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 MICRO JOLLY (series) and DC Micro Z (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/A1:2017, EN 61347-2-13:2014, 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 5 February 2021 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 81-117689

DEKRA Certification B.V.

B.T.M. Holtus
Managing Director

H.R.M. Barends
Certification Manager

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DUTCH ACCREDITATION
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PRODUCTS
RvA C 001

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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 MICRO JOLLY (series) and DC Micro Z (series)
Primary voltage	:	220-240 V for a.c., 196-240 V for d.c.
Rated frequency	:	50/60 Hz, 0 Hz
Primary current	:	From 0,02 A to 0,07 A for a.c., from 0,032 A to 0,045 A for d.c.
Type of load	:	LED modules, power LED
Classification	:	Independent, Built-in

Product data – type DC MICRO JOLLY (series)

Secondary power	:	6 W
Secondary current	:	From 0,35 A to 0,5 A

Product data – type DC Micro Z (series)

Secondary power	:	4 W
Secondary current	:	0,35 A

TESTS

Test requirements

EN 61347-2-13:2014/A1:2017
EN 61347-2-13:2014
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.

DEKRA test report No. 2102975.50 and 2102975.60 are laid down in DEKRA test file 350033600; they contain test results.

The list of components is laid down in test report 2102975.50.

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 intended to supply high power Light Emitting Diodes or LED modules by the following primary voltage: 220-240 V (operating range 196-264 V), 50/60 Hz all models; 196-240 Vdc (operating range 176-264 Vdc), 0 Hz for all models. The output current is stabilized. The Kxxxx can replace the type according to the following table:

Type/s	ac/*dc Input current (A)	Power Factor	Output Power (W)	Output current (A)	U_{OUT} (V)	ta (°C)	tc (°C) [1]	Thermal protection (°C) [2]	Use [3]
DC MICRO JOLLY 350 (K2674)	0,07 *0,045	0,55 C	6	0,35	24	-25...50	70	110	II
DC MICRO JOLLY 350 OF (K2675)						-	80	-	OF
DC MICRO JOLLY 500 (K2676)				0,5	12	-25...50	70	110	II
DC MICRO JOLLY 500 OF (K2677)						-	80	-	OF
DC Micro Z (K2678)	0,02 *0,032	0,5 C	4	0,35	13	-25...50	70	100	DI
DC Micro Z OF (K2679)						-	80	-	OF

Notes: [1] – tc measured on the top of C3 capacitor for OF models. [2] – overheating protection (C.5.a type). [3] – Classification: II = independent, class II, IP20, Non-IC; DI = built-in with double insulation; OF = built-in without enclosure.

Connection

Models		DC MICRO JOLLY 350, DC MICRO JOLLY 500, DC MICRO JOLLY 350 OF, DC MICRO JOLLY 500 OF	DC Micro Z, DC Micro Z OF
Supply	PRI	Screw terminals, 0,75-2,5 mm²	Screw terminals, 0,5-1,5 mm² (stranded wire) 2,5 mm² (solid wire)
Control (if present)	PUSH/1…10V	Screwless terminals, 0,5-1,0 mm²	-
Load	SEC	Screwless terminals, 0,5- 1,0 mm²	0,5 mm² tails (H05V2-K)

Additional information

Use	Independent, built-in for ordinary luminaire, up to 2000 m above sea level.
Features	For LED; short-circuit proof type; impulse withstand category ll; pollution degree 2; material group llla. The material of enclosure was tested for Glow-wire at temperature of 750-960 °C with favourable result. Suitable for direct mounting on normally flammable surfaces (EN 60598-1:2015, VDE 0710 T14 for "MM" triangle marking).

INSULATION: B= basic, S= supplementary, R= double or reinforced	Independent models	OF models	BI model
PRI ↔ SEC	R	R	R
PRI ↔ PUSH/1…10V	R	R	-
SEC ↔ PUSH/1…10V	-	-	-
active parts ↔ the external surfaces of enclosure	R	-	R

OF models have been tested inside the enclosure of equivalent independent models. 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. DC operation: add an external fuse if necessary, according to standards different from IEC 61347 series.

Assessment to IEC 60598-2-22:2014/AMD1:2017 used in conjunction with IEC 60598-1:2014/AMD1:2017 has been performed (valid for EN 60598-2-22:2014/AMD1:2020 used in conjunction with EN 60598-1:2014/AMD1:2017 and EN 60598-1:2015/A1:2018).

Assessment to IEC 62493:2015 has been performed (valid for EN 62493:2015).

Assessment to VDE 0710 Part 14/04.82 has been performed.
Assessment to EN 62442-3:2018 has been performed.
Assessment to SASO 2902: 2018 has been performed.