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INTRODUCTION

The purpose of this document is twofold:

- 1) To provide Manufacturers and Exporters with technical information on compliance requirements in support of Shipment certification, Registration and Licensing procedures.
- 2) To provide PCP approved laboratories with information on the performance of Pre-supply Testing

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B	Name and reference number of Saudi Standards applicable to this regulated category.	2
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D	Provides an outline of KSA PCP Type Approval Licensing procedures.	5
E	Lists the specific tests to be performed or alternatively test data to be evaluated by a PCP approved laboratory for the purpose of pre-supply testing, or testing as part of the Registration Verification review process, or as a part of the annual Licensing renewal.	5- 6
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SECTION A: Scope of Category

Products Covered Under this Category	Products Excluded from this Category
Three phase and single phase, self-contained and split type air-conditioners and heat pumps which may have means for heating, circulating and cleaning the air. Examples: - Window mounted units - Through-wall mounted units - Floor standing units - Split type units (i.e. condensing units "outdoor- units" and evaporating units "indoor-units") - Ceiling cassette type - Rooftop A/C's	Air-purifiers (These are covered under product category II-27)
	Humidifiers and dehumidifiers (These are covered under product category II-26)

SECTION B: Applicable Saudi/Equivalent/International Standards


Saudi Standard	Equivalent /Other Applicable Standard	Title
SASO 385/1999	GS 1006/1998	Methods of test for room air conditioners
SASO 386/1999	GS 1005/1998	Room air conditioners
SASO 1062/2007	GS 576/2007, IEC 60335-1	Safety of household and similar electrical appliances: Part 1: General requirements
SASO 2007/2002	IEC 60335-2-40	Safety of household and similar electrical appliances: Part 2: Particular requirements Section 40: Electrical heat pumps, air conditioners and dehumidifiers
SASO 2681/2007		Non-ducted air conditioners and heat pumps -- Testing and rating performance
SASO 2682/2007		Ducted air conditioners and air – to air heat pumps – Testing and rating for performance
SASO 2663/2007		Energy Labelling and minimum energy performance requirements for Air-conditioners
SASO/IEC 60204-1		Safety of machinery - Electrical equipment of machines - Part 1: General requirements

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SECTION C: KSA PCP Registration Procedures and Essential Requirements

- The product to be registered shall be identified by its type designation. Products of the same electrical and/or mechanical construction, being equal in all safety related aspects, may be defined by one family type designation/model number. This designation must be identifiable on the product(s).
- It is desirable that the Registration declaration refers to relevant Saudi standard(s) wherever possible. The declaration may however refer to any relevant international, regional or national standard provided the Saudi Essential Requirements listed below are also satisfied.
- Standard references must be clearly identified by issue number, date and the like.
- Any test data provided to substantiate the Registration declaration must make clear reference product identification model(s), the laboratory name and appropriate standard(s).
- Any test data to be evaluated for compliance shall be examined towards the applicable standard or standards, including the relevant Saudi Essential Requirements

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ESSENTIAL REQUIREMENTS	
MAINS VOLTAGE	127 or 220 V or 380 V.
MAINS FREQUENCY	60 Hz.
INSTRUCTION MANUAL	Language of instruction manual according to IEC 60335-1(SASO 1062/2007). (i.e. Manuals will be in the official language of the country where the product is intended to be sold - Arabic)
PLUGS	Plugs fitted to the supply cords shall have a configuration in accordance with SASO standard 2203/2003 or 2204/2003 (Refer to CD-479 for more information)
COUNTRY OF ORIGIN	All appliances shall be marked with Country of Origin (MoCI Royal Decree No. M/5, CD-444R3)
CABLES/ CORDS	For single phase A/C's with a cooling capacity up to 24,000 Btu/Hr covered by SASO 385/1999, SASO 386/1999, the flexible cord or cable shall have a free length of at least 1.2 m. (SASO 386/1999, clause 4.7.4).
REFRIGERANTS	Freon 11 and Freon 12 (R11 and R12) shall not be used as refrigerants
OTHERS	Appliances of class 0 and 01 are not allowed
AMBIENT TEMPERATURE/ MEPS (EER)	<ul style="list-style-type: none"> - Ambient test temperature shall be 35°C@T1 for moderate climate and 46°C@T3 for hot/tropical climate according to Table 1 of SASO 2681/2007 & SASO 2682/2007. - The minimum energy performance standard (MEPS) or the EER value for the air conditioner and related products shall be: <ul style="list-style-type: none"> • ≥ 7.5 at cooling capacity test condition T1 (moderate climate) • ≥ 5.4 at cooling capacity test condition T3 (hot/tropical climate) - Window type and split type air-cooled air-conditioners with cooling capacity less than and including 70,000 Btu/h (20000W) shall have Energy rating Classification <p>Note:</p> <ul style="list-style-type: none"> • Tests are conducted at both 35°C and 46°C, and the results in the nameplate shall contain test results at both temperatures • Energy label only contains the test results conducted at 35°C • For detailed information please refer to CD-547
MEPS (EER)	<p>Prior registration with SASO showing compliance with MEPS/Energy rating classification is required</p> <p>Note: Currently this not mandatory but compliance is recommended.</p>

