

# 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) : MP 42 RF (340044) and PRO FLAT (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(s) EN 61347-2-13:2014/A1:2017, EN 61347-2-13:2014, EN 61347-1:2015 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

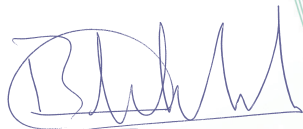
DEKRA hereby grants the right to use the ENEC certification mark.

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 13 April 2022 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 81-123274

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)	: MP 42 RF (340044) and PRO FLAT (series)
Primary voltage	: 220-240 V for a.c., 189-255 V for d.c.
Rated frequency	: 50/60 Hz or 50-60 Hz, 0 Hz
Primary current	: From 0,07 A to 0,22 A for a.c., from 0,07-0,25 A for d.c.
Secondary power	: From 5,5 W to 40 W
Secondary current	: From 0,125 A to 1,05 A
Type of load	: LED modules, power LED
Classification	: Independent, built-in

**TESTS****Test requirements**

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

**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.

DEKRA test report No. 3500336.550 and 3500336.551 are laid down in DEKRA test file 350033600; they contain test results. DEKRA test report No. 3500336.550 contains critical component list.

**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 controlgears for LED modules with stabilized output current (depending on the selection of the DIP switch or NFC setting); the DIP switch options (not for single current models) and the NFC software are detailed both in the technical specification and in the marking plates. All models have SELV output. The input voltage is 220-240 V 50/60 Hz or 50-60 Hz. The Kxxxx code can replace the type reference according to the following tables:

Type/s	PRI voltage (V)	PRI Current (A)	Power factor	Output power (W)	Output current (A)	U <sub>OUT</sub> (Vdc)	ta (°C)	tc (°C) [2]	Use [3]
PRO FLAT 40 (K2D86)	220-240	0,22	0,95 (Po≥15 W)	13-40	0,3-1,05 [1]	59	-25..40	90	II, 110
PRO FLAT 40 BI (K2D87), MP 42 RF (340044)	170-280*	0,24*					-25..45	90	BI, 110
PRO FLAT 40 OF (K2D88)							-	80	OF
PRO FLAT 40/1050 (K2D89)	220-240	0,22	0,9 C-0,95 (Po≥15 W)	40	1,05	59	-25..40	90	II, 110
PRO FLAT 40/1050 BI (K2D90)	170-280*	0,24*					-25..45	90	BI, 110
PRO FLAT 40/1050 OF (K2D91)							-	80	OF
PRO FLAT 36/900 (K2D92)	220-240	0,2	0,9 C-0,95 (Po≥15 W)	36	0,9	59	-25..45	90	II, 110
PRO FLAT 36/900 BI (K2D93)	170-280*	0,22*					-25..45	90	BI, 110
PRO FLAT 36/900 OF (K2D94)							-	80	OF
PRO FLAT 30/800 (K2D98)	220-240	0,15	0,9 C-0,95 (Po≥6 W)	30	0,8	59	-25..45	80	II, 110
PRO FLAT 30/800 BI (K2D99)	170-280*	0,18*					-25..50	80	BI, 110
PRO FLAT 30/800 OF (K2E00)							-	80	OF
PRO FLAT 30 (K2C12)	220-240	0,16	0,95 (Po≥7 W)	15-32	0,35-0,725 [1]	59	-25..45	85	II, 110
PRO FLAT 30 BI (K2C13)	170-280*	0,21*					-25..50	85	BI, 110
PRO FLAT 30 OF (K2C14)							-	80	OF
PRO FLAT 30/700 (K2E01)	220-240	0,15	0,9 C-0,95 (Po≥7 W)	30	0,7	59	-25..45	85	II, 110
PRO FLAT 30/700 BI (K2E02)	170-280*	0,19*					-25..50	85	BI, 110
PRO FLAT 30/700 OF (K2E03)							-	80	OF
PRO FLAT 26/600 (K2E04)	220-240	0,13	0,9 C-0,95 (Po≥7 W)	26	0,6	59	-25..45	85	II, 110
PRO FLAT 26/600 BI (K2E05)	170-280*	0,15*					-25..50	85	BI, 110
PRO FLAT 26/600 OF (K2E06)							-	80	OF
PRO FLAT DALI (K2E07)	220-240	0,15	0,95 (Po≥6 W)	11,5-26	0,25-0,7 [1]	59	-25..40	80	II, 110
PRO FLAT DALI BI (K2E08)	176-276*	0,17*					-25..45	80	DI, 110
PRO FLAT DALI OF (K2E09)							-	80	OF
PRO FLAT LC DALI (K2G75)	220-240	0,12	0,9 C-0,95 (Po≥5,5 W)	5,5-22	0,125-0,5 [1]	59	-25..50	80	II, 110, DNC
PRO FLAT LC DALI BI (K2G76)	176-275*	0,15*					-25..50	80	DI, 110
PRO FLAT DALI OF (K2G77)							-	80	BI
PRO FLAT 22 (K2C15)	220-240	0,12	0,9 C-0,95 (Po≥5,5 W)	5,5-22	0,125-0,5 [1]	59	-25..45	75	II, 110, DNC
PRO FLAT 22 BI (K2C16)	170-280*	0,15*					-25..50	75	BI, 110
PRO FLAT 22 OF (K2C17)							-	80	OF
PRO FLAT 22/500 (K2E10)	220-240	0,12	0,9 C-0,95 (Po≥8 W)	22	0,5	59	-25..45	75	II, 110, DNC
PRO FLAT 22/500 BI (K2E11)	170-280*	0,15*					-25..50	75	BI, 110
PRO FLAT 22/500 OF (K2E12)							-	80	OF
PRO FLAT 15/350 (K2E13)	220-240	0,09	0,9 C-0,95	15	0,35	59	-25..50	75	II, 110, DNC

