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)	:	SUPERFLAT (series), SUPERSLIM (series), SUPERTRACK (series) and TWINFLAT (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 16 September 2021 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 81-120608

DEKRA Certification B.V.

B.T.M. Holtus
Managing Director

M. Triulzi
Certification Manager

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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)	:	SUPERFLAT (series), SUPERSLIM (series), SUPERTRACK (series) and TWINFLAT (series)
Primary voltage	:	120-240 V for a.c., 196-250 V for d.c
Rated frequency	:	50-60 Hz, 0 Hz
Primary current	:	From 0,1 A to 0,35 A for a.c., from 0,14 A to 0,16 A for d.c.
Secondary voltage	:	24 V for SUPERSLIM 24V models
Type of load	:	LED modules, power LED
Classification	:	Built-in

Product data – type SUPERFLAT (series)

Secondary power	:	4 W to 40 W
Secondary current	:	0,1 A to 1,05 A

Product data – type SUPERSLIM (series)

Secondary power	:	16 W to 25 W
Secondary current	:	0,35 A to 0,83 A

Product data – type SUPERTRACK (series)

Secondary power	:	14 W to 40 W
Secondary current	:	0,3 A to 1,05 A

Product data – type TWINFLAT (series)

Secondary power	:	5,2 W to 40 W
Secondary current	:	0,125 A to 1,05 A

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. 3500336.390 and 3500336.391 are laid down in DEKRA test file 350033600; they contain test results.

DEKRA test report No. 3500336.390 contain 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:

All models are electronic step-down controlgears, intended to supply high power Light Emitting Diodes or LED modules. The input is 220-240 V (120-240 V for SUPERFLAT 120V PWG OF) 50-60 Hz for a.c. supply; d.c. supply is specified in the following table. The output has stabilized current (CC) according to the DIP switch selection or 24 V (CV); all models have SELV output. SUPERSLIM 1-10V (local dimming), SUPERFLAT CASAMBI, SUPERFLAT BLL and DALI models are dimmable; models with 151xxx, 126xxx code have AM modulation; other codes have PWM modulation; after the code /yyy may be present where yyy=current value for factory setting. The Kxxxx code can replace the type reference according to the following table:

Type/s	a.c. d.c. PRI Current (A)	Power Factor	Max. Output Power (W)	Constant SEC parameter	Uout (V)	ta (°C)	tc (°C) [2]	Use [3]
SUPERSLIM (K2565)	0,15 0,16 [1]	0,95 (P>8 W)	18/20/ 23/25	350-500 mA (step 50 mA)	59	-25...50	90	BI, IP54, MM, 100
SUPERSLIM MM (K2E25)								BI, MM, 100
SUPERSLIM OF 127330OF (K2566), SUPERSLIM OF 127334L, SUPERSLIM MM OF (K2E26)						-	80	BI, 100
SUPERSLIM OFM (K2567)						-25...50	85	BI, 100
SUPERSLIM 24V (K2E35)	0,12 0,14 [1]	0,95 (P>8 W)	20	24 V	-	-25...45	80	BI, IP54, MM, 100
SUPERSLIM 24V OF (K2E36)						-	80	BI, 100
SUPERSLIM HC (K2E37)	0,15 0,16 [1]	0,95 (P>8 W)	16/18/ 21/24	540/640/ 730/830 mA	59	-20...45	90	BI, IP54, MM, 100
SUPERSLIM HC OF (K2E38)						-	80	BI, 100
SUPERSLIM 1-10V 230V 127464 (K2E27), SUPERSLIM 1-10V 230V 151465 (K2F84), SUPERSLIM DALI (K2E29), SUPERSLIM DALI AM (K2F86)	0,15 0,16 [1]	0,95 (P>8 W)	17,5/20/ 22,5/25	350-500 mA (step 50 mA)	59	-25...50	90	BI, IP54, MM, 100
SUPERSLIM 1-10V 230V OF 127464OF (K2E28), SUPERSLIM 1-10V 230V OF 151465OF (K2F85), SUPERSLIM DALI OF (K2E30), SUPERSLIM DALI AM OF (K2F87)						-	80	BI, 100
SUPERSLIM RR 1450 (K2F88), SUPERSLIM RR 750 (K2F89), SUPERSLIM RR 1450 DALI (K2F90), SUPERSLIM RR 750 DALI (K2F91)	0,15				59	-20...50	85	BI, MM, 100
SUPERSLIM RR 1450 500MA (K2F92), SUPERSLIM RR 750 500MA (K2F93), SUPERSLIM RR 1450 DALI 500MA (K2E31), SUPERSLIM RR 750 DALI 500MA (K2E32)	0,15	0,95	25	500 mA	59	-20...50	85	BI, MM, 100
SUPERSLIM RR 1450 350MA (K2F94), SUPERSLIM RR 750 350MA (K2F95), SUPERSLIM RR 1450 DALI 350MA (K2E33), SUPERSLIM RR 750 DALI 350MA (K2E34)	0,11	0,95	17,5	350 mA	59	-20...50	80	BI, MM, 100
SUPERFLAT SLIM (K2767)	0,15 0,16	0,95 (P>8 W)	17/20/ 22/25	350-500 mA (step 50 mA)	59	-20...45	90	BI, MM, 110
SUPERFLAT SLIM OF or (K2768)						-	80	BI, 110
SUPERFLAT SLIM DALI (K2741)						-25...45	90	BI, MM, 110
SUPERFLAT SLIM DALI OF or (K2742)						-	80	BI, 110