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SECTION D: KSA PCP Type Approval Licensing

- (1) Product Evaluation
Products must be evaluated for full compliance with the Saudi Standards listed in Section B, including the relevant Saudi Essential Requirements listed in Section C. If the national Saudi standard is outdated or deviates heavily from the international equivalents, the relevant international standard may be used in conjunction with the Saudi Essential Requirements listed in Section C.
- (2) Factory Inspection/Audit
All manufacturing sites must be inspected to confirm the existence of an on-going quality and product control system satisfying KSA PCP requirements.
- (3) Annual Surveillance
Samples may be selected for minimum verification tests as a part of annual routine inspections. Periodic pre-supply inspection will be performed.

SECTION E: Pre-Supply Tests For PCP Approved Laboratories

Upon receipt of samples for pre-supply testing, Laboratories are to proceed as follows:

- (1) Examine the products to be tested and identify the applicable standard or standards from Section B.
- (2) Consult the tables given below and select only the test tables relevant to the standards you have selected in (1)
- (3) Read and note the Saudi Essential Requirements given in Section C and incorporate these points in your testing procedures.
- (4) Perform **only** the tests identified in the relevant test tables. (Laboratories are **not** to test to the complete standard unless specifically advised to do so). Saudi Standard test methods have been referenced where they exist.
- (5) Read Section F and include those requirements, which are not included in the test tables of the testing procedures.

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IEC 60335-1 (SASO 1062/2007), IEC 60335-2-40 (SASO 2007/2002) Remark: Air Conditioners			
No.	Test	Requirement Standard Ref. IEC 60335-1 IEC 60335-2-40	Test Method Standard Ref.
1	Marking and instructions	7	--
2	Protection against accessibility to live parts	8	--
3	Heating*	11	--
4	Leakage current and electric strength at operating temperature	13	--
5	Stability and mechanical hazards	20	--
6	Mechanical strength	21	--
7	Nominal Cross sectional area of conductors	25.8	--
8	Terminal for external conductors	26.2	--
9	Provision for earthing	27	--
Additional requirements for single phase air conditioners upto 24,000 Btu/Hr			
1	Supply connection	SASO 386, 4.7	
2	Normal operation running test	SASO 386, 5.1	
3	Insulation resistance test	SASO 386, 5.3	

*Motor-compressors of a split type unit, shipped separately without it's companion unit, may be disconnected during this test.


SASO/IEC 60204-1 Remark: Others			
No.	Test	Requirement Standard Ref. SASO/IEC 60204-1	Test Method Standard Ref.
1	Protection against electric shock	6	--
2	Protection for motors against overheating	7.3	--
3	Protection against supply interruption or voltage reduction and subsequent restoration	7.5	
4	Emergency operations	9.2.5.4	--
5	Electric motors and associated equipment	14.1	--
6	Marking, warning signs and reference designations	16	--

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Section F – Additional Inspection Requirements (AIR)

Note: This document should be used separately by Country Offices for pre-supply inspection purposes.


