

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) : VEGA IP67 (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, EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN 62384:2006 and EN 62384:2006/A1:2009
- an inspection of the factory location according to CENELEC Operational Document CIG 021
- a DEKRA certification agreement with the number 2033015

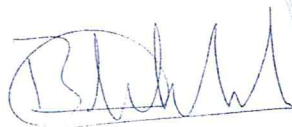
DEKRA hereby grants the right to use the ENEC certification mark.

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 25 May 2021 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 81-119094

DEKRA Certification B.V.



B.T.M. Holtus
Managing Director



R. Zhou
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)	: VEGA IP67 (series)
Primary voltage	: 100-240V/277V or 100-277V
Nature of supply	: alternate current
Rated frequency	: 50/60 Hz
Primary current	: From 1 to 4,2 A
Output current	: From 0,1 to 10 A
Output power	: From 240 to 320 W
Type of load	: LED modules, power LED
Classification	: Independent

TESTS**Test requirements**

EN 61347-2-13:2014
EN 61347-2-13:2014/A1:2017
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. 3500336.340 and 3500336.341 are laid down in DEKRA test file 350033600; they contain test results; DEKRA test report No. 3500336.340 contains critical component list

Conclusion

The examination proved that all requirements were met.

Factory locations

Huizhou MOSO Energy Technology Co., Ltd.
Hongda International Industrial City, Luoyang Town, Boluo County
516100 Huizhou City Guangdong, China

Moso Power Supply Technology Co., Ltd.
Santai Industrial Park, Guanwai Xiaobaimang Songbai Road, Nanshan District
518108 Shenzhen, China

General product information:									
Products covered by this report are class I, IP67, independent LED drivers with metal enclosure filled with potting material. The LED drivers are constant current output and the output current can be adjusted; models with dimming cable are multi dimmable (0-10Vdc/1-10Vdc, PWM and timer dimming); models without dimming cable have resistor adjusting for output current; models with 12V designation have an auxiliary 12 V supply for sensor/dimmer device (DIM). All models have the same construction and PCB layout, they are only different in the turns of winding in transformer and parameter of some components for different output and different dimming functions. Common values to all models: ta=50 °C at 100-200 V, ta=60 °C at 220-277 V, tc=90 °C.									
Type/s	ac input current (A) [1]	Power factor	Output Power (W)	Output Current (A)	U _{OUT} (Vdc)	Use [2]			
VEGA 240/2850-5710 FPD IP67	1-3,3	0,95	240	0,57-5,71	70	SELV, 110, DIM			
VEGA 240/2850-5710 IP67				2,85-5,71		SELV, 110, RA			
VEGA 240/3750-7500 FPD IP67				0,75-7,5	50	SELV, 110, DIM			
VEGA 240/3750-7500 IP67				3,75-7,5		SELV, 110, RA			
VEGA 240/2100-4200 FPD IP67				0,42-4,2	110	SELV, 110, DIM			
VEGA 240/2100-4200 IP67				2,1-4,2		SELV, 110, RA			
VEGA 240/530-1050 FPD IP67				0,1-1,05	360	110, DIM			
VEGA 240/530-1050 IP67				0,53-1,05		110, RA			
VEGA 240/1050-2100 FPD IP67				0,21-2,1	190	110, DIM			
VEGA 240/1050-2100 IP67				1,05-2,1		110, RA			
VEGA 320/550-1100 FPD IP67	1,6-4,2	0,95	320	0,11-1,1	480	110, DIM			
VEGA 320/550-1100 IP67				0,55-1,1		110, RA			
VEGA 320/550-1100 12V FPD IP67				0,11-1,1	480	110, DIM, 12V			
VEGA 320/1600-3200 12V FPD IP67				0,32-3,2		110, DIM, 12V			
VEGA 320/1600-3200 FPD IP67				0,32-3,2	160	110, DIM			
VEGA 320/1600-3200 IP67				1,6-3,2		110, RA			
VEGA 320/5000-10000 12V FPD IP67				1-10	60	SELV, 110, DIM, 12V			
VEGA 320/5000-10000 FPD IP67				1-10		SELV, 110, DIM, 12V			
VEGA 320/5000-10000 IP67				5-10		SELV, 110, DIM			
VEGA 320/3750-7500 12V FPD IP67				0,75-7,5	80	SELV, 110, DIM, 12V			
VEGA 320/3750-7500 FPD IP67				0,75-7,5		SELV, 110, DIM			
VEGA 320/3750-7500 IP67				3,75-7,5		SELV, 110, RA			
Notes: [1] – Supply: 100-240/277 V 50/60 Hz or 100-277 V 50/60 Hz; [2] – SELV=SELV output; 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; DIM=dimmable; 12V=auxiliary supply; RA=resistor adjusting for output current.									
Connections									
Input supply	PRI		Connecting lead (tails) 3x 1 mm ²						
Dimming control, auxiliary 12 V supply	DIM, 12V		Connecting lead (tails) 2x 0,326 mm ²						
Resistor adjusting	Io ADJ		Variable resistor						
Output load	SEC		Connecting lead (tails) 2x 1 mm ²						
Additional information									
Features	All models have the following features: for LED; stabilized output current (CC); multiple value load; short-circuit proof type; impulse withstand category II; Pollution degree 2; Material group IIIa.								
IINSULATION: B= basic, S= supplementary, D= double or reinforced	PRI		DIM, 12V (if present)		Io ADJ (if present)	SEC			
PRI	-		D		D	D			
DIM, 12V (if present)	D		-		-	S			
Io ADJ (if present)	D		-		-	-			
SEC	D		S		-	-			

As the LED drivers have IP67 enclosure, input/output/dimming tails should be connected in terminal block or enclosure which is IP67 or better. 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. For SELV with $U_{out} > 60 \text{ V d.c.}$, at least basic insulation according to U_{out} should be maintain between output circuit and accessible parts after installation or at least one pole of the conductive parts in the SELV circuit shall be insulated by insulation capable of withstanding a test voltage of 500 V r.m.s. for 1 min.

INSULATION: B= basic, S= supplementary, D= double or reinforced

Between live parts ↔ external touchable parts	B
Between DIM, 12V ↔ external touchable parts	B
Between SEC ↔ external touchable parts	B
between output circuit of $60 \text{ V} < U_{out} \leq 120 \text{ V d.c.}$ models ↔ accessible parts after installation or at least one pole of the conductive parts in the SELV circuit shall be insulated by insulation capable of withstanding a test voltage of 500 V r.m.s. for 1 min	B according to U_{out}

Assessment to EN 60598-1:2015/A1:2018 has been performed.

Assessment to EN 62493:2015 has been performed.

All models are suitable for direct mounting on normally flammable surfaces as in EN 60598-1:2015.