Notes: see following page.

Type/s	a.c. PRI Current (A)	Power Factor	Max. Output Power (W)	Constant SEC parameter	Uout (V)	tc (°C) [2]	Use [3]
TWINFLAT OF (K2881)	0,15	0,96 (P>10 W)	19/20,5/ 22,5/24	500-650 mA (step 50 mA)	59	70	OF
TWINFLAT I OF (K2A92)	0,17	0,96 (P>14 W)	24/26,5/ 28,5/31	550-700 mA (step 50 mA)	59	70	OF
TWINFLAT LC OF (K2882)	0,10	0,96 (P>11 W)	11,5/13/ 15/16,5	300/350/400/440 mA	59	70	OF
TWINFLAT LC I OF (K2A93)	0,13	0,96 (P>10 W)	15,5/17,5 /20/22	350-500 mA (step 50 mA)	59	70	OF
TWINFLAT MIT OF (K2E39)	0,17	0,9 C-0,95	8,8-31	200-700 mA (step 50 mA)	59	70	OF
TWINFLAT PRO OF (K2F66)	0,17	0,9 C-0,95	8,8-31	200-700 mA (step 50 mA)	59	70	OF
TWINFLAT PRO X OF (K2G10)	0,17	0,9 C-0,95	8,6-30	200-700 mA (step 50 mA)	59	70	OF
TWINFLAT 30W PRO OF (K2G90)	0,16	0,95 (P>12 W)	8-30	200-750 mA (step 50 mA)	59	80	OF
TWINFLAT 40W PRO OF (K2H01)	0,22	0,95 (P>19 W)	12-40	300-1050 mA (step 50 mA)	59	80	OF
TWINFLAT PRO X DALI OF (K2G11)	0,13	0,9 C-0,95	5,2-21	125-500 mA (step 50 mA)	59	70	OF
TWINFLAT 20W OF (K2G07)	0,13	0,9 C-0,95	10/14 /16/20	250/350/400/500 mA	59	75	OF
TWINFLAT 30W OF (K2G08)	0,2	0,9 C-0,95	22/24 /28/30	550/600/700/750 mA	59	80	OF
TWINFLAT 40W OF (K2G09)	0,22	0,9 C-0,95	34/36 /40/40	850/900/ 1000/1050 mA	59	80	OF
SUPERFLAT OF (K2673)	0,18	0,95 (P>25 W)	26/28/ 30/ 32	700-850 mA (step 50 mA)	49	80	OF
SUPERFLAT I OF (K2A94)	0,21	0,97 (P>13 W)	22-36	525-900 mA (step 25 mA)	59	75	OF
SUPERFLAT PRO OF (K2D15)	0,18	0,95 (P>12 W)	4-32	100-850 mA (step 50 mA)	59	80	OF
SUPERFLAT 675-1050 OF (K2D16), SUPERFLAT PRO HC OF (K2D17)	0,22	0,97	27-40	675-1050 mA	59	80	OF
SUPERFLAT HC BLL OF (K2G12), SUPERFLAT HC BLL PIR OF (K2G13)	0,22	0,97	35-40	675-1050 mA	59	80	OF
SUPERFLAT 300-1050 OF (K2F68)	0,22	0,9 C-0,95	12,6-40	300-1050 mA (step 50 mA)	59	80	OF
SUPERFLAT BLL OF (K2A91), SUPERFLAT BLL AM OF (K2B29), SUPERFLAT BLL PIR OF (K2D13)	0,17	0,97 (P>11 W)	14-31	325-700 mA (step 25 mA)	59	75	OF
SUPERFLAT CASAMBI OF (K2D14)							
SUPERTRACK DALI OF (K2A90), SUPERTRACK DALI2 OF (K2E47),							

