

# CERTIFICATE

Issued to:  
Applicant:  
**TCI Telecomunicazioni Italia Srl**  
Via Parma 14  
21047 Saronno (VA), Italy

Manufacturer/Licensee:  
**TCI Telecomunicazioni Italia Srl**  
Via Parma 14  
21047 Saronno (VA), Italy

Product : Electronic control gear for Light Emitting Diodes  
Trade name(s) : TN101 and TCI  
Type(s)/model(s) : ATON series

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:

- a type test according to the standard EN 61347-2-13:2014, EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN 62384:2006 and EN 62384:2006/A1:2009
- an inspection of the production location according to CENELEC Operational Document CIG 021
- a certification agreement with the number 2033015

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 of the ENEC certification agreement and under the conditions of the ENEC certification agreement.


This certificate is issued on 1 June 2017 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 81-100551

DEKRA Certification B.V.



drs. G.J. Zoetbrood  
Managing Director



Yuki Yau  
Certification Manager

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**SPECIFICATION OF THE CERTIFIED PRODUCT****Product data**

Product	: Electronic control gear for Light Emitting Diodes
Trade name(s)	: TN101 and TCI
Type(s)/model(s)	: ATON series
Primary voltage	: 220...240 V
Nature of supply	: alternate current
Rated frequency	: 50/60 Hz
Primary current	: 0,16-0,18
Power factor	: 0,96 (load >25 W)
D.C. emergency voltage	: 196-250 V
Working voltage U-OUT	: 59 V d.c. ripple free
Class	: II
Protection degree	: IP20
Tc	: 75/80/85 °C
Ta	: -25...+45/50 °C
Type of thermal protection	: C.5.a
Overheating protection	: 110 °C
Classification	: independent controlgear

**TESTS****Test requirements**

EN 61347-2-13:2014  
EN 61347-2-13:2014/A1:2017  
EN 61347-1:2015  
EN 62384:2006  
EN 62384:2006/A1:2009

**Test result**

The test results are laid down in DEKRA test file 350033600.

**Additional Information**

For specific Model/Type electrical rating refer to following pages.

The test results and the critical components list are laid down in DEKRA test report No. 2102509.50 and 2102509.60.

**Conclusion**

The examination proved that all requirements were met.

**Factory location**

TCI Telecomunicazioni Italia SrL  
Via Parma 14  
21047 Saronno (VA), Italy

**General product information:** The devices are electronic SELV controlgears, intended to supply high power Light Emitting Diodes or LED modules. The devices have a stabilized output current. The output (SEC) is dimmable by DALI dimming (DALI models).

Primary voltage: 220-240 V (50-60 Hz); 196-250 V (0 Hz); the following models are suitable for centralized emergency installations (EN 50171 and EN 50172) in the rated range; the operative d.c. range in which the product can work is over  $\pm 10\%$ . OF models are integral controlgears; BI models are built-in; the other models are independent, class II, IP20.

Type/s	Primary Current [A]	Power Factor	Output Power (W)	Secondary parameter	$V_{0max}$ (V)	$t_a$ (°C)	$t_c$ (°C)	Thermal Protection
ATON 30/250-700 or K2963	0,16 at 220-240 V 0,19 at 176-276 V	0,96 [1]	13-30	0,25 -0,7 A [2]	59	-25..45	85	110 °C [4]
-25..50								
-						80 [3]	-	
ATON 30/700-1400 or K2964	0,16 at 220-240 V 0,19 at 176-276 V	0,96 [1]	21-30	0,7 -1,4 A [2]	59	-25..45	80	110 °C [4]
-25..45								
-						80 [3]	-	
ATON 30/250-700 DALI or K2965	0,18 at 220-240 V 0,19 at 176-276 V	0,96 [1]	13-30	0,25 -0,7 A [2]	59	-25..45	75	110 °C [4]
-25..50						85		
-						80 [3]	-	

Notes: [1] – Rated value at output power greater than 7 W for DALI models and 10 W for other models. [2] – Different values according to DIP switch selection (see label). [3] –  $t_c$  measured on the top of C15 capacitor. [4] – The products have an overheating protection (C.5.a type) and comply with temperature limit of clause 4.16.2 of EN 60598-1:04 ("F" triangle marking), EN 60598-1:2008, EN 60598-1 /A11:2009; VDE 0710 T14 ("MM" triangle marking).

Connections				
Input supply	PRI	screwless terminal block 0,75...1,5 mm <sup>2</sup> (for independent models) screwless terminal block 0,5...1,5 mm <sup>2</sup> (for BI and OF models)		
Input for dimming (only for DALI models)	PUSH, DA	screwless terminal block 0,75...1,5 mm <sup>2</sup> (for independent models) screwless terminal block 0,5...1,5 mm <sup>2</sup> (for BI and OF models)		
Output load	SEC	screwless terminal block 0,5...1,5 mm <sup>2</sup>		
Additional information				
All models have the following features: AC/DC P/S for LED; stabilized output current or voltage (not for all models); multiple value load; short-circuit proof type; impulse withstand category II; Pollution degree 2 (Normal Pollution); Material group IIIa; the material of enclosure was tested with favourable result for Glow-wire at temperature 750-950 °C.				
INSULATION	PRI	PUSH (DALI models)	DA (DALI models)	SEC
PRI	-	basic	supplementary	double
PUSH (DALI models)	basic	-	supplementary	double
DA (DALI models)	basic	supplementary	-	supplementary
SEC	double	double	supplementary	-
In the final application the connections to the controlgears shall be according to IEC 60598-1 or national deviations of the country where installed. Creepage distances and clearances for built-in and OF (integrated without enclosure) models shall comply with the requirements of IEC/EN 60598-1 when the device is installed in the final application:				
<b>MODELS:</b>	<b>INSULATION:</b>		Between active parts and the bottom surface of enclosure	Between active parts and external surfaces of enclosure
ATON 30/250-700, ATON 30/700-1400, ATON 30/250-700 DALI			double	double
ATON 30/250-700 BI, ATON 30/700-1400 BI, ATON 30/250-700 DALI BI			double	-
ATON 30/250-700 OF, ATON 30/700-1400 OF, ATON 30/250-700 DALI OF			-	-