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	:	Battery supplied electronic controlgear for emergency lighting
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)	:	ELD P2 ** (* means any alphanumeric characters), ELED-A ** (* means any alphanumeric characters), ELED 1W ** (* means any alphanumeric characters), ELED 3W ** (* means any alphanumeric characters), ELED HP ** (* means any alphanumeric characters) and ELED LP ** (* means any alphanumeric characters)

The product and any acceptable variation thereof as specified in the Annex to this certificate and the documents referred to therein.

DEKRA hereby declares that the above-mentioned product has been certified based on:
- a type test according to EN 61347-2-7:2012, EN 61347-2-7:2012/A1:2019, EN 61347-2-7:2012/A2:2022, 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 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 10 June 2025 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 81-115116 REV.3

DEKRA Certification B.V.

B.T.M. Holtus
Managing Director

Miranda Zhou
Certification Manager

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DUTCH ACCREDITATION
COUNCIL

PRODUCTS
RvA C 001

SPECIFICATION OF THE CERTIFIED PRODUCT

Product data

Product	:	Battery supplied electronic controlgear for emergency lighting
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Type(s)/model(s)	:	ELD P2 ** (* means any alphanumeric characters), ELED-A ** (* means any alphanumeric characters), ELED 1W ** (* means any alphanumeric characters), ELED 3W ** (* means any alphanumeric characters), ELED HP ** (* means any alphanumeric characters) and ELED LP ** (* means any alphanumeric characters)
Primary voltage	:	220-240 V
Nature of supply	:	alternate current
Rated frequency	:	50/60 Hz or 50-60 Hz
Primary current	:	From 0,027 A to 0,035 A
Type of load	:	LED modules, power LED
Battery	:	Ni-Cd or Ni-MH or LiFePO4
Classification	:	Independent, built in

TESTS

Test requirements

EN 61347-2-7:2012
EN 61347-2-7:2012/A1:2019
EN 61347-2-7:2012/A2:2022
EN 61347-1:2015
EN 61347-1:2015/A1:2021

Test result

The test results are documented in DEKRA test file 351015300.

Additional information

DEKRA test report No. 3510153.170 is laid down in DEKRA test file 351015300.

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

This certificate replaces certificate No. 81-115116 REV.2 which we hereby declare invalid.

The list of components is laid down in test report 3510153.170.

Conclusion

The examination has confirmed that all requirements were met.

Factory location

TCI Telecomunicazioni Italia S.r.l.
Via Parma, 14
21047 Saronno (VA), Italy

General product information:
The devices are battery supplied controlgears used for emergency lighting; all models are for maintained operation with external driver or non-maintained operation; external driver can be supplied by L1, LT or directly; the output of external driver is connected to POWER IN terminals. HP models have S1 DIP-switch for the load selection.

Primary voltage	220-240 V
Nature of supply	Alternate current
Rated frequency	50/60 Hz or 50-60 Hz
Types of load	Power LED or LED Modules
Type of thermal protection	None for ELED 1W, ELED 3W, ELED-A models Electronic thermal protection (C.5.e) for other models
Overheating protection	None for ELED 1W, ELED 3W, ELED-A models 100 °C for other models with enclosure for other models

