

CERTIFICATE



Issued to:
Applicant:
T C I Telecomunicazioni S.r.l.
Via Parma 14
21047 Saronno (VA) - ITALY

Manufacturer/Licensee:
T C I Telecomunicazioni S.r.l.
Via Parma 14
21047 Saronno (VA) - ITALY

Product(s) : Electronic controlgear for LED modules
Trade name(s) : TCI or TN101
Type(s)/model(s) : DC W (series), DC WU (series), DC WU S (series), DC W HPF (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; EN 61347-1:2008+A1:2011+A2:2013;
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 KEMA-KEUR certification mark.

The ENEC KEMA-KEUR certification mark may be applied to the product as specified in this certificate for the duration of the ENEC KEMA-KEUR certification agreement and under the conditions of the ENEC KEMA-KEUR certification agreement.

This certificate is issued on: October 5, 2016 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 2102480.02

DEKRA Certification B.V.

drs. G.J. Zoetbrood
Managing Director

Massimiliano Triulzi
Certification Manager

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All testing, inspection, auditing and certification activities of the former KEMA Quality are an integral part of the DEKRA Certification Group.

ACCREDITED BY
THE DUTCH COUNCIL
FOR ACCREDITATION



General product information: the devices are contorgears for LED modules with SELV output. The devices have a stabilized output current.											
Type/s	Primary voltage [1]	Max Pri. Current [A]	Power Factor	Sec. Power [W]	Sec. Parameter	no load Vo max [V]	t _a [°C]	t _c [°C]	Thermal Protection	Class (IPxx)	Classification
DC 17W 350mA WU S or K2151	110-240 V (50/60 Hz)	0,22	0,55-0,6 C [2]	12-17	350 mA	49	-25..50	80	100 °C [4]	II (IP20)	Independent
DC 17W 350mA WU S OF or K2715		0,11 [1]					-	80 [3]	-	-	Integral
DC 20W 500mA WU S or K2152	110-240 V (50/60 Hz)	0,24	0,55-0,6 C [2]	12-20	500 mA	45	-25..45	80	100 °C [4]	II (IP20)	Independent
DC 20W 500mA WU S OF or K2716		0,13 [1]					-	80 [3]	-	-	Integral
DC 12W 700mA WU or K2222	110-240 V (50/60 Hz)	0,23	0,54-0,65 C [2]	12	700 mA	21	-25..50	70	100 °C [4]	II (IP20)	Independent
DC 12W 700mA WU OF or K2238		0,08 [1]					-	80 [3]	-	-	Integral
DC 17W 700mA WU or K2239	110-240 V (50/60 Hz)	0,22	0,6 C [2]	12-17	700 mA	27	-25..50	70	100 °C [4]	II (IP20)	Independent
DC 17W 700mA WU OF or K2717		0,11 [1]					-	80 [3]	-	-	Integral
DC 22W 1050mA WU or K2240	110-240 V (50/60 Hz)	0,23	0,6 C [2]	12-22	1050 mA	24,1	-25..45	75	100 °C [4]	II (IP20)	Independent
DC 22W 1050mA WU OF or K2718		0,14 [1]					-	80 [3]	-	-	Integral
DC 18W 1400mA WU or K2721	110-240 V (50/60 Hz)	0,23	0,54-0,6 C [2]	12-18	1400 mA	15	-25..45	80	100 °C [4]	II (IP20)	Independent
DC 18W 1400mA WU OF or K2722		0,12 [1]					-	80 [3]	-	-	Integral
DC 17W 700mA W or K2017	220-240 V (50/60 Hz)	0,17	0,6 C [2]	17	700 mA	27	-25..50	70	100 °C [4]	II (IP20)	Independent
DC 17W 700mA W OF or K2719		0,11 [1]					-	80 [3]	-	-	Integral
DC 22W 1050mA W or K2031	220-240 V (50/60 Hz)	0,21	0,6 C [2]	22	1050 mA	24	-20..45	75	100 °C [4]	II (IP20)	Independent
DC 22W 1050mA W OF or K2720		0,14 [1]					-	80 [3]	-	-	Integral
DC 18W 350mA W HPF or K2703	220-240 V (50/60 Hz)	0,10	0,98 [2]	18	350 mA	59	-20..45	70	100 °C [4]	II (IP20)	Independent
DC 18W 350mA W HPF OF or K2704		0,12 [1]					-	80 [3]	-	-	Integral
DC 16W 400mA W HPF or K2828	220-240 V (50/60 Hz)	0,10	0,97 [2]	16	400 mA	59	-20..45	70	100 °C [4]	II (IP20)	Independent
DC 16W 400mA W HPF OF or K2829		0,10					-	80 [3]	-	-	Integral
DC 20W 500mA W HPF or K2705	220-240 V (50/60 Hz)	0,11	0,98 [2]	20	500 mA	59	-20..45	70	100 °C [4]	II (IP20)	Independent
DC 20W 500mA W HPF OF or K2706		0,13 [1]					-	80 [3]	-	-	Integral
DC 25W 600mA W HPF or K2707	220-240 V (50/60 Hz)	0,13	0,98 [2]	25	600 mA	59	-20..45	75	110 °C [4]	II (IP20)	Independent
DC 25W 600mA W HPF OF or K2708		0,16 [1]					-	80 [3]	-	-	Integral
DC 25W 700mA W HPF or K2709	220-240 V (50/60 Hz)	0,13	0,98 [2]	25	700 mA	48	-20..45	75	110 °C [4]	II (IP20)	Independent
DC 25W 700mA W HPF OF or K2710		0,16 [1]					-	80 [3]	-	-	Integral
DC 23W 900mA W HPF or K2711	220-240 V (50/60 Hz)	0,12	0,98 [2]	23	900 mA	40	-20..45	70	110 °C [4]	II (IP20)	Independent
DC 23W 900mA W HPF OF or K2712		0,15 [1]					-	80 [3]	-	-	Integral
DC 22W 1050mA W HPF or K2713	220-240 V (50/60 Hz)	0,12	0,98 [2]	22	1050 mA	35	-20..45	70	110 °C [4]	II (IP20)	Independent
DC 22W 1050mA W HPF OF or K2714		0,14 [1]					-	80 [3]	-	-	Integral

