

Test Report issued under the responsibility of:



TEST REPORT IEC 62368-1

Audio/video, information and communication technology equipment Part 1: Safety requirements

Report Number :	CN220SYK 001	
Date of issue	2022-Aug-15	
Total number of pages:	86	
Name of Testing Laboratory preparing the Report:	TÜV Rheinland (Shenzhen) Co., Ltd.	
Applicant's name:	TPV Electronics (Fujian) Co., Ltd.	
Address:	Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian, P.R.China	
Test specification:		
Standard :	IEC 62368-1:2018	
Test procedure:	CB Scheme	
Non-standard test method: :	N/A	
TRF template used:	IECEE OD-2020-F1:2021, Ed.1.4	
Test Report Form No	IEC62368_1E	
Test Report Form(s) Originator :	UL(US)	
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Test item description:	LCD MONITOR
Trade Mark(s)	AOC
Manufacturer	Same as applicant
	27E3UM, 27E3********, Q27E3******* (* can be 0-9, A-Z, a-z, –, /, + or blank, represent different sales region and enclosure colour for marketing purpose)
Ratings	I/P: 100-240V~, 50/60Hz, 1.5A

Resp	Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):			
	CB Testing Laboratory:	TÜV Rheinland (Shenzhen	ı) Co., Ltd.	
Test	ing location/ address:	1601-1604, 17-18F, Tower Shenzhen International Inr Dashi 1st Road, Xili Street Shenzhen 518052 Nansha	novation Valley, , Xili Community,	
Test	ed by (name, function, signature) :	Same as below		
Арри	roved by (name, function, signature) :	Same as below		
\square	Testing procedure: CTF Stage 1:	TPV Electronics (Fujian) Co	o., Ltd.	
Test	ing location/ address:	Shangzheng, Yuan Hong F P.R.China	Road Fuqing City, Fujian,	
Test	ed by (name, function, signature):	Anderson Wang Senior Project Manager	Sen Ci	
Аррі	roved by (name, function, signature) :	Steven Lin Technical Reviewer	Senti	
	Testing procedure: CTF Stage 2:			
Test	ing location/ address:			
Tested by (name, function, signature):				
Witnessed by (name, function, signature) . :				
Аррі	roved by (name, function, signature) :			
	Testing procedure: CTF Stage 3:			
	Testing procedure: CTF Stage 4:			
Test	ing location/ address:			
Test	ed by (name, function, signature) :			
Witn	essed by (name, function, signature) . :			
Appr	roved by (name, function, signature) :			
Supe	ervised by (name, function, signature) :			

List of Attachments (including a total numl	ber of pages in ea	ch attachment):	
- Measurement Section (3 Pages)		·	
- National Differences (33 Pages)			
- Other National Requirements (7 Pages)			
 Photo documentation (8 Pages) 			
Summary of testing:			
		The first to a first to a first	
Tests performed (name of test and test cla	-	Testing location:	
name of test	test clause number	1) All tests except Ball pressure test and Wall mounting test as described in	
Classification of electrical energy sources	5.2	Test Case and Measurement Sections	
Accessibility to electrical energy sources and safeguards (Accessibility test)	5.3.2	were performed at the CTF stage 1 described on page 2.	
Maximum operating temperature test (Heating test)	5.4.1.4, 9.3, B.1.5, B.2.6	2) Ball pressure test and Wall mounting test was performed at CB Testing	
Determination of working voltage	5.4.1.8	Laboratory described on page 2.	
Ball pressure test	5.4.1.10.3		
Minimum Clearances/Creepage distance	5.4.2, 5.4.3]	
Humidity test	5.4.8		
Electric strength test	5.4.9		
Safeguards against capacitance discharge test	5.5.2.2		
Resistance of the protective bonding system (Ground continuity test)	5.6.6		
Unearthed accessible parts	5.7.4		
Earthed accessible conductive part test	5.7.5		
Electrical Power Source (PS) measurements for classification	6.2.2		
Top Openings in Fire Enclosure	6.4.8.3.3		
Bottom Openings in Fire Enclosure	6.4.8.3.4		
Stability	8.6		
Wall or ceiling mount loading test	8.7		
Input test	Annex B.2.5		
Abnormal operating and fault condition tests	Annex B.3, B.4		
Test for permanence of markings	Annex F.3.10		
Transformer insulation	Annex G.5.3.2		
Transformer overload	Annex G.5.3.3		
Safeguards against entry of foreign object	Annex P.2.2		
Adhesive test	Annex P.4		
Limited power source test (LPS)	Annex Q.1		
Steady force test, 10N, 30N, 250N	Annex T.2, T.3, T.5		
Enclosure impact test	Annex T.6		
Stress relief test	Annex T.8		