Type	POWER IN	ta (°C)	tc (°C)	Iin (A)	Output [3]	Uout (V)	Battery type	Time duration [6]	Time duration [7]
ELD P2/2 (K8043), ELD P2 (K8044) [1]	2 A 90 V	0…55	70	0,034	90 mA 30 V 40 mA 68 V	90 75 [3]	7,2 V 2 Ah NiMH 7,2 V 2,5 Ah NiMH	3 h 3 h	- -
ELD P2 OF (K8045)		-	80 [2]						
ELED LP (K8049), ELED LP/1 (K8053) [1], ELED LP BI (K8050), ELED LP/1 BI (K8054)	2 A 90 V	0…55	70	0,027	10-62 mA	90 75 [3]	7,2 V 1,6 Ah NiCd	3 h	2 h
ELED LP OF or K8051, ELED LP/1 OF (K8055)		-	80 [2]						
ELED LP S (K8061)	2 A 60 V	0…55	70		27-62 mA	60 58 [3]			
ELED HP (K8046), ELED HP/3 (K8057) [1], ELED HP BI (K8047), ELED HP/3 BI (K8058)	2 A 90 V	0…55	75	0,027 (5) 0,035 (6)	15-195 mA [4] 20-214 mA [5]	90 65 [3]	7,2 V 1,6 Ah NiCd 7,2 V 4 Ah NiCd 2x3,6 V 4 Ah NiCd	1 h 3 h 3 h	- 1,5 h 1,5 h
ELED HP OF (K8048), ELED HP/3 OF (K8059)		-	80 [2]						
ELED HP S (K8062)	2 A 60 V	0…55	75		15-195 mA [4]	60 58 [3]	7,2 V 1,6 Ah NiCd	1 h 1 h	- 1 h
ELED 3W 12-55V 1h BI (K8066), ELED-A 3W 12-55V 1h BI (K8067)	2 A 60 V	5…50	65	0,027	3 W 12-55 V	60 60 [3]	3,2 V 3,2 Ah LiFePO4 [9]	1 h	-
ELED 3W 12-55V 3h BI (K8068), ELED-A 3W 12-55V 3h BI (K8069)							3,2 V 4,8 Ah LiFePO4 [10]	3 h	-
ELED 3W 20-105V 1h BI (K8070), ELED-A 3W 20-105V 1h BI (K8071)	2 A 120 V	5…50	65	0,027	3 W 20-105 V	120 120 [3]	3,2 V 3,2 Ah LiFePO4 [9]	1 h	-
ELED 3W 20-105V 3h BI (K8072), ELED-A 3W 20-105V 1h BI (K8073)							3,2 V 4,8 Ah LiFePO4 [10]	3 h	-
ELED 3W 100-220V 1h BI (K8074), ELED-A 3W 100-220V 1h BI (K8075)	2 A 350 V	5…50	65	0,027	3 W 100-300 V	350 350 [3]	3,2 V 3,2 Ah LiFePO4 [9]	1 h	-

Type	POWER IN	ta (°C)	tc (°C)	Iin (A)	Output [3]	Uout (V)	Battery type	Time duration [6]	[7]
ELED 3W 100-220V 3h BI (K8076), ELED-A 3W 100-220V 1h BI (K8077)							3,2 V 4,8 Ah LiFePO4 [10]	3 h	-
ELED 1W 12-55V 1h BI (K8078), ELED-A 1W 12-55V 1h BI (K8079)	2 A 350 V	5…60	65	0,027	1 W 12-55 V	60 60 [3]	3,2 V 1,6 Ah LiFePO4	1 h	-
ELED 1W 20-105V 1h BI (K8080), ELED-A 1W 20-105V 1h BI (K8081)	2 A 120 V	5…60	65	0,027	1 W 20-105 V	120 120 [3]	3,2 V 1,6 Ah LiFePO4	1 h	-
ELED 1W 100-220V 1h BI (K8082), ELED-A 1W 100-220V 1h BI (K8083)	2 A 350 V	5…60	65	0,027	1 W 100-300 V	350 350 [3]	3,2 V 1,6 Ah LiFePO4	1 h	-

Notes: [1] – Codes 123xxxSV have an enclosure to built-in with double insulation; codes 123xxxK have an additional enclosure for the battery pack. [2] – Value measured on the top of C13. [3] – Max. values in emergency mode. [4] – Value for 1 h models. [5] – Value for 3 h models. [6] – Only with the following batteries and after 24 h recharge. [7] – Only with these batteries and after 12 h recharge.

Battery type Supplier	technology	Cell no. (s=series p=parallel)	Vnom [V]	Typ. capacity [Ah]	Discharge [mA]	ta [°C]
VNT Cs U ARTS ENERGY	Ni-Cd	6s	7,2	1,6	960	5...55
D-SC1600BT-6S BST BATTERY	Ni-Cd	6s	7,2	1,6	320	0...55
VHT Cs U ARTS ENERGY	Ni-MH	6s	7,2	2	1200	0...55
H-SC2500BT Bst Power	Ni-MH	6s	7,2	2,5	625	0...50
VNT DH U ARTS ENERGY	Ni-Cd	2x 3s	2x 3,6	4	1000	5...55
D-D4000BT-3H BST BATTERY	Ni-Cd	2x 3s	2x 3,6	4	800	0...55
275911 elubat	LiFePO4	1	3,2	1,6	960	0...50
275902 or 275910 elubat	LiFePO4	2p	3,2	3,2	1920	0...50
275909 or 275913 elubat	LiFePO4	3p	3,2	4,8	1200	0...50