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I Air Conditioning Appliances and systems

1. Physical Requirements


Standard Reference	General Physical Requirement	Complies (Y/N)
IEC 60335-1 (SASO 1062), 8.1	Appliances shall be constructed and enclosed so that there is adequate protection against accidental contact with live parts.	
IEC 60335-1 (SASO 1062), 22.8	For appliances having compartments to which access can be gained without the aid of a tool and that are likely to be cleaned in normal use, the electrical connections shall be arranged so they are not subject to pulling during cleaning.	
IEC 60335-1 (SASO 1062), 22.10	Reset buttons of non-self-resetting controls shall be located or protected so that accidental resetting is unlikely to occur if this could result in a hazard.	
IEC 60335-1 (SASO 1062), 22.14	Appliances shall have no ragged or sharp edges, other than those necessary for the functioning of the appliance that could create a hazard for the user in normal use or during user maintenance.	
IEC 60335-1 (SASO 1062), 22.15	Storage hooks and the like for flexible cords shall be smooth and well rounded.	
IEC 60335-1 (SASO 1062), 22.43	Appliances that can be adjusted for different voltages shall be constructed so that accidental changing of setting is unlikely to occur.	
IEC 60335-1 (SASO 1062), 25.1	Appliances <i>not intended to be connected to fixed wiring</i> shall have one of the following means of supply connection: (a) supply cord fitted with plug; (b) appliance inlet or (c) pins for insertion into socket outlets.	
IEC 60335-1 (SASO 1062), 25.6	Plugs shall not be fitted with more than one flexible cord.	
IEC 60335-1 (SASO 1062), 25.13 386, 4.8.2	Inlet openings for supply cords shall be constructed so that the sheath of the supply cord can be introduced without risk of damage. Unless the enclosure at the inlet opening is insulating material, a non-detachable lining or non-detachable bushing shall be provided.	
IEC 60335-1 (SASO 1062), 25.22	Appliance inlets shall: <ul style="list-style-type: none"> a) be located/enclosed that live parts are not accessible during insertion/removal of connector b) be located so that the connector can be inserted without difficulty c) be located so that, after insertion of the connector, the appliance isn't supported by the connector when it is placed in any position of normal use on a flat surface 	
	Plugs fitted to the supply cords shall have a configuration in accordance with SASO standard 2203/2003 and 2204/2003 as detailed in CD-479	
Additional Physical Requirements for single-phase air conditioners upto 24,000 Btu/Hr.		
SASO 386, 4.1.3	Air filters shall be easily removed for cleaning or replacement, without the use of special tools.	
SASO 386, 4.6.2	External switches for controlling the unit shall be easily accessible.	


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SASO 386, 4.7.4	The flexible cord or cable shall have a free length of at least 1.2 metres.	
SASO 386, 4.11.1	The unit shall be provided with an earthing terminal, if not of class II or class III construction.	
Additional Physical Requirements for Air conditioners		
IEC 60335-2-40, (SASO 2007), 6.2	Appliances shall be classified according to the degree of protection against harmful ingress of water as follows: <ul style="list-style-type: none"> - Appliances or parts of appliances intended for outdoor use shall be at least IPX4 - Appliances intended only for indoor use (excluding laundry rooms) may be IPX0 - Appliances intended to be used in laundry rooms shall be at least IPX1 	


2. Marking Requirements

Standard Reference	General Marking Requirement	Complies (Y/N)
IEC 60335-1 (SASO 1062)	Markings shall be easily legible and durable in Arabic and/or English language.	
IEC 60335-1 (SASO 1062), 7.1	Rated voltage or rated voltage range in volts (incorporating 127V and/or 220V and/or 380 V)	
IEC 60335-1 (SASO 1062), 7.1	Rated power input in watts or kilowatts or rated current in amperes	
IEC 60335-1 (SASO 1062), 7.1	Name, trade mark or identification mark of the manufacturer or responsible vendor	
IEC 60335-1 (SASO 1062), 7.1	Model or Type Reference	
IEC 60335-1 (SASO 1062), 7.1	Symbol for nature of supply <i>unless</i> the rated frequency is marked (incorporating 60Hz)	
IEC 60335-1 (SASO 1062), 7.1	Symbol for Class II construction For <i>Class II appliances only</i> 	
MoCI Royal Decree No. M/5	Country of origin	
IEC 60335-1 (SASO 1062), 7.3	Appliances having a range of rated values and which can be operated without adjustment throughout the range shall be marked with the lower and upper limits of the range separated by a hyphen. Example: 115 – 240V	
IEC 60335-1 (SASO 1062), 7.3	Appliances having different rated values and which have to be adjusted for use at a particular value by the user or installer shall be marked with the different values separated by an oblique stroke Example: 115/240V	

