

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-12158-02-02 according to ISO/IEC 17025:2005

Period of validity: 2019-01-23 to 2021-03-30 Date of issue: 2019-01-23

Holder of certificate:

TÜV Rheinland Korea Ltd.
Test Center, Safety of Electrical Appliances and Ergonomics Laboratory
Young City, N-Tower, 25, Mullaero 28-gil
Yeongdeungpo-gu
SEOUL 07298
REPUBLIC OF KOREA

Tests in the fields:

EPA ENERGY STAR® Program, Energy Efficiency

The laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, to use standard test methods listed here with different issue dates or revision status updates.

The testing laboratory maintains a current list of all testing within the flexible scope of accreditation.

Department	Standard / in house procedure / Version	Title of standard or in house procedure (Deviations / Modifications of standard)	Test area / Reductions
Energy efficiency	EN 60456:2005 EN 60456:2011 EN 60456:2016 IEC 60456:2003 IEC 60456:2010 MS IEC 60456:2012 SANS 60456:2007	Clothes washing machines for household use - Methods for measuring the performance	
Energy efficiency	TCVN 8526:2010	Washing machine – Minimum energy performance and methods of determining	

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	SASO 2683:2007	Clothes Washing machines for household use- Methods for measuring the performance	
	SASO 2692:2013	Energy Labeling Requirement of Clothes Washing Machines for Household Use	
	SASO 2693:2007	Method for Measuring the Performance of Clothes Washing for Household Use	
	AS/NZS 2040.1:2005	Performance of household electrical appliances - Clothes washing machines - Part 1: Methods for measuring performance, energy and water consumption	
	AS/NZS 2040.2:2005	Performance of household electrical appliances - Clothes washing machines - Part 2: Energy efficiency labelling requirements	
	EN 61121:2013 IEC 61121:2012 SANS 61121:2015	Tumble dryers for household use – Methods for measuring the performance	
	EN 50229:2007 SANS 50229:2010 EN 50229:2015 IEC 62512:2012	Electric clothes washer-dryers for household use - Methods for measuring the performance	
	AS/NZS 2442.1:1996	Performance of household electrical appliances - Rotary clothes dryers - Energy consumption and performance	
	AS/NZS 2442.2:2000	Performance of household electrical appliances - Rotary clothes dryers - Energy labelling requirements	
	IEC 62301:2006 EN 62301:2005 IEC 62301:2011 MS IEC 62301:2007 MS IEC 62301:2012	Household electrical appliances – Measurement of standby power.	Only single phase equipment.
Energy efficiency	SANS 62301:2015	Methods of measurement for the power consumption of audio, video and related equipment	
	EN 50564:2011 DIN EN 50564:2011 VDE 0705-2301:2011	Electrical and electronic household and office equipment – Measurement of low power consumption.	Only single phase equipment.

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	IEC 62087:2011 EN 62087:2012 DIN EN 62087:2013 VDE:0868-100:2013	Methods of measurement for the power consumption of audio, video and related equipment.	
	IEC 62087-1:2015 EN 62087-1:2015 DIN EN 62087-1:2013 VDE 0868-101:2013	Audio, video, and related equipment - Determination of power consumption - Part 1: General	
	TCVN 9536:2012	Television sets- Energy efficiency	
	TCVN 9537:2012	Television sets. Method for determination of energy efficiency	
	IEC 62087-2:2015 EN 62087-2:2015 DIN EN 62087-2:2013 VDE 0868-102:2013	Audio, video, and related equipment - Determination of power consumption - Part 2: Signals and media	
	IEC 62087-3:2015 EN 62087-3:2015 DIN EN 62087-3:2013 VDE 0868-103:2013	Audio, video, and related equipment - Determination of power consumption - Part 3: Television sets	
	IEC 62087-4:2015 EN 62087-4:2015 DIN EN 62087-4:2013 VDE 0868-104:2013	Audio, video, and related equipment - Determination of power consumption - Part 4: Video recording equipment	
Energy efficiency	IEC 62087-5:2015 EN 62087-5:2015 DIN EN 62087-5:2013 VDE 0868-105:2013	Audio, video, and related equipment - Determination of power consumption - Part 5: Set-top-boxes	
	IEC 62087-6:2015 EN 62087-6:2015 DIN EN 62087-6:2013 VDE 0868-106:2013	Audio, video, and related equipment - Determination of power consumption - Part 6: Audio equipment	
	SANS 62087:2010	Methods of measurement for the power consumption of audio, video and related equipment	
	CEA-2037:2010	Determination of Television Average Power Consumption.	

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	EPRI Generalized Internal Power Supply Efficiency Test Protocol	Household and similar electrical appliances – Safety – Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies.	Only up to Version 6.4.2.
	VESA FPDM 2.0	Flat Panel Display Measurements Standard Version 2.0.	Only the measurement conditions as required in the Energy Star Program Requirements for Displays.
	EN 50563:2011 EN 50563/A1:2013	External a.c. - d.c. and a.c. - a.c. power supplies – Determination of no-load power and average efficiency of active modes.	
	AS/NZS 4665.1:2005 + A1:2009	Performance of external power supplies Test method and energy performance mark	
	AS/NZS 4665.2:2005 + A1:2009	Performance of external power supplies - Minimum energy performance standard (MEPS) requirements: Amendment 1	
Energy efficiency	IEC 62623:2012 EN 62623:2013	Desktop and notebook computers - Measurement of energy consumption	
	Energy Star Test Method for Displays 6.0 and 7.1	Energy Star Program Requirements for Displays.	
	Energy Star Test Method for Televisions 6.0, 6.1 and 7.0	Energy Star Program Requirements for Televisions.	Excluding DAM-testing (Download acquisition mode) as required in clause 3.7.
	Energy Star Test Method for Computers 6.0, 6.1 and 7.1	Energy Star Program Requirements for Computers.	

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	Energy Star Test Method for Audio/Video 3.0	Energy Star Program Requirements for Audio/Video.	
	Energy Star Test Method for Imaging Equipment 2.0	Energy Star Program Requirements for Imaging Equipment.	
	Energy Star Test Method for Set-top Boxes 3.0, 4.1 and 5.0	Energy Star Program Requirements for Set-top Boxes.	