



TEST REPORT	
EN 60335-1 Household and similar electrical appliances - Safety - Part 1: General requirements	
EN 60335-2-21 Household and similar electrical appliances - Safety - Part 2-21: Particular requirements for storage water heaters	
Report Reference No.....	LAB1456TRFSFT
Tested by (name + signature).....	Apergis Nikolaos
Approved by (name + signature).....	Chachlakis Georgios
Date of issue.....	25.01.2019
Testing Laboratory	EMC HELLAS SA
Address	Mesogeion 2-4, 11527, Athens, Attiki, Greece
Testing location.....	EMC HELLAS SA
Address	HAI industries, 32009, Tanagra, Schimatari Viotias, Greece
Applicant's name	PAN.BITZIDIS KAI SIA OE (ALPHA THERM)
Address	Neohorouda, PO Box 152, 570 08 GR - Thessaloniki, Greece
Test specification:	EN 60335-1:2012 +A11 :2014 + AC:2014 (IEC 60335-1:2010 +A1:2013)
Standard(s)	EN 60335-2-21:2003 +A1:2005 +A2:2008 (IEC 60335 2-21:2002 +A1:2004 +A2:2008 +AC:2010)
Full application of the standards	<input checked="" type="checkbox"/>
Partial application of the standards.....	<input type="checkbox"/>
Testing procedure	As Above standards
Test Report Form No	IEC60335-2-21TRFSFT
TRF Originator	EMC HELLAS SA
Master TRF	Dated 11-2018
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Test item description	Storage Water Heaters
Trade Mark.....	
Manufacturer	PAN.BITZIDIS KAI SIA OE (ALPHA THERM)
Manufacturer's Address.....	Neohorouda, PO Box 152, 570 08 GR - Thessaloniki, Greece
Type/Model Reference	ALPHATHERM 300, ALPHATHERM 200, ALPHATHERM 150, ALPHATHERM 120
Ratings.....	230V~, 50Hz, 4000W, 1MPa, IP24
Serial number.....	---
Number of tested samples	Four (4)
Accessories.....	The E.U.T. is composed by a single unit
Project No.:	E18/087



EN 60335-1:2012 +A11 :2014 + AC:2014 (IEC 60335-1:2010 +A1:2013) EN 60335-2-21:2003 +A1:2004 +A2:2008 (IEC 60335 2-21:2002 +A1:2004 +A2:2008)							
No	Par. No.	Description	Verdict	No	Par. No.	Description	Verdict
1.	5	General conditions for the tests	P	2.	30	Resistance to heat and fire	P
3.	6	Classification	P	4.	31	Resistance to rusting	P
5.	7	Marking and instructions	P	6.	32	Radiation, toxicity and similar hazards	P
7.	8	Protection against access to live parts	P	8.	Annex A	Routine tests	NA
9.	10	Power input and current	P	10.	Annex B	Appliances powered by rechargeable batteries	NA
11.	11	Heating	P	12.	Annex C	Ageing test on motors	NA
13.	13	Leakage current and electric strength at operating temperature	P	14.	Annex D	Thermal motor protectors	NA
15.	14	Transient overvoltages	NA	16.	Annex E	Needle flame test	NA
17.	15	Moisture resistance	P	18.	Annex F	Capacitors	NA
19.	16	Leakage current and electric strength	P	20.	Annex G	Safety isolating transformers	NA
21.	17	Overload protection of transformers and associated circuits	NA	22.	Annex H	Switches	NA
23.	19	Abnormal operation	P	24.	Annex I	Motors having basic insulation that is inadequate for the rated voltage of the appliance	NA
25.	20	Stability and mechanical hazards	NA	26.	Annex J	Coated printed circuit boards	NA
27.	21	Mechanical strength	P	28.	Annex K	Overvoltage categories	P
29.	22	Construction	P	30.	Annex L	Guidance for the measurement of clearances and creepage distances	P
31.	23	Internal wiring	P	32.	Annex M	Pollution degree	P

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33.				34.		
35.	24	Components	P	36.	Annex N	Proof tracking test
37.	25	Supply connection and external flexible cords	P	38.	Annex O	Selection and sequence of the tests of clause 30
39.	26	Terminals for external conductors	P	40.	Annex P	Guidance for the application of this standard to appliances used in warm damp equable climates
41.	27	Provision for earthing	P	42.	Annex Q	Sequence of tests for the evaluation of electronic circuits
43.	28	Screws and connections	P	44.	Annex R	SOFTWARE EVALUATION
45.	29	Clearances, creepage distances and solid insulation	P			

Copy of marking plate:

Note: The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.



Note: None

