भारतीय मानक ब्युरो

<u>केन्द्रीय मुहर विभाग - III</u>

हमारा संदर्भ- केन्द्रीय मुहर विभाग-3/16: IS 8148

20 08 2020

विषय: IS 8148 के अनुरूप IDU एवं ODU वाले डक्टेड एवं पैकेज एयर कंडीसनर के प्रमाणन के लिए संशोधित दिशानिर्देश

सभी शाखा कार्यालयों से अनुरोध है कि उपरोक्त विषय के बारे में संलग्न परिपत्र का अवलोकन करें

(राकेश कुमार)

वैज्ञानिक 'सी' (सी एम डी-III)

<u>प्रमुख (सी एम डी-III)</u>

सभी क्षेत्रीय शाखा कार्यालयों/को परिचालित

BUREAU OF INDIAN STANDARDS

CENTRAL MARKS DEPARTMENT-III

Our Ref: CMD-III/16: IS 8148 20 08 2020

Subject: Modified Guidelines for Certification of Ducted and Packaged Air Conditioners as per IS 8148: 2018 having Indoor Unit (IDU) and Outdoor Unit (ODU)

This has reference to the subject mentioned above. The guidelines have been modified based on the inputs received from stakeholders and considering the various scenario in manufacturing of air conditioners. The modified guidelines are attached.

All Branch Offices are requested to inform the same to the Applicants/Licensees under their jurisdiction and ensure the implementation of the same.

Consequent upon the issuance of these guidelines, Product Manual has been revised [Doc No. PM/IS 8148/4/ Aug 2020] incorporating necessary changes and has been issued vide Circular No. CMD-III/Product Manual/IS 8148 dated 20 August 2020, for immediate implementation.

All Applications including the existing Applications shall be processed in line with these guidelines.

These guidelines shall be implemented with immediate effect and supersede any other earlier guidelines issued in this subject.

(Rakesh Kumar) Sc. C (CMD III)

Head (CMD - III)

Circulated to: All ROs/BOs

CENTRAL MARKS DEPARTMENT

Our Ref: CMD-3:16/ IS 8148 20 August 2020

Subject: Modified Guidelines for Certification of Ducted and Packaged Air Conditioners as per IS 8148: 2018 having Indoor Unit (IDU) and Outdoor Unit (ODU)

- 1. This has reference to the Certification of Ducted and Packaged Air Conditioner (AC) having Indoor Unit (IDU) and Outdoor Unit (ODU) as per IS 8148.
- 2. As per Para 1 (i) of Scheme-I of Schedule- II of the BIS (Conformity Assessment) Regulations, 2018, a license can be granted by Bureau for products manufactured in a manufacturing premises. Further, as per Para 3 (1) (a) (ii) of Scheme-I of Schedule- II of these Regulations, a part of the manufacturing activity may be outsourced.
- 3. The following are the possible scenario in the manufacturing of Ducted/Packaged Air Conditioner having Indoor Unit (IDU) and Outdoor Unit (ODU):
 - (A) In-house manufacturing of IDU only.
 - (B) In-house manufacturing of ODU only.
 - (C) In-house manufacturing of both IDU and ODU and selling as individual units only *or* In-house manufacturing of both IDU and ODU and selling as individual units as well as complete Ducted/Packaged AC.
 - (D) In-house manufacturing of IDU and Outsourcing of ODU (i.e purchasing of ODU either from domestic or foreign manufacturer) and selling as complete Ducted/Packaged AC *or* In-house manufacturing of ODU and Outsourcing of IDU (i.e purchasing of IDU either from domestic or foreign manufacturer) and selling as complete Ducted/Packaged AC.
 - (E) Outsourcing of both IDU and ODU (i.e purchasing of both IDU and ODU either from domestic or foreign manufacturer).
- 4. (i) The manufacturer who intends to obtain BIS Certification Licence for Ducted/Packaged AC as per IS 8148 shall normally have complete in-house manufacturing facility. However, considering the possible manufacturing scenario of Ducted/Packaged AC Industry, outsourcing of part of the manufacturing activity may be permitted to the extent of one of the units only (i.e either IDU or ODU only) for certification of Ducted/Packaged AC as per IS 8148.
 - (ii) Under any circumstances, purchasing of both the units (i.e ISI marked IDU as well as ISI marked ODU) shall not be permitted for the certification of Ducted/Packaged AC.
 - (iii) For obtaining BIS licence, at least one of the units (i.e. either IDU or ODU) shall be manufactured in-house. In other words, persons who are not having in-house manufacturing facilities either for IDU or for ODU shall not be eligible for obtaining BIS licence.