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IEC 60335-1 (SASO 1062), 7.4	If appliance can be adjusted for different rated voltages, the voltage to which the appliance has been adjusted shall be clearly discernible.	
IEC 60335-1 (SASO 1062), 7.5	For appliances marked with more than one rated voltage or voltage range, the rated power input or rated current for each of these voltages or ranges shall be marked. However if the difference between the limits of a rated voltage range does not exceed 10% of the mean value of the range, the marking for rated power input or rated current may be related to the mean value of the range. The upper and lower limits of the rated power input or rated current shall be marked on the appliance so that the relation between input and voltage is clear.	
IEC 60335-1 (SASO 1062), 7.9	Switches that may give rise to a hazard when operated shall be marked or placed so as to indicate clearly which part of the appliance they control.	
IEC 60335-1 (SASO 1062), 7.10	Different positions on switches shall be indicated by figures, letters or other visual means	
IEC 60335-1 (SASO 1062), 7.10	If figures are used, the off position shall be '0' and the position for greater effect shall be indicated by a higher figure	
IEC 60335-1 (SASO 1062), 7.10	Figure '0' shall not be used for any indication other than 'off' unless positioned and associated with other numbers so as not to cause confusion.	
IEC 60335-1 (SASO 1062), 7.11	Controls intended to be adjusted during installation or and in normal use shall be provided with an indication of the direction of adjustment.	
--	Each product type shall be accompanied by a Proof of Registration for Energy labeling and MEPS (EER) with SASO as per instructions in SASO 2663 <u>Note:</u> Currently this not mandatory but compliance is recommended & absence of it shall be considered to be a minor discrepancy	
SASO 2663, 6.1	Manufacturer's serial number of the unit. <u>Note:</u> Compliance to this marking requirement is currently not mandatory & absence of it shall be considered to be a minor discrepancy	
SASO 2663, 5 & 6.1	For each of cooling test conditions T1 (moderate climate) and T3 (hot/tropical climate) according to the SASO standard SASO 2681 or SASO 2682 as applicable: <ul style="list-style-type: none"> Rated current in Amperes Rated power inputs in watts or kilowatts Net total room cooling capacity in Btu/h (and any units of kW or Kcal/h) when tested according to conditions stated in SASO 2681 or SASO 2682 Energy Efficiency Ratio (EER) in (Btu/hr)/ Watt (The EER value shall be ≥ 7.5 at cooling capacity test condition T1 (moderate climate) and ≥ 5.4 at cooling capacity test condition T3 (hot/tropical climate)) <u>Note:</u> Compliance to this marking requirement is currently not mandatory & absence of it shall be considered to be a minor discrepancy	

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Additional Marking Requirements for Air conditioners		
IEC 60335-2-40 (SASO 2007), 7.1	Appliances provided with compressors shall be marked with the following information: <ul style="list-style-type: none"> - The mass of the refrigerant, or of each refrigerant in a blend other than those of the azeotropic type; - The refrigerant identification <ul style="list-style-type: none"> For a single component refrigerant – one of the following: <ul style="list-style-type: none"> • The chemical name • The chemical formula • The refrigerant number For a blended refrigerant – one of the following: <ul style="list-style-type: none"> • The chemical name of each of the components; • The chemical formula of each of the components; • The refrigerant numbers of each of the components; • The refrigerant number of the refrigerant blend - For the refrigerant circuit; should the permissible excessive operating pressure for the suction and discharge side differ, a separate indication is required 	
IEC 60335-2-40 (SASO 2007), 7.1	Appliances shall be marked with the symbol for nature of supply including number of phases unless for single phase operation	
IEC 60335-2-40 (SASO 2007), 7.1	Appliances shall be marked with the IP number according to degree of protection against ingress of water, other than IPX0	
Additional Marking Requirements for window type and split type air-cooled air- conditioner with cooling capacity less than and including 70,000 Btu/Hr.		
SASO 2663, 8	Energy Labelling (This will include Information & values such as model, brand, power input rating, EER value etc. See Example figure for accepted energy label - Appendix A , at the end of CVG) <u>Note:</u> Compliance to this Energy Labelling requirement is currently not mandatory & absence of it shall be considered to be a minor discrepancy	

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3. Instructions Manual Requirements