SUPERTRACK DALI AM OF (K2B28)							
SUPERFLAT 1050 NFC CASAMBI OF (K2F67)	0,22	0,9 C-0,95	11-40	300-1050 mA	59	80	OF
SUPERFLAT 120V PWG OF (K2G14)	0,18/0,35	0,78 C-0,97	10-36	250-900 mA	59	70	OF
SUPERTRACK 1050 DALI OF (K2E40)	0,22	0,9 C-0,95	28-40	675-1050 mA (step 25 mA)	59	80	OF
SUPERTRACK 300-1050 DALI OF (K2F69)	0,22	0,9 C-0,95	12,6-40	300-1050 mA (step 50 mA)	59	80	OF

Notes: [1] Tested also in 176-275 V operational range and they can be used for centralized emergency installations (EN 50171 and EN 50172) in the rated 196-250 V. [2] – the t_c point for OF models is measured on the metal cap of C_{15} or C_{CE2} capacitor. [3] – Use: BI=built-in; IP54=case IP54; OF= built-in without enclosure; MM=SUPERSLIM 24V, SUPERFLAT SLIM, SUPERFLAT SLIM DALI are suitable for direct mounting on normally flammable surfaces (EN 60598-1:2015, VDE 0710 T14 for "MM" triangle marking); other models only at tc≤85 °C at the ambient temperature and output power of final application; 100, 110= overheating protection (C.5.a type) and comply with temperature limit of clause 4.16.2 of IEC 60598-1; the heating tests for OF models have been performed using the same enclosure of BI model.

Connections		Connection device (0,2-0,75 mm^2 or *0,5-1,5 mm^2)	tails	terminals (0,2-0,5 mm^2 or "0,5-1,5 mm^2)
Supply connection	PRI, J1, N, L or F, JP1A, JP1B, PAD1, PAD2	*SUPERSLIM MM, *SUPERFLAT SLIM DALI models, SUPERFLAT SLIM models, SUPERFLAT OF models, SUPERTRACK models, TWINFLAT PRO X OF	Other SUPERSLIM models, TWINFLAT models, SUPERFLAT 300-1050 DALI OF TWINFLAT PRO X DALI OF, TWINFLAT 30W PRO OF, TWINFLAT 40W PRO OF	-
Control (if present)	JP1, J2, J3A, DA	*SUPERFLAT SLIM DALI models	Other SUPERSLIM models, TWINFLAT PRO X DALI OF	"SUPERTRACK DALI models
Load connection	SEC, J2, J3, J40, JP50, + -	*SUPERSLIM MM, SUPERFLAT SLIM DALI models, TWINFLAT models, TWINFLAT PRO X models	Other SUPERSLIM models	SUPERFLAT SLIM models, SUPERFLAT OF models, SUPERTRACK models, TWINFLAT 30W PRO OF

