

# Tanúsítvány *Certificate*



Tanúsítvány szám *Certificate No.* Oldal *Page*  
HN 69255059 0001

Jegyzőkönyv szám *Test Report No.* *Kiadás dátuma Date of Issue*  
28236328 002 2018-12-04

Tanúsítvány Tulajdonos *Certificate Holder* *Gyártóhely Manufacturing Plant*  
LIGHTRONIC Világítástechnikai és Elektronikai Kft. LIGHTRONIC Világítástechnikai és Elektronikai Kft.  
Szent-Györgyi A. u. 1. Szent-Györgyi A. u. 1.  
H-2600 Vác Hungary. H-2600 Vác Hungary.

Vizsgálati Jel *Test Mark* *Tanúsítás alapjául szolgáló előírások Tested according to*



EN 61347-2-1:2001+A1:2006+A2:2014  
EN 61347-1:2015  
EN 60927:2007+A1:2013

Tanúsított Termék (Termék azonosítás)  
*Certified Product (Product Identification)*

Márkajel  
*Trademark*  
**LIGHTRONIC** or  
**HELVAR**

**Built-in ignitor**

Type references:

- 1) L70; L-150; HI-400M; HI-400S; L-400; L-600; L-1000S,
- 2) LSI-70T1; LSI-150T20; LSI-250T1; LHI-400ST10,
- 3) LSI-70T20; LSI-150T20/μC; LSI-400MT20; LSI-400ST20;  
LSI-400T20; LSI-600T20; LSI-1000T10;

Ratings: AC 220-240V, 50-60Hz;

(for further ratings refer to Annex to this Certificate)

Remark: This Certificate supersedes Certificate No.  
ENEC 2992231 01, ENEC 2992231 02 and HN 69242992 0001  
due to update

A tanúsítvány a fenti termék típusra vonatkozik. A tanúsítvány a TÜV Rheinland InterCert Kft. Vizsgálati, Ellenőrzési és Tanúsítási Szabályzatán alapszik. A tanúsított termék megfelel a fenti vizsgálati előírásoknak, a sorozatgyártása ellenőrzött. A fenti ENEC jel használatának joga engedélyezett a tanúsított terméken. Ezt az Engedélyt egy, a CENELEC Jelhasználati Bizottság ENEC egyezményt aláíró testület adta ki.

*This certificate refers to the above mentioned product type. The certificate is based on the Testing, Inspection and Certification Regulation of TÜV Rheinland InterCert Kft. The certified product fulfils the above listed requirements and its manufacturing is subject to surveillance. The right to use the above ENEC mark is permitted on the certified product. This Licence has been established by a body which is a signatory to the ENEC Agreement.*

TÜV Rheinland InterCert Kft., MEEI Division – Product Certification  
H-1132 Budapest, Váci út 48/A-B  
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Tanúsító Szervezet  
*Certification Body*



Gabor Kassai

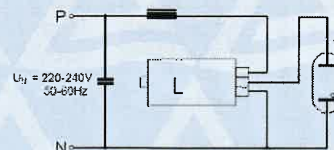
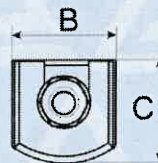
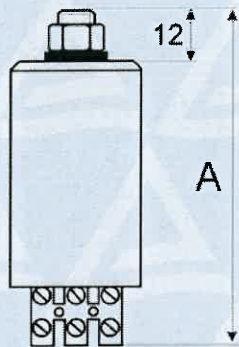


**Annex to certificate No. HN 69255059 0001**

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**L... Ignitors:** – Ignitors for high pressure Na lamps and/or metal-halide lamps

Type	me	L-70	L-150	HI-400M	HI-400S	L-400	L-600	L-1000S
Size AxBxC	mm	93x34x28	93x34x28	93x34x28	90x38x32	92x43x36	92x43x36	110x55x42
Light source: Na lamp	W	35-70	70(DE)-150	70(DE)-400	70(DE)-400	70(DE)-400	70(DE)-600	70(DE)-1000
MH, CMH lamp	W	-	35-150	35-400	35-400	35-400	35-400	35-1000
Weight	g	120	130	130	160	210	210	450
Rated voltage	V	220-240	220-240	220-240	220-240	220-240	220-240	220-240
Mains frequency	Hz	50-60	50-60	50-60	50-60	50-60	50-60	50-60
Load capacitance	pF	200	100	100	100	100	100	100
Losses	W	<1,0	<1,0	<3,4	<3,3	<3	<3	<6
Max. case temperature	°C	105	105	105	105	105	105	105
Min. Ambient temperature	°C	-30	-30	-30	-30	-30	-30	-30
Max. Ambient temperature (Ta)	°C	90	85	70	70	85	80	85
Peak voltage (pulse)	kV	1,8-2,3	3,5-4,5	4-5	4-5	4-5	4-5	4-5
Pulse width (2kV)	µsec	2(1,5kV)	1,6	0,8	0,9	1,5	1,5	1,5
No. Of pulses/half period		>=2	3	3	3	3	3	3
Pulse position	°	60-90/240-270	60-90/240-270	60-90/240-270	60-90/240-270	60-90/240-270	60-90/240-270	60-90/240-270
Max. lamp current	A	1	1,8	4,6	4,6	6	6,5	12
Operating voltage	V	198-264	198-264	198-264	198-264	198-264	198-264	198-264
Non operating voltage	V	<170	<170	<170	<170	<170	<170	<170



