTIGUA AND BARBUDA		
Product:	Single package of window type		
Brand:	air		
Model No.:	AF-W-18095 (ind)		
EER Value:	8.5	Star Rating:	3

Approved by	Notified Body No. 5
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Intertek Testing Services Hong Kong Ltd
2/F Garment Center , 576 Castle Peak Road ,Kowloon ,
Hong Kong
HONG KONG

The product is registered under the Bahrain Energy Efficiency Labelling Scheme for Air Conditioners based on compliance to Bahrain Ministerial decree (70/2015)

Authorized by	
---------------	--

Eng. Entesar Abdulaal
Chief of Standards Implementation & QA Section

This electronically generated approval letter is valid without stamp and signature.
Visit the Bahrain EER website (<https://bemd.moc.gov.bh/eer>) or scan the QR code to verify this document and the Energy Efficiency label.

Conditions:

- This registration grants permission to the manufacturer to use the energy efficiency label according to Bahrain Ministerial decree (70/2015) for the above-indicated product. The validity of this registration is subject to the related Rules & Regulations of the Kingdom of Bahrain, and any instructions or amendments issued by BTMD.
- The label must comply with the dimensions required by Bahrain Ministerial decree (70/2015) and be adhered on the front of the unit. It shall be visible when the unit is removed from its packaging for display purposes. Additional label may be attached to the exterior of the packaging.
- The manufacturer shall report any technical changes of the product to the Notified Body for review and approval.
- The manufacturer shall apply for renewal of this approval by the Notified Body within 3 months prior to expiry.
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2021-02-14	2022-11-27	2023-11-27	2024-11-27



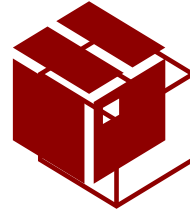
Bahrain Energy Efficiency Platform

Since May 2021



14

Notified
Bodies



554

Approved
Products

Directions of Gulf Technical Regulations and Energy Rationalization labels for AC in GCC Member States

Mr. Basem Salameh,
Senior Technical Regulation Specialist, GSO

Dubai 13th September 2022.

