

Ref. Certif. No.

FI-57536

IEC SYSTEM FOR MUTUAL RECOGNITIO (IECEE) CB SCHEME	N OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT
CB TEST CERTIFICATE	
Product	LCD Monitor
Name and address of the applicant	TPV Electronics (Fujian) Co., Ltd. Rongqiao Economic & Technological Development Zone, Fuqing, Fujian, China
Name and address of the manufacturer	TPV Electronics (Fujian) Co., Ltd. Rongqiao Economic & Technological Development Zone, Fuqing, Fujian, China
Name and address of the factory	See page 2
Note: When more than one factory, please report on page 2	Additional Information on page 2
Ratings and principal characteristics	100 V - 240 V; 50 Hz / 60 Hz; 1,5 A; Class I
Trademark / Brand (if any)	/IOC
Customer's Testing Facility (CTF) Stage used	-
Model / Type Ref.	24G4, **24G4********** (* can be A-Z, a-z, 0-9, blank or symbol +, -, /, or sign absence or no mark or no symbol)
Additional information (if necessary may also be reported on page 2)	Other rating: IPX0; Tma: 40 °C; Max. altitude: 5000 m
A sample of the product was tested and found to be in conformity with	IEC 62368-1:2018 National Differences: EU Group Differences, AU, NZ, US, CA, SG, SA, CN, JP
As shown in the Test Report Ref. No. which forms part of this Certificate	SZES230800494101
This CB Test Certificate is issued by the Nation	onal Certification Body
SGS Fimko Ltd Takomotie 8 FI-00380 Helsinki, Finland	SGS
Date: 2023-09-05	Signature: Ny D
	Ralf Klingberg Certification Manager

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FI-57536

Name and address of the factories: 1. TPV Electronics (Fujian) Co., Ltd. Ronggiao Economic & Technological Development Zone, Fuging, Fujian, China 2. TPV Electronics (Fujian) Co., Ltd. Shangzheng, Yuan Hong Road, Fuqing, Fujian, China 3. TPV Electronics (Fujian) Co., Ltd. Optoelectronic Park, Ronggiao Economic and Technological Development Zone, Fuging, Fujian, China 4. L&T Display Technology (Fujian) Ltd. Optoelectronic Park, Ronggiao Economic and Technological Development Zone, Fuging, Fujian, China 5. TPV Display Technology (China) Co., Ltd. No.106 Jinghai 3 Rd., BDA, Beijing, 100176, China 6. TPV Display Technology (Wuhan) Co., Ltd. Unique No. 11 Zhuankou Development District of Economic Technological Development Zone, Wuhan, Hubei, China 7. TPV Display Technology (Beihai) Co., Ltd. China Electronic Beihai Industry Park, Northeast of the Crossing between Taiwan Road and Jilin Road, Beihai, Guangxi, China 8. TREND SMART CE MEXICO S. DE R.L. DE C.V. Sor Juana, Ines de la Cruz No.19602 Nueva, C.P. 23435, Tijuana, Baja California, Mexico 9. Envision Indústria de Produtos Eletrônicos Ltda. Av. Torquato Tapajós, 2236, Flores, CEP 69058-830, Manaus, AM, Brazil 10. TPV Technology (Thailand) Co., Ltd. No. 267 Mu7, Tha Tum Sub- District, Si Maha Pho District, Prachinburi, Thailand 11. GeneTouch Corporation No. 9, Neixi Rd., Luzhu Dist., Taoyuan, 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, 517526, Andhra Pradesh, India 13. Fábrica Austral de Productos Eléctricos S.A. Islas Malvinas 1180, Rio Grande (9420), Provincia de, Tierra del Fuego, Antártida e Islas del Atlántico Sur, Argentina 14. Sichuan Greatwall Computer System Co., Ltd. 1# Kechuang Road, Jiangyang District, Luzhou, Sichuan, China SGS Fimko Ltd SGS Takomotie 8 FI-00380 Helsinki, Finland Signature: Date: 2023-09-05 Ralf Klingberg Certification Manager

Issued 2018-06-05

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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:	SZES230800494101
Date of issue:	2023-09-05
Total number of pages	80 Pages
Name of Testing Laboratory preparing the Report	SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
Applicant's name:	TPV Electronics (Fujian) Co., Ltd.
Address:	Rongqiao Economic & Technological Development Zone, Fuqing, Fujian, 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)
Master TRF :	Dated 2022-04-14

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This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