Connections		ELD P2 models	Other ELED models	ELED 1W, ELED 3W models	ELED-A models
Input charge	N, L	Screw-less terminal 0,5-1,5 mm^2; screw terminals 0,75-2,5 mm^2 for independent models.	Screw-less terminal 0,5-1,5 mm^2; 0,75-1,5 mm^2 for independent models. Models with 123xxxMV have screw terminals 0,75-2,5 mm^2	Screw-less terminal 0,5-1,5 mm^2	Screw-less terminal 0,5-1,5 mm^2
Supply connection (if present)	L1, LT, Lin, Lout	Screw-less terminal 0,5-1,5 mm^2 and screw terminals 0,75-2,5 mm^2 for	Screw-less terminal 0,5-1,5 mm^2 and 0,75-1,5 mm^2 for independent models. Models with	Screw-less terminal 0,5-1,5 mm^2	Screw-less terminal 0,5-1,5 mm^2

		independent models.	123xxxMV have screw terminals 0,75-2,5 mm^2		
Rest mode	7-12V +/-	Screw-less terminal 0,5-1,5 mm^2	Screw-less terminal 0,5-1,5 mm^2	-	-
Power IN	Power IN +/-	Screw-less terminal 0,5-1,5 mm^2	Screw-less terminal 0,5-1,5 mm^2	Screw-less terminal 0,5-1,5 mm^2	Screw-less terminal 0,5-1,5 mm^2
Battery	Battery	Connection device			
Signal LED	Signal LED	Connection device			
Load connection	LED OUT +/-	Screw-less terminal 0,5-1,5 mm^2			

Additional information

All models fulfil the requirements for: short-circuit proof type; impulse withstand category II; Pollution degree 2; Material group IIIa; recharging device with self-resetting protection; suitable for normally flammable surface. Heating tests have been performed only with the selected battery types. Additional functions: auto-test for ELED-A models; rest mode (7-12 V) for ELD P2, ELED LP, ELED HP models. Models with code 123xxxSV, ELED 1W, ELED 3W, ELED-A models have enclosure to built-in with double insulation symbol ⧈; other models are independent, IP20, class II.

INSULATION (B= basic, S= supplementary, R= double or reinforced) between:

L, N ↔ L1, LT for ELD P2 models, ELED LP and ELED HP models	B
L1, LT (if present) ↔ SIGNAL LED, BATT, POWER IN, LED OUT, REST MODE for ELD P2 models, ELED LP and ELED HP models	R
L, N ↔ SIGNAL LED, BATT, POWER IN, LED OUT, REST MODE for ELD P2 models, ELED LP and ELED HP models	R
Active parts ↔ bottom side of the enclosure that can come in contact with the luminaire body when incorporated for other BI models	R
L, N ↔ L1, LT for ELED 1W, ELED 3W and ELED-A models	-
L1, LT, L, N ↔ POWER IN, LED OUT for ELED 1W, ELED 3W and ELED-A models	R
L1, LT, L, N ↔ POWER IN, SIGNAL LED, BATT/Battery for ELED 1W, ELED 3W and ELED-A models	B
POWER IN, SIGNAL LED ↔ POWER IN, LED OUT for ELED 1W, ELED 3W and ELED-A models	S
Active parts ↔ all parts of the enclosure that can come in contact with the luminaire body when incorporated for codes 123xxxSV	R
Active parts ↔ parts of the white enclosure/wires of SIGNAL LED that can come in contact with the luminaire body when incorporated	B
Active parts ↔ frontal part of SIGNAL LED	R

The heating tests for OF models have been performed using an enclosure with dimensions as the BI models; they shall comply with the requirements of EN 60598-1 when built into a luminaire. In the final application the connections shall be according to EN standards or national deviations of the country where installed.

Assessment to EN IEC 60598-2-22:2022 used in conjunction with EN IEC 60598-1:2021 has been performed for independent models; only 22.7.2, 22.7.3, TABLE for thermal tests of Section 12 have been performed for built-int models

Assessment to EN 62493:2015, EN 62493:2022 has been performed.