



Ref. No : 08T013/0698

## CERTIFICATE OF LABORATORY ACCREDITATION

This is to certify that

**Testing Laboratory**  
**Eurofins Product Service (Thailand) Company Limited**  
**344/2 Soi Soonvijai 4 Rama 9 Road, Bangkapi, Huaykwang, Bangkok**

has successfully undergone assessment under  
the Thai Laboratory Accreditation Scheme (TLAS)  
Thai Industrial Standards Institute  
for meeting its criteria of competence, which are in accordance with  
General requirements for the competence of testing and calibration laboratories

TIS 17025 - 2548 (2005)

ISO/IEC 17025 : 2005

Accreditation No. TESTING 0167

The scope of accreditation is as annexed hereto.

Date of Issue : 18<sup>th</sup> September 2008

Valid until : 10<sup>th</sup> April 2010

Signature : 

(Issra Shoatburakarn)

Deputy Permanent Secretary for Industry  
Chairman, Ministerial Cluster  
for Industrial and Entrepreneurial Promotion  
Chairman of Industrial Product Standards Council

Initial Date of Issue : 23<sup>rd</sup> February 2006

Thai Laboratory Accreditation Scheme, Thai Industrial Standards Institute, Ministry of Industry

## Scope of Accreditation for Testing

**Laboratory Name** : Testing Laboratory  
 Eurofins Product Service (Thailand) Company Limited  
**Premises** : 344/2 Soi Soonvijai 4, Rama 9 Road, Bangkapi, Huaykwang, Bangkok  
**Accreditation No.** : TESTING 0167  
**Laboratory Status** :  Permanent  Site  Temporary  Mobile

Item/Product Tested	Specific Test/ Range of Measurement	Standard/Test Method/ Technique Used
1. A.C. Electric fans : Safety requirements	<ul style="list-style-type: none"> <li>- Supply cord</li> <li>- Guard</li> <li>- Enclosures</li> <li>- Blade fixing</li> <li>- Device for suspension, clamping device and mounting</li> <li>- Protection against electric shock</li> <li>- Cord grip</li> <li>- Temperature rise</li> <li>- Moisture resistance</li> <li>- Leakage current</li> <li>- High voltage resistance</li> <li>- Insulation resistance</li> <li>- Earthing provision</li> <li>- Protection against direct contact</li> </ul>	<ul style="list-style-type: none"> <li>- TIS 934-2533 (1990) clause 3.1</li> <li>- TIS 934-2533 (1990) clause 3.2</li> <li>- TIS 934-2533 (1990) clause 3.3</li> <li>- TIS 934-2533 (1990) clause 3.4</li> <li>- TIS 934-2533 (1990) clause 3.5</li> <li>- TIS 934-2533 (1990) clause 4.1</li> <li>- TIS 934-2533 (1990) clause 7.2</li> <li>- TIS 934-2533 (1990) clause 7.3</li> <li>- TIS 934-2533 (1990) clause 7.4</li> <li>- TIS 934-2533 (1990) clause 7.5</li> <li>- TIS 934-2533 (1990) clause 7.6</li> <li>- TIS 934-2533 (1990) clause 7.7</li> <li>- TIS 934-2533 (1990) clause 7.8</li> <li>- TIS 934-2533 (1990) clause 7.9</li> </ul>

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Accreditation No. : TESTING 0167

Laboratory Status :  Permanent  Site  Temporary  Mobile

Item/Product Tested	Specific Test/ Range of Measurement	Standard/Test Method/ Technique Used
2. Mains operated electronic and related apparatus for household and similar general use : Safety requirements	<ul style="list-style-type: none"> <li>- Marking</li> <li>- Heating under normal operating conditions</li> <li>- Heating at elevated ambient temperatures</li> <li>- Shock hazard under normal operating conditions</li> <li>- Insulation requirements</li> <li>- Fault conditions</li> <li>- Mechanical strength</li> <li>- Parts connected to the supply mains</li> <li>- Terminal devices</li> <li>- External flexible cords</li> </ul>	<ul style="list-style-type: none"> <li>- TIS 1195-2536 (1993) clause 5</li> <li>- TIS 1195-2536 (1993) clause 7 (excluding 7.2)</li> <li>- TIS 1195-2536 (1993) clause 8</li> <li>- TIS 1195-2536 (1993) clause 9 (excluding 9.3)</li> <li>- TIS 1195-2536 (1993) clause 10 (excluding 10.1)</li> <li>- TIS 1195-2536 (1993) clause 11 (excluding 11.2)</li> <li>- TIS 1195-2536 (1993) clause 12 (excluding 12.1.2)</li> <li>- TIS 1195-2536 (1993) clause 13</li> <li>- TIS 1195-2536 (1993) clause 15 (excluding 15.4)</li> <li>- TIS 1195-2536 (1993) clause 16 (excluding 16.4)</li> </ul>

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Laboratory Status :  Permanent     Site     Temporary     Mobile

Item/Product Tested	Specific Test/ Range of Measurement	Standard/Test Method/ Technique Used
2. Mains operated electronic and related apparatus for household and similar general use : Safety requirements (cont.)	- Electrical connections and mechanical fixings	- TIS 1195-2536 (1993) clause 17
	- Mechanical stability	- TIS 1195-2536 (1993) clause 19
3. Electrical and electronic equipment	- Limits for harmonic current emissions (equipment input current $\leq$ 16A per phase)	- TIS 1448-2540 (1997) - IEC 61000-3-2 edition 3.0:2005 - EN 61000-3-2:2000 and Amendment 2:2005
	- Limits for voltage fluctuation and flicker emissions (equipment input current $\leq$ 16A per phase)	- TIS 1449-2540 (1997) - IEC 61000-3-3 edition 1.2:2005 - EN 61000-3-3:1995, Amendment 1:2001 and Amendment 2:2005
	- Electrostatic discharge immunity test 15 kV air 8 kV contact	- TIS 1452-2540 (1997) - IEC 61000-4-2 edition 1.2:2001 - En 61000-4-2:1995, Amendment 1:1998 and Amendment 2: 2001

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Item/Product Tested	Specific Test/ Range of Measurement	Standard/Test Method/ Technique Used
3. Electrical and electronic equipment (cont.)	- Electrical fast transient/burst immunity test 4 kV	- TIS 1454-2540 (1997) - IEC 61000-4-4 edition 2.0:2004 - EN 61000-4-4:2004
4. Household appliances, electric tools and similar apparatus	- Continuous disturbance (Mains terminal) 148.5 kHz to 30 MHz  - Disturbance power 30 MHz to 300 MHz	- CISPR 14-1 edition 4.2:2002 - EN 55014-1:2000, Amendment 1:2001 and Amendment 2:2002

## Scope of Accreditation for Testing

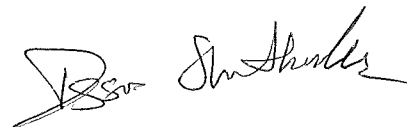
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Laboratory Status :  Permanent     Site     Temporary     Mobile

Item/Product Tested	Specific Test/ Range of Measurement	Standard/Test Method/ Technique Used
5. Electrical lighting and similar equipment	<ul style="list-style-type: none"> <li>- Disturbance voltages (Mains terminal) 9 kHz to 30 MHz</li> <li>- Radiated electromagnetic disturbance 9 kHz to 30 MHz</li> </ul>	<ul style="list-style-type: none"> <li>- TIS 1955-2542 (1999)</li> <li>- CISPR 15 edition 6.2:2002</li> <li>- EN 55015:2000, Amendment 1:2001 and Amendment 2:2002</li> </ul>

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