TRF No. IEC62368_1E

Summary of compliance with National Differences (List of countries addressed):

EU Group Differences, EU Special National Conditions, CA, DK, SG, US

Explanation of used codes: CA=Canada, DK=Demark, SG=Singapore, US=United States of America

The product fulfils the requirements of <u>EN IEC 62368-1:2020+ A11:2020</u> and <u>BS EN IEC 62368-1:</u> 2020 + A11: 2020.

For National Differences see corresponding Attachment.

Use of uncertainty of measurement for decisions on conformity (decision rule) :

No decision rule is specified by the IEC standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule, previously known as "accuracy method").

Other:... (to be specified, for example when required by the standard or client, or if national accreditation requirements apply)

Information on uncertainty of measurement:

The uncertainties of measurement are calculated by the laboratory based on application of criteria given by OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE.

IEC Guide 115 provides guidance on the application of measurement uncertainty principles and applying the decision rule when reporting test results within IECEE scheme, noting that the reporting of the measurement uncertainty for measurements is not necessary unless required by the test standard or customer.

Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.

Copy of marking plate:

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: All models rating label are similar except for type designation. Above labels are representing the other models.

Test item particulars:			
Product group	end product	built-in compo	onent
Classification of use by	Ordinary persor	n 🛛 🖂 Chi	ldren likely present
	Instructed perso	on	
	Skilled person		
Supply connection	AC mains		mains
			3
Supply tolerance			
	+20%/-15%		
	□ + %/ -	%	
Supply connection – type:		etachable supply	cord
		ince coupler	Cord
	☐ direct	•	
	🗌 pluggable equip	• •	
		etachable supply	cord
	applia	ince coupler	
	mating connect		
Considered current rating of protective	\boxtimes 20 A;		
device:	Location:	🛛 building	🗌 equipment
	□ N/A		
Equipment mobility:	⊠ movable	hand-held	transportable
	☐ direct plug-in ⊠ wall/ceiling-mo		for building-in
	other:		mack-mounted
Overvoltage category (OVC):	_	🖂 OVC II	
		other:	
Class of equipment:	Class I	Class II	Class III
Special installation location	☐ Not classified ⊠ N/A	restricted acc	
Special installation location:	outdoor location	_	,555 alea
Pollution degree (PD)	PD 1	⊠ PD 2	PD 3
Manufacturer's specified T _{ma}	40 °C 🗌 Outdoor	r: minimum	°C
IP protection class		🗌 IP	
Power systems:	 ⊠ TN □ TT	□ IT - V	
	not AC mains		L-L
Altitude during operation (m)	2000 m or less	🔀 5000 m	
Altitude of test laboratory (m)	🔀 2000 m or less	🗌 m	
Mass of equipment (kg):	Approx. 4.32kg (wi	th base); Base w	eight: 0.67kg
Possible test case verdicts:			
- test case does not apply to the test object:	N/A		
- test object does meet the requirement:			
- test object does not meet the requirement:	, ,		
teet enjoet need net meet the requirement	. ()		

