Technical Report No.: 64.140.22.02712.02

Date: 2024-08-19

Client:	Name:	Guangdong Huasheng Electronic Technology Co., Ltd.
	Address:	118# Dongyuan Road, Shipai Town, 523350 Dongguan City, Guangdong Province, PEOPLE'S REPUBLIC OF CHINA
	Contact person:	Mr. Sky Li
Manufacturer:	Name:	Same as applicant
	Address:	Same as applicant
	Contact person:	Mr. Sky Li
Factory:	Name:	Same as applicant
	Address:	Same as applicant
	Contact person:	See above
Test object:	Product:	LED Driver
	Model:	HS12A-xxxyyy-AG, HS12A-xxxyyy-AB, HS12A-xxxyyy-CG, HS12B-xxxyyy-CG, HS12B-xxxyyy-CB, HS12U-050yyy-AG, HS12U-050yyy-AB (xxx and yyy are variables, see model list for details)
	Trade mark:	N/A
	Brand name:	N/A
Test specification:	EN 61347-1:2015/A1:2021 EN 61347-2-13:2014/A1:2017 EN 62493:2015/A1:2022 EK1 557-13 AfPS GS 2019:01 PAK	

Purpose of examination:

- ☒ Testing (☐ visual / ☐ partial) for compliance with specified requirements to assess conformity with the German Product Safety Act - ProdSG (27 July 2021)
- ☒ Testing (☐ visual / ☐ partial) for compliance with specified requirements to assess conformity with the essential safety and health requirements of the following European Directives:
  - ☒ Low Voltage Directive 2014/35/EU
  - ☒ EMC directive 2014/30/EU

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- Testing and evaluation (☐ visual / ☐ partial) according to the test specification

Test result: The test results show that the presented product is in compliance with the above listed test specifications.

Requirements of AfPS GS 2019:01 PAK have been evaluated and found to be met by evaluation and relevant test.

1. Description of the test object

1.1 Picture(s)

1.2 Function

The LED Drivers are independent non-inherently short-circuit proof safety isolating control gear; they are constant voltage output type and the load can only be LED modules.

Manufacturer's specification for intended use:
According to the user manual

1.3 Consideration of the foreseeable use

☐ Not applicable
☒ Covered through the applied standard
☐ Covered by the following comment*
☐ Covered by attached risk analysis
*

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1.4 Technical Data

Model	:	HS12A-xxxyyy-AG, HS12A-xxxyyy-AB, HS12A-xxxyyy-CG, HS12B-xxxyyy-CG, HS12B-xxxyyy-CB, HS12U-050yyy-AG, HS12U-050yyy-AB(xxx=050-300 stands for rated output voltage range 5.0-30.0VDC with step of 0.1V; yyy=010-200 stands for rated output current 0.01-2.0A with step of 0.01A)
Rated Input	:	220-240VAC, 50/60Hz, 0.4A Max.
Rated Output	:	See model list for details
Protection against Electric Shock	:	Class II; SELV
Degree of Protection	:	IP20
Method of Installation	:	Independent
Supply connection	:	Direct plug-in
Type of Output	:	Constant voltage type
ta; tc	:	ta=40°C, tc=75°C
Software revision number(s) for functional safety	:	None

Model list:

Model	Rated output		
	Voltage range (VDC)	Current range (A)	Max. Power (W)
HS12U-050yyy-AG, HS12U-050yyy-AB	5.0	0.01-2.0	10.0
HS12A-xxxyyy-AG, HS12A-xxxyyy-AB	5.0-9.0	0.01-2.0	12.0
	9.1-17.0	0.01-1.25	15.0
	17.1-30.0	0.01-0.7	12.0
HS12B-xxxyyy-CG, HS12B-xxxyyy-CB, HS12A-xxxyyy-CG	5.0-9.0	0.01-2.0	12.0
	9.1-17.0	0.01-1.33	12.0
	17.1-30.0	0.01-0.7	12.0
Remark: 1). xxx=050-300 stands for rated output voltage range 5.0-30.0VDC with step of 0.1V; 2). yyy=010-200 stands for rated output current 0.01-2.0A with step of 0.01A;			

2. Order

2.1 Date of Purchase Order, Customer's Reference

2024-07-30

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2.2 Test Sample(s)

- Reception date(s): 2024-08-07
- Location(s) of reception: TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch
  5F&8F East, Communication Building, No.163 Pingyun Road, Huangpu Ave. West, Guangzhou, Guangdong 510656
- Condition of test sample(s): complete

2.3 Date(s) of Testing

- Reception date(s): 2024-08-07 to 2024-08-19
- Location(s) of testing: TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch
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2.4 Points of Non-Compliance or Exceptions of the Test Procedure

- None

3. Test Results

☒ Decision rule according to ILAC-G8:09/2019 clause 4.2.1 Binary statement for simple acceptance rule or IEC Guide 115:2023, clause 4.3.3 Simple acceptance was applied.

