

CERTIFICATE

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

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

Product : Electronic controlgear for LED modules
Trade name(s) : TCI, TCI (with little dragon), TCI LED, TCI LED (with little dragon),
TCI LIGHT (with little dragon and ball in square), TCI LIGHT Saronno Italy or
TN101
Type(s)/model(s) : DC 120W (series) and DC 70W (series)

The product and any acceptable variation thereto as 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 EN 61347-2-13:2014, EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN 61347-1:2015/A1:2021 and EN IEC 62384:2020
- an inspection of the factory location according to CENELEC Operational Document CIG 021
- a DEKRA certification agreement with the number 2033015

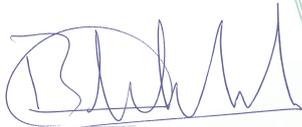
DEKRA hereby grants the right to use the ENEC certification mark.

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

This certificate is issued on 7 August 2023 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 81-120476 REV.2

DEKRA Certification B.V.



B.T.M. Holtus
Managing Director



K Xu
Certification Manager

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DUTCH ACCREDITATION
COUNCIL



SPECIFICATION OF THE CERTIFIED PRODUCT**Product data**

Product	: Electronic controlgear for LED modules
Trade name(s)	: TCI, TCI (with little dragon), TCI LED, TCI LED (with little dragon), TCI LIGHT (with little dragon and ball in square), TCI LIGHT Saronno Italy or TN101
Type(s)/model(s)	: DC 120W (series) and DC 70W (series)
Primary voltage	: 220-240 V for a.c., 187-250 V for d.c.
Rated frequency	: 50-60 Hz, 0 Hz
Primary current	: From 0,37 to 0,63 A for a.c., from 0,5 to 0,75 A for d.c.
Secondary power	: From 60 to 120 W
Secondary voltage	: From 24 V to 48 V
Type of load	: LED modules, power LED
Classification	: Independent, Built-in

TESTS**Test requirements**

EN 61347-2-13:2014
EN 61347-2-13:2014/A1:2017
EN 61347-1:2015
EN 61347-1:2015/A1:2021
EN IEC 62384:2020

Test result

The test results are laid down in DEKRA test file 350908000.

Additional information

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

DEKRA test report No. 3509080.182 and 3509080.183 are laid down in DEKRA test file 350033600; they contain test results.

DEKRA test report No. 3509080.182 contain critical component list.

This certificate replaces certificate No. 81-120476 REV.1 which we hereby declare invalid.

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 step-down controlgears for LED modules. The devices have a constant output voltage (CV). The output is SELV and it can be reduced by ADIM control signal (if present) or dimmable by DALI control.

Type/s	Primary voltage (V) [1]	Primary Current (A)	Power Factor	Secondary Power (W)	Secondary Output (V)	Uout d.c. [V]	ta [°C]	tc [°C] [2]	Classification [3]
DC 70W 24V SLIM R DALI (K2G94)	220-240 *176-275	0,37 *0,5	0,95 (Po>35W)	70	24	24	-25..50	75	BI, 110, PE, AC
DC 120W 24V SLIM RM DALI (K2I69)	220-240 *176-275	0,63 0,75	0,95 (Po>51 W)	120	24	24	-25..50	85	BI, 110, PE, AC
DC 70W 24V K3 (K2G95)	220-240 *168-275	0,37 *0,5	0,95 (Po>35 W)	≤60 [▲] 60-70	24	24	-25..50 [▲] -25..45	90 [▲] 95	IND, II, 120
DC 70W 24V K3 BI (K2G96)									BI, 120
DC 70W 24V K3 OF (K2G97)									OF
DC 70W 48V K3 (K2G98)	220-240 *168-275	0,37 *0,5	0,95 (Po>35 W)	≤60 [▲] 60-70	48	49	-25..50 [▲] -25..45	90 90	IND, II, 120
DC 70W 48V K3 BI (K2G99)									BI, 120
DC 70W 48V K3 OF (K2H00)									OF

Notes: Kxxxx code can replace the type. [1] – Input supply: 50/60 Hz or 50-60Hz or *0 Hz, see additional information for rated/operative range in d.c. supply. [2] – The tc point for OF integral models is measured on the metal cap of C7 capacitor. [3] – IND=independent and IP20, II=class II; BI=built-in; OF=built-in without enclosure; 110 or 120= overheating protection (C.5.a type); PE=protective earth; AC=independent with additional cable retainer as accessory or IP67 LINEAR BOX.

Connections	DC 70W 24V SLIM R DALI, DC 120W 24V SLIM RM DALI	DC 70W 24V K3, DC 70W 48V K3	DC 70W 24V K3 BI, DC 70W 48V K3 BI
Connection to supply (PRI)	screwless terminal block 0,2...1,5 mm ²	screwless terminal block 0,75...1,5 mm ²	screwless terminal block 0,5...1,5 mm ²
Dimming (DALI, ADIM)	screwless terminal block 0,2...1,5 mm ²	-	-
Connection to load (SEC)	screw terminal block 0,5...2,5 mm ²	screwless terminal block 0,5...1,5 mm ²	screwless terminal block 0,5...1,5 mm ²

Additional information

Use	Independent, built-in for ordinary luminaire, up to 2000 m above sea level.
Features	For LED; stabilized output voltage (CV); multiple value load; short-circuit proof type; impulse withstand category II; Pollution degree 2; Material group IIIa. The material of enclosure was tested with favourable result for Glow-wire at temperature 750-960 °C. Total circuit power: 130 W for DC 120W 24V SLIM RM DALI, 76 W for all other models
DC operation	Models suitable for d.c. operation (EL symbol) have been tested in the rated supply range 187-250 V or 196-250 V (extended 168-275 V or 176-275 V) for the specific use in centralized emergency installations; assessment to EN IEC 60598-2-22:2022 used in conjunction with EN IEC 60598-1:2021 has been performed for independent models (for built-in models only Clauses 22.7.2 and 22.7.3 have been assessed).

OF models have been tested inside the enclosure of equivalent BI models. The creepage distances, clearances and connections of control gears in the final application shall be according to EN 60598-1 or national deviations of the country where installed:

INSULATION (B= basic, S= supplementary, R= double or reinforced)	
Supply ↔ earth	B
Supply ↔ DA1, DA2	B
Active parts of built-in models ↔ accessible parts	B
Supply ↔ SEC, Supply ↔ ADIM, DA1, DA2, DA/N, DA/LS ↔ SEC, DA1, DA2, DA/N, DA/LS ↔ ADIM	R
active parts ↔ the external surfaces of enclosure for independent models; active parts ↔ the bottom surfaces of enclosure for built-in models	R
All models are suitable for direct mounting on normally flammable surfaces (EN 60598-1). Assessment to EN 62493:2015 and EN 62493:2015/A1:2022 has been performed. Assessment to EN IEC 62442-3:2022 has been performed.	