Standard Reference	General Instruction Manual Requirement	Complies (Y/N)
IEC 60335-1 (SASO 1062), 7.13	Instructions and other texts shall be written in both Arabic and English languages	
IEC 60335-1 (SASO 1062), 7.12	Instructions for use shall be provided with the appliance so that it can be used safely.	
IEC 60335-1 (SASO 1062), 7.12.1	If special installation precautions or user maintenance is required, details must be supplied.	
IEC 60335-1 (SASO 1062), 7.12.5	Instructions shall indicate that for appliances with: <ul style="list-style-type: none"> a) Type X attachment with specially prepared cord – Damaged supply cords must be replaced by a special cord or assembly available from the manufacturer or its service agent b) Type Y attachment – Damaged supply cords to be replaced by the manufacturer, service agent or similarly qualified person to avoid hazard c) Type Z attachment – Damaged supply cord cannot be replaced and the appliance should be scrapped 	
Additional Instructions Manual Requirements for Air conditioners		
IEC 60335-2-40 (SASO 2007), 7.12.1	If special installation precautions or user maintenance is required, details must be supplied. In particular: <ul style="list-style-type: none"> - That appliance shall be installed in accordance with national wiring regulations - Dimensions of space necessary for correct installation including minimum permissible distances to adjacent structures. - A wiring diagram clearly indicating connections and wiring to external control devices and supply cord. - Range of external static pressures at which the appliance was tested - Method of connection of the appliance to the electrical supply and interconnection of separate components. - Indication of which parts of appliance if any are suitable for outdoor use. - Details of type and rating of fuses. - Maximum and minimum water or brine operating temperatures - Maximum and minimum water or brine operating pressures. 	

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II Others

1. Physical Requirements

Standard Reference	General Physical Requirement	Complies (Y/N)																	
SASO/IEC 60204-1, 5.3.1	A supply disconnecting device shall be provided: - For each incoming source of supply to a machine(s) - For each on board power supply																		
SASO/IEC 60204-1, 9.2.3	Indication of the selected operating mode shall be provided (for example the position of the mode selector, the provision of an indicating light, a visual display indication)																		
SASO/IEC 60204-1, 10.7.1	Devices for emergency stop shall be easily accessible.																		
SASO/IEC 60204-1, 13.1.1	All connections, especially those of the protective bonding circuit, shall be secured against accidental loosening.																		
SASO/IEC 60204-1, 13.5.1	All sharp edges, flash, burrs, rough surfaces, or threads with which the insulation of the conductors can come in contact shall be removed from ducts and fittings																		
SASO/IEC 60204-1, 13.5.6	Cable trunking systems external to enclosures shall be rigidly supported and clear of all moving portions of the machine.																		
SASO/IEC 60204-1, 10.2.1	Push button actuators shall be colour coded in accordance with the following table. <table><tr><th>Colour</th><th>Examples of application</th></tr><tr><td>RED</td><td>Emergency stop</td></tr><tr><td rowspan="2">YELLOW</td><td>Intervention to suppress abnormal condition</td></tr><tr><td>Intervention to restart an interrupted automatic cycle</td></tr><tr><td>BLUE</td><td>Reset function</td></tr><tr><td>GREEN</td><td>START/ ON</td></tr><tr><td>WHITE</td><td>START/ ON (preferred) STOP/ OFF</td></tr><tr><td>GREY</td><td>START/ ON STOP/ OFF</td></tr><tr><td>BLACK</td><td>START/ ON STOP/ OFF (preferred)</td></tr></table>	Colour	Examples of application	RED	Emergency stop	YELLOW	Intervention to suppress abnormal condition	Intervention to restart an interrupted automatic cycle	BLUE	Reset function	GREEN	START/ ON	WHITE	START/ ON (preferred) STOP/ OFF	GREY	START/ ON STOP/ OFF	BLACK	START/ ON STOP/ OFF (preferred)	
Colour	Examples of application																		
RED	Emergency stop																		
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GREY	START/ ON STOP/ OFF																		
BLACK	START/ ON STOP/ OFF (preferred)																		
SASO/IEC 60204-1, 10.8.3	Actuators of emergency switching off devices shall be coloured RED. If a background exists immediately around the actuator, then this background shall be coloured YELLOW.																		