3.1 Positive Test Results

Test specification(s)	Report no. / Rev. No.	Date	Remark
Electrical safety:	64.140.22.02712.02 Rev. 00	2024-08-19	--
Mechanical safety:	64.140.22.02712.02 Rev. 00	2024-08-19	--
PAH:	68.420.24.0997.01 Rev. 01	2024-07-12	--
EMF Radiation:	64.140.22.02712.02 Rev. 00	2024-08-19	--
EMC Radiation:	SDOC	2024-08-19	--
Chemical requirements / compounds:	SDOC	2024-08-19	ROHS, WEEE
Energy efficiency:	SDOC	2024-08-19	ERP

3.2 Points of Non-Compliance according to the test specification

☒ None

4. Remarks

4.1 General

The user manual has been examined according to the minimum requirements described in the product standard. The manufacturer is responsible for the accuracy of further particulars as well as of the composition and layout.

4.2 Factory surveillance cycle

Your production facility is currently on the following surveillance cycle.

☒ Annual (12 month)
☐ Bi-Annual (6 month)
☐ Quarterly (3 month)
☐

4.3 Additional information for routine tests to be performed by the factory(ies)

Final inspection requirements for production are described in Annex K of EN 61347-1:2015/A1:2021.

Routine tests for electrical appliances / equipment:

Routine test requirements for production are described in Annex K of EN 61347-1:2015/A1:2021.

☒ Required
☐ Not Required — Reason for non-requirement:
☐ Class III product
☐ Other:

Test Details:	Test Points:	Test Values / Limit(s):
☒ Dielectric Strength	BI: L/N – Chassis / Earthing terminal	Vac / Vdc
	RI: L/N – Secondary	3000 Vac / Vdc
☐ Ground Continuity	AC-Inlet – Chassis and/or Earthing terminal	A ; t ≥ 1 s ; R < 0.1 Ohm (Ω)
☐ Insulation Resistance	BI: L/N – Chassis	Vdc

		R > 2 MOhm (MΩ)
	RI: L/N – Secondary	Vdc
☐ Leakage Current	Ground - PE	mA
☐ Touch Current		mA
☐ Polarity		
☐ Other:		

4.4 When the product is placed on the market, it must be accompanied with safety Instructions written in official language of the country. The instructions shall give information regarding safe operation, installation and maintenance

4.5 When measurement results are close to limit value of specified requirement, manufacturer shall take actions during the production process to keep the limit, especially if the result of a measurement is in a bandwidth within ±10% to the limit value

4.6 According to the German product safety law (ProdSG), the name and contact address of manufacturer or if he is not based in the European Economic Area, an EU-based authorized representative or importer shall be affixed to the product or, where that is not possible, to its packaging before the product is placed on the market;

For EU directives and regulations which have been harmonized with (EU) 2019/1020 in its Annex I, the name, registered trade name or registered trade mark, and contact details, including the postal address of the economic operator (EU manufacturer, EU importer, EU authorised representative, or EU fulfilment service provider where no other economic operator as mentioned in the first 3 options) shall be indicated on the product or on its packing, the parcel or an accompanying document.

4.7 The economic operator has to ensure the appliance placing on the EU market conforms to the applicable EU directives and regulations which provide the affixing of the CE marking, such as LVD, EMC, RoHS, ErP, and so on.

4.8 All applicable hazards from EU directive 2014/35/EU are covered by harmonized standard

EN 61347-1:2015/A1:2021

EN 61347-2-13:2014/A1:2017

EN 62493:2015/A1:2022

4.9 Battery Regulation (EU) 2023/1542 applies from February 18th, 2024. The CE marking conformity requirement to all batteries applies from August 18th, 2024. Economic operators of end products incorporated with battery shall ensure the conformity of battery used to all applicable requirements of (EU) 2023/1542. Portable batteries and

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LMT batteries used in end products shall meet additional requirement of removability and replaceability by February 18, 2027.

5. Documentation

File	File name	Date
Data form (CDF):	64.140.22.02712.02 CDF_Z1A_N8A	2024-08-19
Photo documentation:	64.140.22.02712.02 DOC_Z1A_N8A	2024-08-19

6. Summary

The test specification(s) is (are) met.

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Tested by: Kenly Wu
Project Handler
printed name, function & signature

Approved by: Allen Dong
Designated Reviewer
printed name, function & signature

--- End of Report ---

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