PRO FLAT 15/350 BI (K2E14)	170-280*	0,1*	(Po≥8 W)				-25..55	75	BI, 110
PRO FLAT 15/350 OF (K2E15)							-	80	OF
PRO FLAT 13/300 (K2E16)	220-240	0,08	0,9 C-0,95 (Po≥8 W)	13	0,3	59	-25..50	75	II, 110, DNC
PRO FLAT 13/300 BI (K2E17)	170-280*	0,08*					-25..55	75	BI, 110
PRO FLAT 13/300 OF (K2E18)							-	80	OF
PRO FLAT 12/250 (K2E19)	220-240	0,07					0,9 C-0,95 (Po≥8 W)	12	0,25
PRO FLAT 12/250 BI (K2E20)	170-280*	0,07*	-25..55	75	BI, 110				
PRO FLAT 12/250 OF (K2E21)			-	80	OF				

Type/s	PRI voltage (V)	PRI Current (A)	Power factor	Output power (W)	Output current (A)	U <sub>OUT</sub> (Vdc)	ta (°C)	tc (°C) [2]	Use [3]
PRO FLAT 38 DALI NFC IPR3 (K2H82)	220-240	0,2	0,95 (Po≥13 W)	38	0,15-1,05 [1]	59	-25..50	90	II, 110
PRO FLAT 38 NFC IPR3 (K2H95)	176-275*	0,25*					-25..50	90	II, 110
PRO FLAT 38 DALI NFC (K2H74)							-25..40	85	II, 110
PRO FLAT 38 DALI NFC BI (K2H75)							-25..45	80	DI, 110
PRO FLAT 38 DALI NFC OF (K2H76)							-	80	OF

Notes: \*Supply at 0 Hz; [1] – Different values according to DIP switch selection; software setting fo NFC models. [2] – For OF models tc is measured on the top of C15. [3] – 110=the products have an overheating protection (C.5.a automatic resetting type) and comply with temperature limit of EN 60598-1:2015/A1:2018; II=class II; DI=Built-in with double insulation; OF=built-in without enclosure; DNC=Do not cover.

