# CERTIFICATE

Issued to: Applicant: HEP Tech Co. Ltd. No. 20, Jingke 7th Rd., Nantun Dist., 408 Taichung City, Taiwan

Licensee: HEP GmbH Ramsloh 10 58579 Schalksmühle, Germany

Product Trade name(s) Type(s)/model(s)

**>** DEKRA

HEP GROUP® LLD20W700CA, LLD30W900CA, LLD40W1050CA, LLD50W1400CA and LLD60W1750CA

The product and any acceptable variation thereto is specified in the Annex to this certificate and the documents therein referred to.

DEKRA hereby declares that the above-mentioned product has been certified on the basis of:

Current controlled dimmable LED Driver

- a type test according to the standard(s) EN 61347-1.2015, EN 61347-2-13/2014 EN 61347-2-13:2014/A1:2017, EN 62384:2006 and EN 62384/2006/A1:2009
- an inspection of the factory location according to CENELEC Operational Document CIG 021
- a DEKRA certification agreement with the number 2013493

DEKRA hereby grants the right to use the ENEC certification mark.

The ENEC certification mark may be applied to the product as specified in this certificate for the duration and under the conditions of the ENEC certification agreement.

This certificate is issued on 28 July 2021 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 88-119992

DEKRA Certification B.V.

B.T.M. Holtus Managing Director

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ACCREDITED BY THE DUTCH ACCREDITATION COUNCIL



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### ANNEX TO ENEC CERTIFICATE 88-119992

### SPECIFICATION OF THE CERTIFIED PRODUCT

# Product dataProduct: Current controlled dimmable LED DriverTrade name(s): HEP GROUP®Type(s)/model(s): LLD20W700CA, LLD30W900CA, LLD40W1050CA,<br/>LLD50W1400CA and LLD60W1750CARated input voltage: 220-240 VNature of supply: acRated frequency: 50-60 HzPower factor: 0,9 CTemperature range: -25...+50°CMax. case temperature: tc = 85°CDegree of protection: IP 20Type of protection: Class IIClassification of installation: Independent

### Product data – type LLD20W700CA

Supply current	: max. 120 mA
Rated output voltage	: 60 Vdc max.
Rated output current	: 700 mA max.
Rated output power	: 21 W max.

### Product data - type LLD30W900CA

max. 160 mA
58 Vdc max.
900 mA max.
30 W max.

### Product data – type LLD40W1050CA

Supply current	: max. 220 mA
Rated output voltage	: 58 Vdc max.
Rated output current	: 1050 mA max.
Rated output power	: 40 W max.

### Product data - type LLD50W1400CA

Supply current	: max. 270 mA
Rated output voltage	: 58 Vdc max.
Rated output current	: 1400 mA max.
Rated output power	: 50 W max.

### Product data – type LLD60W1750CA

Supply current	: max. 320 mA
Rated output voltage	: 58 Vdc max.
Rated output current	: 1750 mA max.
Rated output power	: 60 W max.

### TESTS

### **Test requirements**

EN 61347-1:2015 EN 61347-2-13:2014



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EN 61347-2-13:2014/A1:2017 EN 62384:2006 EN 62384:2006/A1:2009

### **Test result**

The test results are laid down in DEKRA test file 342402300.

### Additional information

The LED controlgear is an independent SELV controlgear for LEDs with constant current. The LED controlgear is dimmable with DALI or 0-10V / 1-10V. The insulation between primary and secondary is SELV and between primary and housing is considered as double insulation. The insulation between DALI and primary circuit is basis isolated and to the secondary circuit is double or reinforced insulation. The insulation between 0-10V / 1-10V control and primary circuit is double or reinforced insulated and to the secondary circuit is double or reinforced insulated and to the secondary circuit is non-insulated. The controlgear has screwless terminals. The max. enclosure temperature under abnormal or fault conditions is 110°C.

This certificate replaces certificate No. 88-116422 which we hereby declare invalid.

The list of components is laid down in test report 3424023.50.

**Conclusion** The examination proved that all requirements were met.

Factory locations HEP GmbH Ramsloh 10 58579 Schalksmühle, Germany

Weisen Electronic Co. Ltd. Sanzao Ind. Park of Zhuhai Zhuhai City 511450 Guangdong Province, China



## Type designation: LLDyyWxxxxCA

"yy" in the type designation = type series, throughout the whole list below. "xxxx" in the type designation = output current, throughout the whole list below.

Model Name	Input			Output				Environment		
								No-load		
	Supply	Supply	Supply	Power	Output	Output	Output	Output	Ambient	Max. Case
- LLDyyWxxxxCA	Voltage	Frequency	Current	Factor	Voltage	Current	Power	Voltage	Temperature	Temperature
(with DALI-2 and 1-10V Control)	Un [V]	fn [Hz]	In [mA]	@ full load	Urange [V]	Irated [mA]	Prated [W]	Uout [V]	ta [°C]	tc [°C]
LLD20W700CA					9–60	250	2,3–15			
	220-240	50-60	max.	0,90 C	9–58	350	3,2–20,5	68	-25 - +50	85
	220-240	50-60	120	0,90 C	9–42	500	4,5–21	68	-25 - +50	85
					9–30	700	6,3–21			
LLD30W900CA					9–58	300	2,7–17,4			
					9–58	350	3,2–20,3			
					9–58	400	3,6–23,2			
					9–58	450	4,1-26,1			
					9–58	500	4,5–29			
			max.		9–55	550	5–30			
	220–240	50-60	160	0,90 C	9–50	600	5,4–30	68	-25-+50	85
			100		9–46	650	5,9 <del>-</del> 30			
					9–42	700	6,3–30			
					9–40	750	6,8–30			
					9–38	800	7,2–30			
					9–35	850	7,7–30			
					9–34	900	8,1–30			
LLD40W1050CA					9–58	500	4,5–29	-		
					9–58	550	5–31,9			
					9–58	600	5,4–34,8			
					9–58	650	5,9 <del>-</del> 37,7			
					9–58	700	6,3–40			
	220-240	50–60	max. 220	0,90 C	9–53	750	6,8–40	68	-25 - +50	85
	220-240				9–50	800	7,2–40			
					9–47	850	7,7–40			
					9–45	900	8,1–40			
					9–42	950	8,6–40			
					9–40	1000	9–40			
					9–38	1050	9,5–40			
LLD50W1400CA					9–58	700	6,3–40,6			
					9–58	800	7,2–46,4			
			max. 270	0,90 C	9–56	900	8,1–50	68	-25 - +50	85
220	220–240	50-60			9–48	1050	9,5–50			
			270		9-41	1200	10,8–50			
					9–38	1300	11,7–50			
					9–36	1400	12,6–50			
LLD60W1750CA	LD60W1750CA				9–58	900	8,1–52,2			
			max.		9–58	1050	9,5–60			
	220–240	50–60	320	0,90 C	9–50	1200	10,8–60	68	-25 – +50	85
			520		9–43	1400	12,6–60			
					9–34	1750	15,8–60			