	Ref. Certif. No.
IEC IECEE CB SCHEME	**SI-3892**

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS D'ESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE

CERTIFICAT D'ESSAI OC

Product Produit	AC Supplied Electronic Control Gear for LED Modules
Name and address of the applicant Nom et adresse du demandeur	FRIWO Gerätebau GmbH Von-Liebig-Strasse 11, D-48346 Ostbevern, Germany
Name and address of the manufacturer Nom et adresse du fabricant	FRIWO Gerätebau GmbH Von-Liebig-Strasse 11, D-48346 Ostbevern, Germany
Name and address of the factory Nom et adresse de l'usine Note: *When more than one factory, please report on page 2* Note: *Lorsque il y plus d'une usine, veuillez utiliser la 2ème page*	FRIWO Gerätebau GmbH Von-Liebig-Strasse 11, D-48346 Ostbevern, Germany ☒ Additional Information on page 2
Ratings and principal characteristics Valeurs nominales et caractéristiques principales	See additional information on page 2
Trademark (if any) Marque de fabrique (si elle existe)	FWGB
Type of Manufacturer's Testing Laboratories used Type de programme du laboratoire d'essais constructeur	/
Model / Type Ref. Ref. De type	LT60SQ-24/xxxx, LT60SQ-36/xxxx, LT60SQ-48/xxxx See additional information on page 2
Additional information (if necessary may also be reported on page 2) Les informations complémentaires (si nécessaire,, peuvent être indiqués sur la 2ème page	This CB certificate supersedes previously issued CB certificate SI-3807 due to the introduction of additional models. ☒ Additional Information on page 2
A sample of the product was tested and found to be in conformity with Un échantillon de ce produit a été essayé et a été considéré conforme à la	IEC 61347-1:2007+A1:2010 (2nd Edition) IEC 61347-2-13:2006 (1st Edition) IEC 62384:2006+A1:2009 (1st Edition)
As shown in the Test Report Ref. No. which forms part of this Certificate Comme indiqué dans le Rapport d'essais numéro de référence qui constitue partie de ce Certificat	T211-0362/13, T211-0363/13

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme **National de Certification**

SIQ

Slovenski institut za kakovost in meroslovje
Slovenian Institute of Quality and Metrology
Tržaška c. 2, SI-1000 Ljubljana, Slovenia
Product Certification Body is accredited by Slovenian Accreditation, Reg. No.: CP-001

Date: 2013-07-18

Signature: Alja Pregl

Model / Type Ref., Ratings and principal characteristics:

LT60SQ-24/xxxx

xxxx…value of output current

LT60SQ-24/xxxx series can have any rated output current between 0 mA and 2500 mA.

Input: Uin=220-240 V; fin=50-60 Hz; Iin[1)]=30-300 mA; Pin[1)]=0,6-67 W; λ[1)] 0,60 C-0,95; tc 80°C; ta -20°C…40°C

Output: constant current: Io*=0-2500 mA; Uo*=15-23,5 V; Po*=0-60 W

constant voltage: Uo=24 V; Io*=0-2375 mA; Po*=0-60 W

* Remarks:

Range of output current at constant current operation can be between 0-2500 mA.

Range of output voltage at constant current operation can be between 15-23,5 V.

Range of output current at constant voltage operation can be between 0-2375 mA and depends on the rated output current at constant current operation.

LT60SQ-36/xxxx

xxxx…value of output current

LT60SQ-36/xxxx series can have any rated output current between 0 mA and 1600 mA.

Input: Uin=220-240 V; fin=50-60 Hz; Iin[1)]=35-290 mA; Pin[1)]=0,6-64 W; λ[1)] 0,60 C-0,95; tc 80°C; ta -20°C…45°C

Output: constant current: Io*=0-1600 mA; Uo*=22-35 V; Po*=0-58 W

constant voltage: Uo=36 V; Io*=0-1520 mA; Po*=0-58 W

* Remarks:

Range of output current at constant current operation can be between 0-1600 mA.

Range of output voltage at constant current operation can be 22-35 V.

Range of output current at constant voltage operation can be between 0-1520 mA and depends on the rated output current at constant current operation.

LT60SQ-48/xxxx

xxxx…value of output current

LT60SQ-48/xxxx series can have any rated output current between 0 mA and 1200 mA.

Input: Uin=220-240 V; fin=50-60 Hz; Iin[1)]=30-290 mA; Pin[1)]=0,6-64 W; λ[1)] 0,60 C-0,95; tc 80°C; ta -20°C…45°C

Output: constant current: Io*=0-1200 mA; Uo*=30-47 V; Po*=0-58 W

constant voltage: Uo=48 V; Io*=0-1140 mA; Po*=0-58 W

* Remarks:

Range of output current at constant current operation can be between 0-1200 mA.

Range of output voltage at constant current operation can be 30-47 V.

Range of output current at constant voltage operation can be between 0-1140 mA and depends on the rated output current at constant current operation.

[1)] Values of input current, input power, circuit power factor λ and output power depend on the rated output current. Stated are minimal and maximal values of the ratings and can be marked with any value between stated ranges for separate rating.

Control gears where circuit power factor λ is less than 0,95 leading the value of power factor λ shall be followed with letter "C". On separate type of control gear is stated circuit power factor λ at maximal output power. In the specifications for is stated graph of circuit power factor λ with relation to the output power.

Protection against electric shock shall be assured by installation of the control gears. Control gears are protected against overheating - max. case temperature 110 °C. Control gears can have stabilized output voltage or output current.

Control gears are provided with following dimming options:

- dimming with Friwo DIMMbox connected to the output of the control gears
- dimming with ON/OFF switch connected to the output of the control gears
- dimming with variable resistor connected to the output of the control gears
- dimming with external control voltage connected to the output of the control gears

For all variants of dimming must be used SELV control units or units separated from mains with reinforced insulation.

Factory locations:

- FRIWO Gerätebau GmbH, Von-Liebig-Strasse 11, D-48346 Ostbevern, Germany
- TABEMAX SP J, Ulica Betonowa 1, 86-005 Bialo Blota, Poland

Additional information (if necessary)
Information complémentaire (si nécessaire)

Date: 2013-07-18

Signature: Alja Pregl