5. Accordingly, the guidelines given below shall be followed for Certification of Air Conditioners as per IS 8148:

(A) Manufacturer of only IDU (in-house)

- i) Every manufacturer who is carrying out in-house manufacturing of only IDU shall obtain licence from BIS for the product type *Indoor Unit* as per IS 8148. In such cases, the scope of BIS licence will be "*Indoor Unit Only*".
- ii) The manufacturer shall have complete in-house testing facility for all the *Production Routine tests* for IDU as per IS 8148 and shall carry out due testing of IDU as per the Scheme of Inspection and Testing (SIT) and maintain records.
- iii) The manufacturer shall ensure that all the components used in manufacturing (either bought out or manufactured in-house) which are covered under the mandatory certification of BIS through various QCOs (e.g. Cables as per IS 694/ IS 9968-1, Capacitors as per IS 2993, Finned Type Heat Exchangers as per IS 11329, Hermetic Compressors as per IS 10617, Temperature Sensing Controls as per IS 60730-2-9 etc.), as applicable, are ISI Marked under a valid BIS licence.
- iv) Upon obtaining BIS licence, the licensee shall ensure that all the information as per IS 8148 as well as the SIT are marked on each IDU only after due testing of IDU as per the SIT.
- v) Each IDU shall be marked with the BIS Standard Mark as given below and the responsibility of the Quality of ISI marked IDU shall vest with the IDU licensee:



- vi) (a) The IDU manufacturer shall sell ISI marked IDU to those manufacturers only who holds BIS licence for the complete product Ducted/Packaged AC (i.e Licensee at item '5D' or even to licensee at item '5C').
 - (b) An undertaking shall be furnished by the IDU manufacturer to BIS to the effect that the ISI marked IDU will be sold to BIS licensees for the complete product Ducted/Packaged AC only.
 - (c) However, the actual physical supply of the ISI marked IDU may be to any place other than the licenced premises of the Ducted/Packaged AC manufacturer also. The details of all such supplies shall be maintained by the IDU licensee and shall be produced to BIS on demand. An undertaking in this respect shall be obtained from the IDU manufacturer.

(B) Manufacturer of only ODU (in-house)

- i) Every manufacturer who is carrying out in-house manufacturing of only ODU shall obtain licence from BIS for the product type *Outdoor Unit* as per IS 8148. In such cases, the scope of BIS licence will be "*Outdoor Unit Only*".
- ii) The manufacturer shall have complete in-house testing facility for all the *Production Routine tests* for ODU as per IS 8148 and shall carry out due testing of ODU as per the Scheme of Inspection and Testing (SIT) and maintain records.
- iii) The manufacturer shall ensure that all the components used in manufacturing (either bought out or manufactured in-house) which are covered under the mandatory certification of BIS through various QCOs (e.g. Cables as per IS 694/ IS 9968-1, Capacitors as per IS 2993, Finned Type Heat Exchangers as per IS 11329, Hermetic Compressors as per IS 10617, Temperature Sensing Controls as per IS 60730-2-9 etc.), as applicable, are ISI Marked under a valid BIS licence.
- iv) Upon obtaining BIS licence, the licensee shall ensure that all the information as per IS 8148 as well as the SIT are marked on each ODU only after due testing of ODU as per the SIT.
- v) Each ODU shall be marked with the BIS Standard Mark as given below and the responsibility of the Quality of ISI marked ODU shall vest with the ODU licensee:

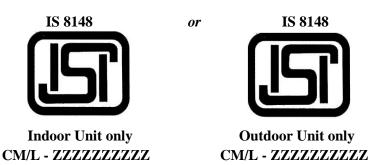


Outdoor Unit only
CM/L - YYYYYYYYYY

- vi) (a) The ODU manufacturer shall sell ISI marked ODU to those manufacturers only who holds BIS licence for the complete product Ducted/Packaged AC (i.e Licensee at item '5D' or even to licensee at item '5C').
 - (b) An undertaking shall be furnished by the ODU manufacturer to BIS to the effect that the ISI marked ODU will be sold to BIS licensees for the complete product Ducted/Packaged AC only.
 - (c) However, the actual physical supply of the ISI marked ODU may be to any place other than the licenced premises of the Ducted/Packaged AC manufacturer also. The details of all such supplies shall be maintained by the ODU licensee and shall be produced to BIS on demand. An undertaking in this respect shall be obtained from the ODU manufacturer.