Testing:			
Date of receipt of test item Jun.29.2022			
Date	Date (s) of performance of tests Jun.29.2022 - Aug.09.2022		
Gene	ral remarks:		
	"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.		
Thurs			
Throu	ughout this report a 🗌 comma / 🖄 point is	used as the decimal separator.	
Manu	ifacturer's Declaration per sub-clause 4.2.5 o	of IECEE 02:	
	-	⊠ Yes	
	les more than one factory location and a	Not applicable	
	ration from the Manufacturer stating that the le(s) submitted for evaluation is (are)		
	sentative of the products from each factory		
	een provided		
When	n differences exist; they shall be identified in	n the General product information section.	
Name	e and address of factory (ies) :		
1	TPV Electronics (Fujian) Co., Ltd.		
	Rongqiao Economic and Technological Devel	lopment Zone, Fuqing City, Fujian, P.R. China	
2	TPV Electronics (Fujian) Co., Ltd.		
_	Shangzheng, Yuan Hong Road, Fuqing City,	Fujian, P.R. China	
3	TPV Electronics (Fujian) Co., Ltd.	d Technological Development Zone, Fuqing City,	
	350301, Fujian, P.R. China	a reciniological Development Zone, ruqing City,	
4	L&T Display Technology (Fujian) Ltd.		
	Optoelectronic Park, Rongqiao Economic and	d Technological Development Zone, Fuqing, 350301,	
	Fujian, P.R. China		
5	TPV Display Technology (China) Co., Ltd.		
6	No. 106 Jinghai 3 Rd., BDA, 100176, Beijing, TPV Display Technology (Wuhan) Co., Ltd.	P.R. China	
0		ict of Economic Technological Development Zone,	
	430056, Wuhan City, P.R. China		
7			
	China Electronic Beihai Industry Park, Northeast of the Crossing Between Taiwan Road and Jilin		
	Road, Beihai City, Guangxi, P.R. China		
8			
	Avenida Sor Juana Ines de la Cruz de 19602 Nueva Tijuana, 22435 Tijuana Baja California, MEXICO		
9			
	Av. Torquato Tapajós, 2236, Flores - CEP 69058-830 - Manaus/AM, Brazil		
10	10 TPV Technology (Thailand) Co., Ltd.		
	No.267 Mu7, Tha Tum Sub- District, Si Maha Pho District, Prachin Buri Province, Thailand		
11	11 GeneTouch Corp. No. 9 Neivi Rd. Luzhu Dist. Taovuan City, 338012 Taiwan		
12	No. 9 Neixi Rd., Luzhu Dist., Taoyuan City, 338012, Taiwan 12 Dixon Technologies (India) Ltd.		
	EMC-2, Shed No. 2,4,5,6 & 7, Near Tirupati Airport, Village Govindhavaram, Munagalapalem Post,		
	Revenue Vikruthamala, Yerpedu Mandelam, District-Chittoor, Andhra Pradesh, 517526, India		
13			
	Islas Malvinas 1180, Rio Grande (9420), Provincia de Tierra del Fuego, Antártida e Islas del		
	Atlántico Sur, Argentina		

General product information and other remarks:

Product Description -

The model is LCD MONITOR intended for general office use and has following features:

- 1. LCD Type: curved TFT LCD panel with LED backlight.
- 2. Two alternative building-in power supply boards 715GD270 and 715GD262 with DC/DC converter circuit and decoding circuit with data ports;
- 3. USB board 715G9632 (optional), which is supplied by power boards mentioned above
- 4. The internal metal chassis is considered as fire enclosure and mechanical enclosure, and the external plastic enclosure is regarded as electrical enclosure and mechanical enclosure, made of min. HB material;
- 5. Base stand (optional use): Plastic (HB or better) and metal;
- 6. Maximum declared ambient: 40°C.

Additional information –

All data ports on power boards are optional use.

Model Differences -

All models are identical except for type designation; Model 27E3UM is specified model of model 27E3****** listed by client's request.