

CERTIFICATE

Issued to:
Applicant:
TCI Telecomunicazioni Italia S.r.l.
Via Parma, 14
21047 Saronno (Va), Italy

Licensee:
TCI Telecomunicazioni Italia S.r.l.
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 35W 24V ** (*means any alphanumeric characters),
JOLLY ** NFC ** (*means any alphanumeric characters) and
JOLLY EASY ** (*means any alphanumeric characters)

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

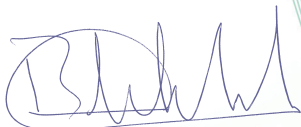
DEKRA hereby grants the right to use the ENEC certification mark.

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 21 February 2024 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 81-125660 REV.1

DEKRA Certification B.V.



B.T.M. Holtus
Managing Director



R Zhou
Certification Manager

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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 35W 24V ** (*means any alphanumeric characters), JOLLY ** NFC ** (*means any alphanumeric characters) and JOLLY EASY ** (*means any alphanumeric characters)
Primary voltage	: 110-240 V for a.c., 196-250 V for d.c.
Rated frequency	: 50/60 Hz, 0 Hz
Primary current	: From 0,18 A to 0,2 A for a.c., from 0,23-0,24 A for d.c.
Secondary power	: From 8,1 W to 38 W
Secondary current	: From 0,15 A to 1,05 A
Secondary voltage	: From 12 V to 24 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

DEKRA test report No. 3509040.430 and 3509040.431 are laid down in DEKRA test file 350908000; they contain test results.

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

This certificate replaces certificate No. 81-125660 which we hereby declare invalid.

The list of components is laid down in test report 3509080.430.

Conclusion

The examination proved that all requirements were met.

Factory location

TCI Telecomunicazioni Italia S.r.l.
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21047 Saronno (Va), Italy

General product information:									
The devices are controlgears for LED modules with stabilized output current (CC) or voltage (CV); DC 35W 24V K2 is not dimmable, the other models can be dimmed by DALI, Push switch or ADIM; the output parameter can be selected by the DIP switch or NFC. All models have SELV output. The input voltage is 110-240 V or 220-240 V 50/60 Hz; in the marking plate is also present an operative d.c. range in which the products can work for centralized emergency. The Kxxxx code can replace the type reference according to the following table:									
Type/s	ac/*dc supply (V)	ac/*dc current (A)	Power factor	Po (W)	SEC output	U _{out} (V dc)	ta (°C)	tc (°C)	Use [3]
JOLLY 38 DALI NFC (K2I07)	110-127 220-240	0,18 0,2	0,95 (Po≥3 W) 0,95 (Po≥12 W)	8,1-15 8,1-38	0,15-1,05 A	59	-25...45	85	II, 110
JOLLY 38 DALI NFC BI (K2I08)	176-275*	*0,24		8,1-38			-25...50	85	DI, 110
JOLLY 38 DALI NFC OF (K2I09)							-	80 [2]	OF
JOLLY EASY DALI (K2I07)	110-127 220-240	0,18 0,2	0,95 (Po≥3 W) 0,95 (Po≥12 W)	12,6-15 12,6-38	0,3-1,05 A 12 V 24 V	59 13 25	-25...45	85	II, 110
JOLLY EASY DALI BI (K2I08)	176-275*	*0,24		12,6-38			-25...50	85	DI, 110
JOLLY EASY DALI OF (K2I09)							-	80 [2]	OF
DC 35W 24V K2 (K2I10)	220-240 176-275*	0,18 *0,23	0,95 (Po>16 W)	35 35	24 V	24	-25...40/ 45 [1]	85	II, 110
DC 35W 24V BI (K2I11)							-25...50/ 45 [1]		DI, 110
DC 35W 24V OF (K2I12)							-	80 [2]	OF
Notes: * rated range: 196-250 V; extended range: 176-275 V; [1] – Different heating for Po≤30 W or Po>30 W; [2] – OF models: tc position is on the cap of C15 (C16 for DC 35W 24V OF). [3] – Symbols: II= independent class II; DI=Built-in with double insulation; OF= Built-in without enclosure; 110= products have an overheating protection (C.5.a automatic resetting type) and comply with temperature limit of IEC/EN 60598-1.									

Connections		
Input supply	L, N	screwless terminal 0,5...1,5 mm ² (0,75...1,5 mm ² for independent model)
DALI control	DA/Ls, DA/N	screwless terminal 0,5...1,5 mm ² (0,75...1,5 mm ² for independent model)
Analog control	ADIM +, -	screwless terminal 0,5...1,5 mm ²
Sincro signal	SYNC +, -	Connector
Output load	SEC +, -	screwless terminal 0,5...1,5 mm ²
Additional information		
Use	Independent and built-in for ordinary luminaire; up to 2000 m above sea level.	

Features	All models have the following features: for LED; stabilized output current (CC) or 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 850-960 °C. The tests for OF models have been performed using the same enclosure of BI models. Total circuit power: 42,5 W for JOLLY 38 DALI NFC and JOLLY EASY DALI models, 40 W for DC 35W 24V K2 models.	
DC operation	Models suitable for d.c. operation (EL symbol) have been tested in the rated supply range 196-250 V for the specific use in centralized emergency installations (extended range 176-275 V or 176-276 V); 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).	
INSULATION (B= basic, S= supplementary, R= double or reinforced)		
Between L, N ↔ DA/Ls, DA/N		B
Between DA/Ls, DA/N ↔ SEC, ADIM, SYNC		R
Between L, N ↔ SEC, L, N ↔ ADIM, L, N ↔ SYNC		R
Between ADIM ↔ SEC ↔ SYNC		—
Between active parts ↔ bottom of the enclosure for built-in models		R
Between active parts ↔ external touchable parts for independent models		R
<p>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 in the final application.</p> <p>Assessment to IEC 60598-2-22:2021 used in conjunction with EN IEC 60598-2-22:2022 used in conjunction with EN IEC 60598-1:2021 has been performed. All models are suitable for direct mounting on normally flammable surfaces for values (most unfavorable) up to t_a or the $t_c = 71$ °C for JOLLY 38 DALI NFC, JOLLY EASY DALI.</p> <p>Assessment to EN 62493:2015, EN 62493/A1:2022 has been performed.</p> <p>Assessment to Clauses 8.1.4, 19.11.4, 22.5, 22.27, 22.42, 24.1.1, 24.1.2, 29, 30.2.3, 30.2.4 of EN 60335-1:2012, A11:2014, A13:2017, A1:2019, A14:2019, A2:2019; A15:2021 has been performed for DC 35W 24V models.</p>		