**Date of issue:**  
Budapest, 2018-12-04

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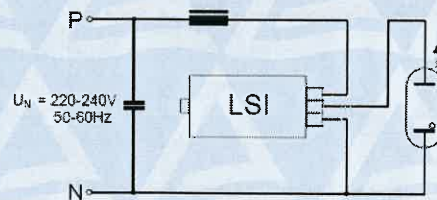
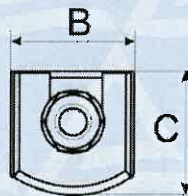
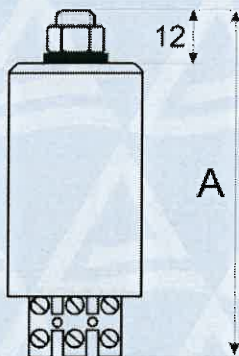


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**LSI... T Ignitors** – Ignitors with timing element via superposition  
For high pressure Na lamps and/or metal-halide lamps

Type	me	LSI-70T1	LSI-150T20	LSI-250T1	LHI-400ST10
Size AxBxC	mm	93x34x28	93x34x28	93x34x28	90x38x32
Light source: Na lamp	W	35-70	70(DE)-150	100-250	70(DE)-400
Metal halide lamp	W	-	35-150	-	35-400
Weight	g	120	120	120	160
Rated voltage	V	220-240	220-240	220-240	220-240
Mains frequency	Hz	50-60	50-60	50-60	50-60
Load capacitance	pF	200	100	100	100
Losses	W	<1,0	<1,0	<3,3	<3,3
Timing	min	5	20	5	20
Max. case temperature	°C	105	105	105	105
Min. Ambient temperature	°C	90	85	80	70
Max. Ambient temperature (Ta)	°C	-30	-30	-30	-30
Peak voltage (pulse)	kV	1,8...2,3	3,5-4,5	4-5	4-5
Pulse width (2kV)	µsec	2(1,5kV)	1,6	0,9	0,9
No. Of pulses/half period		≥2	3	3	3
Pulse position	°	60-90/240-270	60-90/240-270	60-90/240-270	60-90/240-270
Max. lamp current	A	1	1,8	4,6	4,6
Operating voltage	V	198-264	198-264	198-264	198-264
Non operating voltage	V	<170	<170	<170	<170



**Date of issue:**  
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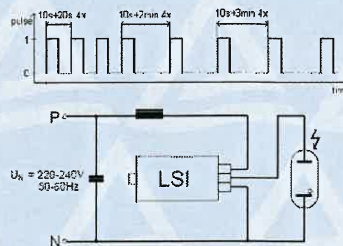
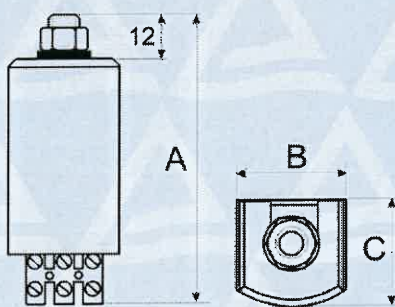
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**LSI... T Ignitors – Intelligent ignitors with timing element via superposition for high pressure Na lamps and/or metal-halide lamps**

Type	me	LSI-70T20	LSI-150T20 $\mu$ C	LSI-400MT20	LSI-400ST20	LSI-400T20	LSI-600T20	LSI-1000T10
Size AxBxC	mm	93x34x28	93x34x28	93x34x28	93x38x32	92x43x36	92x43x36	110x55x42
Light source: Na lamp	W	35-70	70(DE)-150	70(DE)-400	70(DE)-400	70(DE)-400	70(DE)-600	70(DE)-1000
MH, CMH lamp	W	35-70TT	35-150	35-400	35-400	35-400	35-400	35-1000
Weight	g	120	120	120	160	210	210	450
Rated voltage	V	220-240	220-240	220-240	220-240	220-240	220-240	220-240
Mains frequency	Hz	50-60	50-60	50-60	50-60	50-60	50-60	50-60
Load capacitance	pF	200	100	100	100	100	100	100
Losses	W	<1,0	<1,0	<3,3	<3,3	<3	<4	<6
Timing		DIGITAL	DIGITAL	DIGITAL	DIGITAL	DIGITAL	DIGITAL	DIGITAL
Max. case temperature	°C	105	105	105	105	105	105	105
Min. Ambient temperature	°C	90	85	70	70	80	80	85
Max. Ambient temperature (Ta)	°C	-30	-30	-30	-30	-30	-30	-30
Peak voltage (pulse)	kV	1,9...2,3	3,5-4,5	4-5	4-5	4-5	4-5	4-5
Pulse width (2kV)	$\mu$ sec	2(1,5kV)	1,6	0,9	0,9	1,5	1,5	1,5
No. Of pulses/half period		$\geq 2$	3	3	3	3	3	3
Pulse position	°	60-90/240-270	60-90/240-270	60-90/240-270	60-90/240-270	60-90/240-270	60-90/240-270	60-90/240-270
Max. lamp current	A	1	1,8	4,6	4,6	6	6,5	12
Operating voltage	V	198-264	198-264	198-264	198-264	198-264	198-264	198-264
Non operating voltage	V	<170	<170	<170	<170	<170	<170	<170



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