Additional information

All models fulfil the requirements for: P/S for LED; short-circuit proof type; impulse withstand category II; Pollution degree 2; Material group IIIa; the material of enclosure for SUPERSLIM and SUPERFLAT SLIM models was tested with favourable result for Glow-wire at temperature 850 °C. The case of SUPERSLIM is IP54 (cable diameter is ≥1,6 mm).

INSULATION (B= basic, S= supplementary, R= double or reinforced)	PRI, P (if present)	DALI (if present)	1-10 (if present)	SEC
PRI, P (if present)	-	B	R	R
DALI (if present)	B	-	-	S
1-10 (if present)	R	-	-	-
SEC	R	S	-	-

OF models (printed circuit boards and electrical components) do not have an enclosure; they shall comply with the requirements of IEC 60598-1 when built into a luminaire. In the final application the connections shall be according to IEC 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:

INSULATION (B= basic, S= supplementary, R= double or reinforced)	Between live parts and standard test finger	Between live parts and bottom of enclosure

SUPERSLIM, SUPERSLIM MM, SUPERSLIM 1-10V 230V 127464, SUPERSLIM 1-10V 230V 151464, SUPERSLIM DALI, SUPERSLIM DALI AM, SUPERSLIM 24V, SUPERSLIM HC, SUPERSLIM 1-10V 230V 127464, SUPERSLIM 1-10V 230V 151464, SUPERSLIM RR 1450, SUPERSLIM RR 750, SUPERSLIM RR 1450 DALI, SUPERSLIM RR 750 DALI, SUPERSLIM RR 1450 500MA, SUPERSLIM RR 750 500MA, SUPERSLIM RR 1450 DALI 500MA, SUPERSLIM RR 750 DALI 500MA, SUPERSLIM RR 1450 350MA, SUPERSLIM RR 750 350MA, SUPERSLIM RR 1450 DALI 350MA, SUPERSLIM RR 750 DALI 350MA	R	R
SUPERSLIM OFM	B	-
SUPERFLAT SLIM, SUPERFLAT SLIM DALI	N/A (to be verified in the final application)	R
All other OF models	N/A (to be verified in the final application)	N/A (to be verified in the final application)
Assessment to normally flammable surface according to IEC 60598-1:2014/AMD1:2017 (valid for EN 60598-1:2015/A1:2018) and VDE 0710 T14 for "MM" triangle marking has been performed for SUPERSLIM, SUPERSLIM MM, SUPERSLIM 1-10V 230V 127464, SUPERSLIM 1-10V 230V 151465, SUPERSLIM DALI, SUPERSLIM DALI AM, SUPERSLIM OFM, SUPERSLIM 24V, SUPERSLIM HC, SUPERSLIM 1-10V 230V 127464, SUPERSLIM 1-10V 230V 151464, SUPERSLIM RR 1450, SUPERSLIM RR 750, SUPERSLIM RR 1450 DALI, SUPERSLIM RR 750 DALI, SUPERFLAT SLIM, SUPERFLAT SLIM DALI, SUPERSLIM RR 1450 500MA, SUPERSLIM RR 750 500MA, SUPERSLIM RR 1450 DALI 500MA, SUPERSLIM RR 750 DALI 500MA, SUPERSLIM RR 1450 350MA, SUPERSLIM RR 750 350MA, SUPERSLIM RR 1450 DALI 350MA, SUPERSLIM RR 750 DALI 350MA. Assessment to IEC 62493:2015 (valid for EN 62493:2015) has been performed when all models are built into the luminaire or lighting system. Assessment to IEC 62442-3:2018 (valid also for EN 62442-3:2018) has been performed.		