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Standard Reference	General Physical Requirement	Complies (Y/N)
SASO/IEC 60204-1, 13.2.4	<p>Where colour coding is used for identification of conductors, it is recommended that they be colour coded as follows:</p> <ul style="list-style-type: none"> - BLACK: a.c. and d.c. power circuits - RED: a.c. control circuits - BLUE: d.c. control circuits - ORANGE: excepted circuits <p>Exceptions to the above are permitted where:</p> <ul style="list-style-type: none"> - Insulation is used that is not available in the colours recommended - Multiconductor cable is used, but not the bi-colour combination of GREEN-AND-YELLOW 	


2. Marking Requirements

Standard Reference	General Marking Requirement	Complies (Y/N)
SASO/IEC 60204-1, 16.4	<p>Equipment shall be legibly and durably marked in a way that is plainly visible. A nameplate giving the following information shall be attached to the enclosure adjacent to each incoming supply:</p> <ul style="list-style-type: none"> - Name or trade mark of the supplier - Serial number where applicable - Rated voltage, number of phases and frequency and full load current for each supply 	
SASO/IEC 60204-1, 8.2.6	<p>Each protective conductor connecting point shall be marked or labelled using the symbol (as shown)</p> 	
SASO/IEC 60204-1, 16.2.1	<p>Enclosures that do not otherwise clearly show that they contain electrical equipment that can give rise to a risk of electric shock shall be marked with the graphical symbol (as shown).</p> 	
SASO/IEC 60204-1, 16.2.2	<p>Where the risk assessment shows the need to warn against the possibility of hazardous surface temperatures of the electrical equipment, the graphical symbol shall be marked (as shown).</p> 	

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SASO/IEC 60034	<p>For Equipment provided with Motors: Motor shall be provided with a rating plate. The plate shall be securely mounted and be located so as to be easily legible in the position of use.</p> <p>Information on the rating plate shall include the following:</p> <ol style="list-style-type: none"> 1) Rated voltage or voltage range. 2) Rated frequency 3) Rated power input in watts or kilowatts or rated current in amperes 4) The manufacturer's name or trade mark 5) The manufacturer's serial number or identification mark <p>Note: A single identification mark may be used to identify each member of a group of machines, which are made to the same electrical and mechanical design and are produced in one batch using the same technology.</p> <ol style="list-style-type: none"> 6) The number of phases 7) The rated speed(s) or range of rated speed 8) The rated power factor(s). 	
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3. Instructions Manual Requirements

Standard Reference	General Instruction Manual Requirement	Complies (Y/N)
	Instructions and other texts shall be written in both Arabic and/or English languages:	
SASO/IEC 60204-1, 17.1	<p>Information provided with the equipment shall include the following:</p> <ul style="list-style-type: none"> - The main document - Complementary documents including <ol style="list-style-type: none"> 1) A clear, comprehensive description of the equipment, installation and mounting, and the connection to the electrical supply 2) Electrical supply requirements 3) Information on the physical environment (lighting, vibration, atmospheric contaminants etc) where appropriate 4) Overview (block diagrams) where appropriate 5) Circuit diagrams 6) Information (as applicable) on <ul style="list-style-type: none"> • Programming, as necessary for use of the equipment • Sequence of operation • Frequency of inspection • Frequency and method of functional testing • Guidance to the adjustment, maintenance and repair, particularly of the protective devices and circuits • Recommended spare parts list • List of tools supplied 7) A description (including the interconnection diagrams) of the safeguard, interlocking functions, and interlocking of guards against hazards, particularly for machines operating in a co-ordinated manner. 8) A description of the safeguarding and of the means provided where it is necessary to suspend the safeguarding (for setting or maintenance etc) 9) Instructions on the procedures for securing the machine for safe maintenance 10) Information on handling, transportation and storage. 11) Information regarding load currents, peak starting currents and permitted voltage drops as applicable. 12) Information on the residual risks due to the protection measures adopted, indication of whether any particular training is required and specification of any necessary personal protective equipment. 	
SASO/IEC 60204-1, 17.7	<p><u>Operating manual</u></p> <p>The technical documentation shall contain an operating manual detailing proper procedures for set up and use of electrical equipment. Particular attentions should be given to the safety measure provided.</p> <p>Where the operation of the equipment can be programmed, detailed information on methods of programming, equipment required, program verification and additional safety procedures (where required) shall be provided.</p>	

