

**Declaration of National Differences,
Regulatory Requirements or Special
National Conditions in testing and
certification**

Country	MALAYSIA
IECEE Member NCB	SIRIM QAS INTERNATIONAL SDN. BHD.
IEC Standard	IEC 60335-1 ed.4 +amd 1
Corresponding National Standard	MS IEC 60335-1:2005
Regulatory Requirements	ENERGY COMMISSION OF MALAYSIA (EC) REGULATION

We hereby declare the following against the above IEC Standard:

National Differences

Regulatory Requirements

Special National Conditions

Clause and Sub-clause	Exact wording
	<p>Energy Commission Information Booklet 2012; states that a Certificate of Approval is required for manufacturing, selling, advertising, displaying or importing into Malaysia, electrical/electronic products as Listed in Chapter 5 of the Booklet 2012.</p> <p>The regulatory requirements related to the National Differences can be referred to Chapter 8 of th Booklet;</p>
Nominal Voltages and Frequency	<p>a) Nominal Voltage Nominal voltage for low voltage supply in Malaysia is 230/400V (+10%, -6%) in accordance with MS IEC 60038.</p> <p>b) Nominal Frequency Nominal frequency for low voltage supply voltage in Malaysia is allowed to fluctuate at $\pm 1\%$ from 50Hz.</p>
Voltages and Frequency Marking for Regulated Equipment	<p>a) Voltage Single-phase equipment shall be rated / marked at 230V or 240V. If the equipment is rated with multiple or a range of voltages, voltage range between 230V (+10%,-6%) shall be included.</p> <p>Three-phase equipment shall be rated/marked at 400V or 415V. If the equipment is rated with multiple or a range of voltages, voltage range between 400V (+10%,-6%) shall be included.</p> <p>b) Frequency Product shall be rated / marked at 50Hz and testing shall be conducted at 50Hz ($\pm 1\%$). If the product is marked with 50/60Hz or 50-60Hz then testing shall be conducted either at 50Hz or 60Hz, whichever is more unfavourable.</p>

<p>Testing Voltage and Frequency on Electrical Equipment</p>	<p>a) Voltage</p> <p>Single-phase equipment Testing shall be conducted based on 230V(+10%,-10%) or 240V (+6%,-6%) and other relevant voltages, whenever the equipment is marked with multiple or a range of voltages.</p> <p>Three-phase equipment Testing shall be conducted based on 400V(+10%,-10%) or 415V(+6%,-6%), and other relevant voltages, whenever the equipment is marked with multiple or a range of voltages.</p> <p>b) Frequency Testing shall be conducted either at 50Hz or 60Hz, whichever is more unfavourable.</p>
<p>Power supply cord and main plug requirements</p>	<p>Appliances shall be fitted with a suitable and appropriately approved power supply cord and mains plug. Both are regulated equipment and must be approved by the regulatory body before it can be used with the appliances.</p> <p>a) The Power Supply Cord shall be certified to :- MS 140 or MS2112-5 or BS 6500 or IEC 60227-1 & IEC 60227-5 (PVC insulated - flexible cables/cords);or MS 140 or BS 6500 or IEC 60245-1 & IEC 60245-4 (Rubber insulated - flexible cables/cords)</p> <p>b) The mains Plug to be used in Malaysia shall be as follows: - 13A fused plug complying to MS 589: Part 1 or BS 1363: Part 1; - 15A plugs complying to MS 1577; - 2.5A, 250V, flat nonrewireable two-pole plugs with cord for the connection of class II equipment complying to MS 1578 or BS EN 50075.</p>
<p>Class I and Class II Equipment</p>	<p>Only Class I and Class II are allowed to be used in Malaysia.</p> <p>Class 0 and Class 01 appliances are NOT ALLOWED to be used in Malaysia.</p>