Connections				
Input supply	PRI	screwless terminal block 0,2/0,5...1,5 mm <sup>2</sup> (0,75...1,5 mm <sup>2</sup> for independent models) IPR3 models provided with tails / leads wirings: J1-J2 H07RN-F 2x1 mm <sup>2</sup>		
DALI control	DA	screwless terminal block 0,2/0,5...1,5 mm <sup>2</sup> (0,75...1,5 mm <sup>2</sup> for independent models) IPR3 models provided with tails / leads wirings: J3-J4 H05RN-F 2x0,75 mm <sup>2</sup>		
Output load	SEC	screwless terminal block 0,2/0,5...1,5 mm <sup>2</sup> IPR3 models provided with tails / leads wirings: J5-J6 Style 20549 or 20233 HFT 2x18AWG		
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); multiple value load; short-circuit proof type; impulse withstand category II and III; Pollution degree 2; Material group IIIa; the material of enclosure was tested with favourable result for Glow-wire at temperature 750-960 °C. The tests for OF models have been performed using the same enclosure of independent models. Total circuit power: 44 W for PRO FLAT 40 models, PRO FLAT 40/1050 models and MP 42 RF (340044), 43 W for PRO FLAT 38 models, 40 W for PRO FLAT 36/900 models, 36 W for PRO FLAT 30 models, 33 W for PRO FLAT 30/800 models and PRO FLAT 30/700 models, 29 W for PRO FLAT DALI models, 28 W for PRO FLAT 26/600 models, 25 W for PRO FLAT LC DALI models, PRO FLAT 22 models and PRO FLAT 22/500 models, 17 W for PRO FLAT 15/350 models, 15 W for PRO FLAT 13/300 models, 14 W for PRO FLAT 12/250 models.			
DC operation	The products were tested in the nominal range 189-255 (operative range 170-280 V) or 196-250 V (operative range 176-275 or 276 V) according to IEC/EN 61347-2-13; d.c. operation for standards different from IEC/EN 61347 can be allowed with external fuse installed in front of the controlgear (e.g. Littelfuse, 477 series, 5x20 mm time-lag rated for 500 Vac / 400 Vdc, VDE certificate No. 40025413).			
INSULATION (B= basic, S= supplementary, R= double or reinforced)		PRI	DA (if present)	SEC
PRI		-	D	D
DA (if present)		B	-	D
SEC		D	D	-
The OF models have been tested in the same enclosure of built-in models, the safety evaluations must be repeated if they will be assembled in a final luminaire with different enclosure. The creepage distances, clearances and connections of control gears in the final application shall be according to IEC 60598-1 or national deviations of the country where installed in the final application:				
INSULATION (B= basic, S= supplementary, R= double or reinforced)		independent models	BI models	OF models
Between active parts ↔ external touchable parts		R	B, R for DALI models	-
Between active parts ↔ bottom side of the enclosure		R	R	-

Assessment to IEC 60598-2-22:2014, IEC 60598-2-22:2014 AMD1:2017 used in conjunction with IEC 60598-1:2020 (valid for EN 60598-2-22:2014/A1:2020 used in conjunction with EN IEC 60598-1:2021) has been performed. All models are suitable for direct mounting on normally flammable surfaces (EN IEC 60598-1:2021) only for values (most unfavorable) up to the following $t_c$ value:	
PRO FLAT 40 models, PRO FLAT 36 models, MP 42 RF (340044)	75
PRO FLAT 38 DALI NFC IPR3, PRO FLAT 38 NFC IPR3	82
PRO FLAT 38 DALI NFC models	73
PRO FLAT 30 models, PRO FLAT DALI models,	73
Assessment to IEC 62493:2015 (valid for EN 62493:2015) has been performed. All independent models are suitable for "MM" triangle marking (VDE 0710 T14) only for values (most unfavorable) up to the following $t_c$ value:	
PRO FLAT 40 models, PRO FLAT 36 models	80
PRO FLAT 38 DALI NFC IPR3, PRO FLAT 38 NFC IPR3	87
PRO FLAT 38 DALI NFC models	78
PRO FLAT 30 models, PRO FLAT DALI models	75
PRO FLAT 30/800, PRO FLAT 22, PRO FLAT LC DALI models	rated $t_c$
Assessment to EN IEC 62442-3:2022 has been performed.	