(C) Manufacturer of both IDU and ODU (both in-house)

- i) (a) Every manufacturer who is carrying out in-house manufacturing of both IDU and ODU shall obtain licence from BIS for the product types *Indoor Unit* and *Outdoor Unit* as per IS 8148. In such cases, the scope of BIS licence will be "Indoor Unit Only" and "Outdoor Unit Only".
 - (b) However, if the manufacturer intends to manufacture the complete product Ducted/Packaged AC also in the same premises, the scope of BIS licence will include "Ducted/Packaged AC" also.
- (a) The manufacturer shall have complete in-house testing facility for all the *Production Routine tests* for IDU as well as ODU as per IS 8148 and shall carry out due testing of IDU and ODU as per the Scheme of Inspection and Testing (SIT) and maintain records.
 - (b) In addition, the manufacturer who has taken licence for the complete product Ducted/Packaged AC shall also comply with the provisions of the SIT w.r.t testing of the complete product Ducted/Packaged AC and maintain records.
- iii) The manufacturer shall ensure that all the components used in manufacturing (either bought out or manufactured in-house) which are covered under the mandatory certification of BIS through various QCOs (e.g. Cables as per IS 694/ IS 9968-1, Capacitors as per IS 2993, Finned Type Heat Exchangers as per IS 11329, Hermetic Compressors as per IS 10617, Temperature Sensing Controls as per IS 60730-2-9 etc.), as applicable, are ISI Marked under a valid BIS licence.
- iv) Upon obtaining BIS licence, the licensee shall ensure that all the information as per IS 8148 as well as the SIT are marked on each IDU and each ODU as well as the complete product Ducted/Packaged AC (as applicable) only after due testing of IDU, ODU and the complete product Ducted/Packaged AC (as applicable) as per the SIT.
- v) (a) Each IDU and each ODU intended to be sold as individual unit only shall be marked with the BIS Standard Mark as given below and the **responsibility of the Quality of ISI marked IDU and ISI marked ODU shall vest with the licensee**:



(b) Each IDU and each ODU used for the manufacturing of the complete product Ducted/Packaged AC shall be marked with the BIS Standard Mark as given below and the responsibility of the Quality of ISI marked Ducted/Packaged AC shall vest with the Ducted/Packaged AC licensee:

- vi) (a) The manufacturer shall sell ISI marked IDU or ISI marked ODU to those manufacturers only who holds BIS licence for the complete product Ducted/Packaged AC (i.e Licensee at item '5D' or even to any other licensee at item '5C').
 - (b) An undertaking shall be furnished by the manufacturer to BIS to the effect that the ISI marked IDU or ISI marked ODU will be sold to BIS licensees for the complete product "Ducted/Packaged AC" only.
 - (c) However, the actual physical supply of such ISI marked IDU or ISI marked ODU may be to any place other than the licensed premises of the Ducted/Packaged AC manufacturer also. The details of all such supplies shall be maintained by this licensee who is making such supplies and shall be produced to BIS on demand. An undertaking in this respect shall be obtained from this manufacturer.
- vii) (a) However, due to any reason, if the Ducted/Packaged AC licensee intends to purchase any of the units (i.e either ISI marked IDU or ISI marked ODU) from any other manufacturer, it shall be purchased from BIS licensees only (i.e. Licensee at item '5A' or '5B' or '5D' or even from any other licensee at item '5C').
 - (b) An undertaking shall be furnished by the Ducted/Packaged AC manufacturer to BIS to the effect that the ISI marked IDU or ISI marked ODU (as the case may be) will be purchased from BIS licensees only.
 - (c) However, the actual physical receipt of such ISI marked IDU or ISI marked ODU may be at any place other than the licenced premises of this Ducted/Packaged AC manufacturer also. The details of all such receipts shall be maintained by this Ducted/Packaged AC licensee and shall be produced to BIS on demand. An undertaking in this respect shall be obtained from this Ducted/Packaged AC manufacturer.
 - (d) In such cases where one of the units (i.e either ISI marked IDU or ISI marked ODU, as the case may be) is purchased from BIS licensee, the Standard Mark as given below shall be used on the other unit manufactured in-house (i.e ODU or IDU, as the case may be):



(e) Under any circumstances, purchasing of both the units (i.e ISI marked IDU as well as ISI marked ODU) shall not be permitted for the manufacturing of same Ducted/Packaged AC. In other words, at least one of the units (ie. either IDU or ODU) used in the manufacturing of same Ducted/Packaged AC shall be manufactured in-house.

