

# 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 : Filter for lighting control gears  
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) : FILTER (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 61347-2-11:2001 and EN 61347-1:2015
- 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 12 May 2021 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 81-119005

DEKRA Certification B.V.



B.T.M. Holtus  
Managing Director



R Zhou  
Certification Manager

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

Product	: Filter for lighting control gears
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)	: FILTER (series)
Primary voltage	: From 0 to 300 V
Nature of supply	: alternate current or direct current
Rated frequency	: 50-60 Hz or 0 Hz
Primary current	: From 0,02 to 2 A
Class	: II or I for Independent
Protection degree	: IP20 for Independent
Output Voltage	: From 0 to 300 V
Classification	: Independent, built-in

**TESTS****Test requirements**

EN 61347-2-11:2001

EN 61347-1:2015

**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. 3500336.350 is laid down in DEKRA test file 350033600; it contains test results and 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:** Miscellaneous electronic devices for lighting controlgears or luminaire: EMI, harmonic or glowing filter.

Type/s	Primary voltage (A)	Rated frequency (Hz)	Max. current (A)	ta (°C)	tc (°C)	Overheating protection (°C) [4]	Use [5]
EL/EMI FILTER (K3001)	110-240	50-60	1,0	-40...60	95	110	II
EL/EMI FILTER OF (K3002)				-	100 [1]	-	OF
EMI FILTER (K3003)	100-240	50-60	0,9	-40...60	95	110	II
EMI FILTER OF (K3004)				-	100 [1]	-	OF
EL/EMI FILTER A (K3005)	110-240	50-60	0,8	-40...60	95	110	II
EL/EMI FILTER A OF (K3006)				-	100 [1]	-	OF
EL/EMI FILTER/GND (K3007)	110-240	50-60	1,0	-40...60	95	110	I
EL/EMI FILTER/GND OF (K3008)				-	100 [1]	-	OF
FM EMI FILTER (K3009)	0-240	0/50-60	1,05	-40...60	65	110	II
FM EMI FILTER OF (K3010)				-	80 [2]	-	OF
SRG FILTER (K3013)	100-240	50-60	2	-40...60	65	110	II
THD FILTER – A (K3041)	100-240	50-60	0,02	-40...60	65	110	II
X2 FILTER 47N (K3046)	0-300	0/50-60	2	-40...85	85	-	BI
X2 FILTER 47N OF (K3050)				-	85 [3]	-	OF
X2 FILTER 47N 119933BE	0-60	0-60	2	-40...85	85	-	BI
Y1 FILTER 4N7 (K3047)	0-300	0/50-60	2	-40...85	85	-	BI
Y1 FILTER 4N7 OF (K3051)				-	85 [3]	-	OF
Y2 FILTER 47N (K3048)	0-300	0/50-60	2	-40...85	85	-	II
Y2 FILTER 47N OF (K3052)				-	85 [3]	-	OF
Y2 FILTER 82N (K3049)	0-300	0/50-60	2	-40...85	85	-	II
Y2 FILTER 82N OF (K3053)				-	85 [3]	-	OF

Note: [1] – tc is measured on the top of L1. [2] – tc is measured on the top of F1. [3] – tc is measured on the top of capacitor. [4] – Thermal protection: non-renewable, non-resetting type. [5] – I= independent, class I, IP20; II= independent, class II, IP20; BI= built-in; OF= built-in without enclosure.

### Connections

Input	INPUT, IN	screw terminal block 0,75...1,5 mm <sup>2</sup> (for independent models) screw terminal block 0,5...1,5 mm <sup>2</sup> (for OF models)
Output	OUT	screw terminal block 0,75...1,5 mm <sup>2</sup> (for independent models) screw terminal block 0,5...1,5 mm <sup>2</sup> (for OF models)
Terminals	A, B	screwless terminal block 0,5...1,5 mm <sup>2</sup> (for X2 FILTER models, Y1 FILTER models, Y2 FILTER models)

### Additional information

All models have the following features: impulse withstand category II; Pollution degree 2; Material group IIIa; the material of enclosure was tested with favourable result for Glow-wire at temperature 750-950 °C. In the final application the connections to the devices shall be according to IEC 60598-1 or national deviations of the country where installed. Creepage distances and clearances for OF models (built-in without enclosure) shall comply with the requirements of IEC/EN 60598-1 when the device is installed in the final application.

INSULATION:	Independent models	Built-in models	OF models
B= basic, S= supplementary, R= double or reinforced			
active parts ↔ the external surfaces of enclosure	R	-	-
active parts ↔ the bottom of enclosure	R	R	-

OF models have been tested inside the enclosure of equivalent independent models; add an external fuse if necessary, according to standards different from IEC 61347 series. The creepage distances, clearances and connections of devices in the final application shall be according to IEC 60598-1 or national deviations of the country where installed.

Models with enclosure are suitable for direct mounting on normally flammable surfaces (EN 60598-1:2015, VDE 0710 T14 for "MM" triangle marking) with tc upward only for values up to the following tc value:	
	max. $t_c$ (°C)
EL/EMI FILTER, EMI FILTER, EL/EMI FILTER A, EL/EMI FILTER/GND	85
All other models	Declared tc