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)	:	CVD DALI (series) and CVD MD (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 and EN 61347-1:2015/A1:2021
- an inspection of the factory location according to CENELEC Operational Document CIG 021
- a DEKRA certification agreement with the number 6064204

DEKRA hereby grants the right to use the DEKRA Mark.

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

This certificate is issued on 2 November 2023 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 81-132139

DEKRA Certification B.V.

B.T.M. Holtus
Managing Director

H.R.M. Barends
Certification Manager

ACCREDITED BY THE
DUTCH ACCREDITATION
COUNCIL

PRODUCTS
RvA C 001

81-132139

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)	:	CVD DALI (series) and CVD MD (series)
Primary voltage	:	100-240 V a.c.
Rated frequency	:	50/60 Hz
Primary curreny	:	From 0,46 A to 3 A
Secondary power	:	From 90 W to 300 W
Secondary voltage	:	24 V
Type of load	:	LED modules
Classification	:	Independent

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

Test result

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

Additional information

DEKRA test report No. 3509080.330 is laid down in DEKRA test file 350908000; it contains test results and critical component list.

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

Conclusion

The examination proved that all requirements were met.

Factory location

The factory location is registered with the number 26583.

General product information: The devices are controlgears for LED modules with SELV output. The devices have a stabilized output voltage and they are independent.

Type/s	Primary voltage [1]	Primary Current (A) [2]	Power factor	Sec. Power (W)	Sec. Voltage (V)	Uout [V]	t_a (°C)	t_c (°C)	Use [3]
CVD 90W 24V MD (K2I86)	220-240 V (50/60 Hz) [1]	0,46	0,95 (Po≥33 W)	90	24	26	-40...40	80	IND, II, IP20, MM, 110
CVD 200W 24V MD (K2I87)	220-240 V (50/60 Hz) [1]	1,07	0,95 (Po≥113 W)	200	24			80	IND, I, IP66, MM, 110
CVD 300W 24V MD (K2I88)	220-240 V (50/60 Hz) [1]	1,52	0,95 (Po≥123 W)	300	24			85	
CVD 100W 24V DALI (K2I89)	100-240/277 V (50/60 Hz) [2]	1,17	0,95 (Po≥44 W)	100				75	IND, I, IP66, MM, 110, D2&P
CVD 200W 24V DALI (K2I90)	100-240/277 V (50/60 Hz) [2]	2,21	0,95 (Po≥87 W)	200				80	
CVD 300W 24V DALI (K2I91)	110-240/277 V (50/60 Hz) [2]	3	0,95 (Po≥123 W)	300				90	

Notes: The Kxxxx code can replace the type. [1] – Models with 162-264 V operational range. [2] – Models with operational range = ±10 % of rated value; 277 V only for UL. [3] – Value at max. rated power. [4] IND=Independent; IPxx= IP20 or IP66; I=class I; II=class II; MM= suitable for direct mounting on normally flammable surfaces; 110= overheating protection (C.5.e type); D2&P=dimmable by DALI or PUSH.

Connections	CVD 90W 24V MD	CVD 200W 24V MD	CVD 300W 24V MD	CVD 100W 24V DALI	CVD 200W 24V DALI	CVD 300W 24V DALI
Supply (PRI)	screw terminals, 0,75-4,0 mm²	Tail, H05RN-F 3x1 mm² or H07RN-F 3x1,5 mm²				
Dimming (DA/L, DA/N)	-	-		Tail, H05RN-F 2x1 mm²		
Load (SEC)	screw terminals, 0,5-2,5 mm²	Tail, H07RN-F 2x1,5 mm²	Tail, 14AWG, H05RN-F 2x2,08 mm²	Tail, H05RN-F 2x1 mm²	Tail, H05RN-F 2x1,5 mm²	Tail, 14AWG

Additional information

All models fulfil the requirements for: for LED; stabilized output voltage (CV); multiple value load; short-circuit proof type; impulse withstand category II; pollution degree 2; material group IIIa. CVD 200W 24V MD, CVD 300W 24V MD and DALI models have a metal enclosure. All MD models can be dimmed by leading edge and trailing edge TRIAC dimmers; all DALI models can be dimmed by DALI protocol or analogic push.

In the final application the connections of external wiring shall be according to EN 60598-1 or national deviations of the country where installed. Creepage distances and clearances shall comply with the requirements of EN 60598-1 when the device is installed in the final application:

INSULATION (B=Basic; S=Supplementary; R=Double/Reinforced)

Between PRI ↔ SEC	R
Between active parts ↔ external touchable parts for CVD 90W 24V MD	R
Between active parts ↔ external touchable parts for CVD 200W 24V MD, CVD 300W 24V MD, CVD 100W 24V DALI, CVD 200W 24V DALI, CVD 300W 24V DALI	B
Assessment to EN 60598-2-1:2021 used in conjunction with EN IEC 60598-1:2021 has been performed. Assessment to EN 62493:2015, EN 62493:2022 has been performed. Assessment to EN IEC 62442-3:2022 has been performed.	