Notes: [1] – All models (DC 16W 400mA W HPF excluded) were tested also in 176-264 V d.c. operational range according to IEC 61347-2-13:2014 and they can be used for centralized emergency installations (EN 50171 and EN 50172) in the rated 196-240 V; I_{dc} max in the label. [2] – Value at rated P_o. [3] – Measured on the top of C₂ or C_{14A} (for DC W HFP models) capacitor. [4] – The products have an overheating protection (C.5.a type) and comply with temperature limit of clause 4.16.2 of EN 60598-1:04 ("F" triangle marking), EN 60598-1:2015; VDE 0710 T14 ("MM" triangle marking) except for HPF models.

Common parameters for all models			
Supply (PRI)	screw terminals, 0,75-2,5 mm ²		
Load (SEC)	screw terminals, 0,75-2,5 mm ²		
Additional information			
All models with the enclosure fulfil the requirements for: AC/DC P/S for LED; multiple value load; short-circuit proof type; stabilized output current; impulse withstand category II; Pollution degree 2 (Normal Pollution); Material group IIIa; the material of enclosure was tested with favourable result for Glow-wire at temperature 850/950 °C.			
INSULATION	PRI	SEC	
PRI	-	double	
SEC	double	-	
In the final application the connections of external wiring shall be according to IEC 60598-1 or national deviations of the country where installed. Creepage distances and clearances for built-in models shall comply with the requirements of IEC/EN 60598-1 when the device is installed in the final application:			
MODELS:	INSULATION between active parts and:	the bottom surface of enclosure	external side of enclosure
DC 17W 350mA WU S, DC 20W 500mA WU S, DC 17W 700mA W, DC 22W 1050mA W, DC 12W 700mA WU, DC 17W 700mA WU, DC 22W 1050mA WU, DC 18W 1400 WU, DC 18W 350mA W HPF, DC 16W 400mA W HPF, DC 20W 500mA W HPF, DC 25W 600mA W HPF, DC 25W 700mA W HPF, DC 23W 900mA W HPF, DC 22W 1050mA W HPF		double	double
DC 17W 350mA WU S OF, DC 20W 500mA WU S OF, DC 17W 700mA W OF, DC 22W 1050mA W OF, DC 12W 700mA WU OF, DC 17W 700mA WU OF, DC 22W 1050mA WU OF, DC 18W 1400 WU OF, DC 18W 350mA W HPF OF, DC 16W 400mA W HPF OF, DC 20W 500mA W HPF OF, DC 25W 600mA W HPF OF, DC 25W 700mA W HPF OF, DC 23W 900mA W HPF OF, DC 22W 1050mA W HPF OF		-	-

TESTS

Test requirements

EN 61347-1:2008+A1:2011+A2:2013, EN 61347-2-13:2014, EN 62384:2006+A1:2009

Test result

The test results are laid down in DEKRA test reports No.2102480.50 and No.2102480.60

Remarks

This ENEC KEMA-KEUR Certificate covers respect to certificate 2102480.01 the addition of new models DC 16W 400mA W HPF and DC 16W 400mA W HPF OF. The certificate 2102480.01 is still valid.

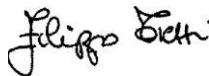
Reports No. 2102480.50 and No.2102480.60 are issued on Amendment 1 (dated September 23, 2016).

Conclusions

The examination proved that all test requirements were met.

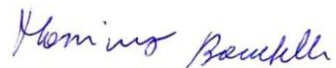
Tested by

: Filippo Tiezzi



Checked by

: Massimo Banchelli



Factory-Location

TCI Telecomunicazioni Italia S.r.l.

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I-21047 Saronno (VA)