(D) Manufacturer of Ducted/Packaged AC (where one of the units i.e IDU or ODU is manufactured in-house and the other unit i.e ODU or IDU is purchased from outside)

- i) Every Ducted/Packaged AC manufacturer who is carrying out in-house manufacturing of one of the units (i.e either IDU or ODU) and intends to purchase the other unit (i.e ODU or IDU, as the case may be) from any other manufacturer shall obtain licence from BIS for the complete product *Ducted/Packaged AC* as per IS 8148. In such cases, the scope of BIS licence will be "Indoor Unit Only" and "Ducted/Packaged AC" or "Outdoor Unit Only" and "Ducted/Packaged AC", as the case may be.
- The manufacturer shall have complete in-house testing facility for all the *Production Routine tests* for the unit which is manufactured in-house (i.e either IDU or ODU, as the case may be) as per IS 8148 and shall carry out due testing of IDU or ODU (as applicable) as per the Scheme of Inspection and Testing (SIT) and maintain records. In addition, the licensee shall also comply with the provisions of the SIT w.r.t testing of the complete product Ducted/Packaged AC and maintain records.
- iii) The manufacturer shall ensure that all the components used in manufacturing (either bought out or manufactured in-house) which are covered under the mandatory certification of BIS through various QCOs (e.g. Cables as per IS 694/ IS 9968-1, Capacitors as per IS 2993, Finned Type Heat Exchangers as per IS 11329, Hermetic Compressors as per IS 10617, Temperature Sensing Controls as per IS 60730-2-9 etc.), as applicable, are ISI Marked under a valid BIS licence.
- iv) Upon obtaining BIS licence, the licensee shall ensure that all the information as per IS 8148 as well as the SIT are marked on each IDU or each ODU (as applicable) as well as the complete product Ducted/Packaged AC only after due testing of IDU or ODU (as applicable) and the complete product Ducted/Packaged AC as per the SIT.
- v) Each IDU or each ODU (as the case may be) manufactured in-house and used for the complete product Ducted/Packaged AC shall be marked with the BIS Standard Mark as given below and the responsibility of the Quality of ISI marked Ducted/Packaged AC shall vest with this Ducted/Packaged AC licensee:



- vi) (a) The Ducted/Packaged AC manufacturer shall purchase ISI marked IDU or ISI marked ODU (as the case may be) from BIS licensee only (i.e. Licensee at item '5A' or '5B' or '5C' or even from any other licensee at item '5D').
 - (b) An undertaking shall be furnished by this Ducted/Packaged AC manufacturer to BIS to the effect that the ISI marked IDU or ISI marked ODU (as the case may be) will be purchased from BIS licensees only.
 - (c) However, the actual physical receipt of such ISI marked IDU or ISI marked ODU may be at any place other than the licenced premises of this Ducted/Packaged AC manufacturer also. The details of all such receipts shall be maintained by this Ducted/Packaged AC licensee and shall be produced to BIS on demand. An undertaking in this respect shall be obtained from this Ducted/Packaged AC manufacturer.
- vii) (a) In case the licensee intends to sell ISI marked IDU or ISI marked ODU (as the case may be) manufactured in-house to any other manufacturer, it shall be sold to those manufacturers only who hold BIS licence for the complete product Ducted/Packaged AC (i.e Licensee at item '5C' or even to any other licensee at item '5D').
 - (b) An undertaking shall be furnished by the Ducted/Packaged AC manufacturer to BIS to the effect that the ISI marked IDU or ISI marked ODU (as the case may be) will be sold to BIS licensees for the complete product Ducted/Packaged AC only.
 - (c) However, the actual physical supply of such ISI marked IDU or ISI marked ODU (as the case may be) may be to any place other than the licensed premises of the other Ducted/Packaged AC licensee also. The details of all such supplies shall be maintained by this Ducted/Packaged AC licensee who is making such supplies and shall be produced to BIS on demand. An undertaking in this respect shall be obtained from this Ducted/Packaged AC manufacturer.
 - (d) In such cases where ISI marked IDU or ISI marked ODU (as the case may be) is sold to any other manufacturer, the Standard Mark as given below shall be used on IDU or ODU (as the case may be):

IS 8148

Indoor Unit only CM/L - QQQQQQQQQ

or IS 8148

Outdoor Unit only CM/L – QQQQQQQQQ

(E) Outsourcing of both the units (i.e IDU and ODU)

- i) For obtaining BIS licence for certification of Ducted/Packaged AC as per IS 8148, outsourcing of both the units (i.e IDU and ODU) shall not be permitted under any circumstances (Please see item 4 also).
- 6. All Applications including the existing Applications shall be processed in line with these guidelines. Any licences granted as on date shall also be reviewed and ensured that the provisions contained in these guidelines are followed in toto.
- 7. These guidelines shall be implemented with immediate effect and supersede any other earlier guidelines issued in this subject.