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SASO/IEC 60204-1, 17.8	Maintenance manual The technical documentation shall contain a maintenance manual detailing proper procedures for adjustment, servicing and preventive inspection and repair. Recommendations on maintenance/ service intervals and records should be part of that manual. Where methods for the verification of proper operation are provided (for example software testing programs), the use of those methods shall be detailed.	
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Appendix A

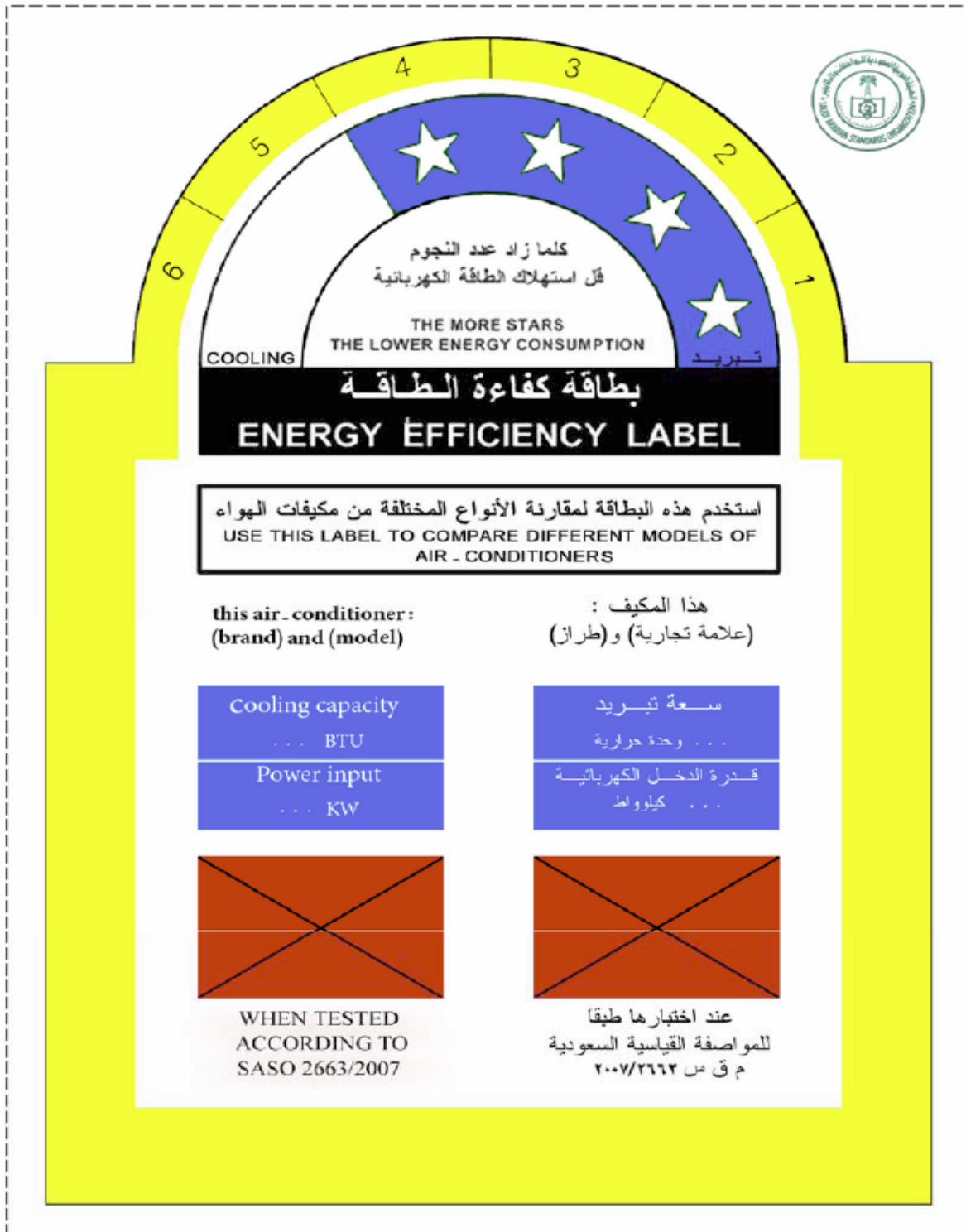


Figure: Example of Label –Cooling Only