		F	Page 2 of 80	Report No.: SZES230800494101
Test	item description:	LCD N	Ionitor	
Trac	le Mark(s):		OC	
Man	ufacturer:	Same	as applicant	
Mod	el/Type reference:	24G4	**24G4*************** (* car	be A-7 a-z 0-9 blank or symbol
		+, -, /,	or sign absence or no	mark or no symbol)
Rati	ngs:	100 - 2	240 V ~~, 50 / 60 Hz, 1,	5 A, Class I
Res	ponsible Testing Laboratory (as a	applical	ole), testing procedure	and testing location(s):
\boxtimes	CB Testing Laboratory:		SGS-CSTC Standards T Shenzhen Branch	Technical Services Co., Ltd.
Test	ing location/ address	:	No. 1 Workshop, M-10, Technology Park, Shenz	Middle Section, Science & zhen, Guangdong, China
Tested by (name, function, signature) :		Becky Wang /	Bach. III.	
			Project Engineer	Decky Wang
Approved by (name, function, signature):		Ruby Yan /		
			Report Reviewer	1xm1/a
	Teeting presedure: CTE Store 4	_		11
	Testing procedure: CTF Stage 1	•		
lest	ing location/ address	:		
Test	ed by (name, function, signature)) :		
Арр	roved by (name, function, signate	ure):		
	Testing procedure: CTF Stage 2	:		
Test	ing location/ address	:		
Test	ed by (name, function, signature))		
Witr	essed by (name, function, signat	ure).:		
Арр	roved by (name, function, signate	ure):		
	Testing procedure: CTF Stage 3	:		
	Testing procedure: CTF Stage 4	:		
Test	ing location/ address	:		
Test	ed by (name, function, signature)) :		
Witr	essed by (name, function, signat	ure).:		
Арр	roved by (name, function, signati	ure):		
Sup	ervised by (name, function, signa	ture) :		
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List of Attachments (including a total number of	pages in each attachment):			
Attachment 1: 12 pages of Photos;				
Attachment 2: 2 pages of Construction of Transformer;				
Attachment 3: 20 pages of EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES;				
Attachment 4: 29 pages of AUSTRALIA / NEW ZEALAND NATIONAL DIFFERENCES;				
Attachment 5: 8 pages of U.S.A. AND CANADA NATIONAL DIFFERENCES;				
Attachment 6: 2 pages of SINGAPORE NATIONAL DIFFERENCES;				
Attachment 7: 1 page of SAUDI ARABIA NATIONAL DIFFERENCES;				
Attachment 8: 5 pages of CHINA NATIONAL DIFFERENCES;				
Attachment 9: 5 pages of JAPAN NATIONAL DIFFERENCES.				
Summary of testing:				
The sample(s) tested complies with the requirements	of IEC 62368-1:2018.			
Representative model(s) for full testing: 24G4.				
Heating test: Tma = 40 °C (Declared by manufacturer)				
T-type thermocouple used for temperature measurement.				
Unless otherwise specified, all tests were carried out	with three vertical bar products three equidistant			
vertical white bars on a black background and maxin	num brightness and contrast.			
Tests performed (name of test and test clause):	Testing location:			
Tests performed (name of test and test clause): \boxtimes 4. General requirements	Testing location: SGS-CSTC Standards Technical Services Co., Ltd.			
 Tests performed (name of test and test clause): ☑ 4. General requirements ☑ 5. Electrically-caused injury 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch			
 Tests performed (name of test and test clause): ☑ 4. General requirements ☑ 5. Electrically-caused injury ☑ 6. Electrically-caused fire 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): ☑ 4. General requirements ☑ 5. Electrically-caused injury ☑ 6. Electrically-caused fire ☑ 7. Injury caused by hazardous substances 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): ☑ 4. General requirements ☑ 5. Electrically-caused injury ☑ 6. Electrically-caused fire ☑ 7. Injury caused by hazardous substances ☑ 8. Mechanically-caused injury 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): ☑ 4. General requirements ☑ 5. Electrically-caused injury ☑ 6. Electrically-caused fire ☑ 7. Injury caused by hazardous substances ☑ 8. Mechanically-caused injury ☑ 9. Thermal burn injury 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): △ 4. General requirements △ 5. Electrically-caused injury △ 6. Electrically-caused fire □ 7. Injury caused by hazardous substances △ 8. Mechanically-caused injury △ 9. Thermal burn injury △ 10. Radiation 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): ☑ 4. General requirements ☑ 5. Electrically-caused injury ☑ 6. Electrically-caused fire ☑ 7. Injury caused by hazardous substances ☑ 8. Mechanically-caused injury ☑ 9. Thermal burn injury ☑ 10. Radiation ☑ Annex B. Normal operating condition tests, a provide test of a set of a	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): ☑ 4. General requirements ☑ 5. Electrically-caused injury ☑ 6. Electrically-caused fire ☑ 7. Injury caused by hazardous substances ☑ 8. Mechanically-caused injury ☑ 9. Thermal burn injury ☑ 10. Radiation ☑ Annex B. Normal operating condition tests, abnormal operating condition tests and single fault condition tests 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): ☑ 4. General requirements ☑ 5. Electrically-caused injury ☑ 6. Electrically-caused fire ☑ 7. Injury caused by hazardous substances ☑ 8. Mechanically-caused injury ☑ 9. Thermal burn injury ☑ 10. Radiation ☑ Annex B. Normal operating condition tests, abnormal operating condition tests and single fault condition tests ☑ Annex F.3.9. Performance of Marking test 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): △ 4. General requirements △ 5. Electrically-caused injury △ 6. Electrically-caused fire ○ 7. Injury caused by hazardous substances ○ 8. Mechanically-caused injury ○ 9. Thermal burn injury ○ 10. Radiation ○ Annex B. Normal operating condition tests, abnormal operating condition tests and single fault condition tests ○ Annex F.3.9. Performance of Marking test ○ Annex M. Equipment Containing Batteries And 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): △ 4. General requirements △ 5. Electrically-caused injury △ 6. Electrically-caused fire ○ 7. Injury caused by hazardous substances ○ 8. Mechanically-caused injury ○ 9. Thermal burn injury ○ 10. Radiation ○ Annex B. Normal operating condition tests, abnormal operating condition tests and single fault condition tests ○ Annex F.3.9. Performance of Marking test ○ Annex M. Equipment Containing Batteries And Their Protection Circuits 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): ☑ 4. General requirements ☑ 5. Electrically-caused injury ☑ 6. Electrically-caused fire ☑ 7. Injury caused by hazardous substances ☑ 8. Mechanically-caused injury ☑ 9. Thermal burn injury ☑ 10. Radiation ☑ Annex B. Normal operating condition tests, abnormal operating condition tests and single fault condition tests ☑ Annex F.3.9. Performance of Marking test ☑ Annex M. Equipment Containing Batteries And Their Protection Circuits ☑ Annex P.4 Metallized coatings and adhesives 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): △ 4. General requirements △ 5. Electrically-caused injury △ 6. Electrically-caused fire ○ 7. Injury caused by hazardous substances ○ 8. Mechanically-caused injury ○ 9. Thermal burn injury ○ 10. Radiation ○ Annex B. Normal operating condition tests, abnormal operating condition tests and single fault condition tests ○ Annex F.3.9. Performance of Marking test ○ Annex M. Equipment Containing Batteries And Their Protection Circuits ○ Annex P.4 Metallized coatings and adhesives securing parts 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): △ 4. General requirements △ 5. Electrically-caused injury △ 6. Electrically-caused fire ○ 7. Injury caused by hazardous substances ○ 8. Mechanically-caused injury ○ 9. Thermal burn injury ○ 10. Radiation ○ Annex B. Normal operating condition tests, abnormal operating condition tests and single fault condition tests ○ Annex F.3.9. Performance of Marking test ○ Annex M. Equipment Containing Batteries And Their Protection Circuits ○ Annex P.4 Metallized coatings and adhesives securing parts ○ Annex Q. Limited Power Source 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			
 Tests performed (name of test and test clause): △ 4. General requirements △ 5. Electrically-caused injury △ 6. Electrically-caused fire ○ 7. Injury caused by hazardous substances ○ 8. Mechanically-caused injury ○ 9. Thermal burn injury ○ 10. Radiation ○ Annex B. Normal operating condition tests, abnormal operating condition tests and single fault condition tests ○ Annex F.3.9. Performance of Marking test ○ Annex M. Equipment Containing Batteries And Their Protection Circuits ○ Annex P.4 Metallized coatings and adhesives securing parts ○ Annex Q. Limited Power Source ○ Annex T. Mechanical strength tests 	Testing location: SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China			

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

EU Group Differences, AU, NZ, US, CA, SG, SA, CN, GB, JP

☑ The product fulfils the requirements of EN IEC 62368-1:2020+A11:2020, AS/NZS 62368.1:2022, UL 62368-1: 2019 Ed.3, CSA C22.2 No. 62368-1: 19 Ed.3, SASO-IEC 62368-1:2020, GB 4943.1-2022, BS EN IEC 62368-1: 2020 + A11: 2020, J62368-1(2023).

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.



4. Marking on the packaging or in a document accompanying the electrical equipment is only acceptable if it is not possible to place such markings on the product.