



Ref. Certif. No.

**ES1785-M1**

**IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME**

**CB TEST CERTIFICATE**

Product

ELECTRONIC CONTROL GEAR FOR LED MODULES

Name and address of the applicant

ESPECIALIDADES LUMINOTÉCNICAS, S.A.U.  
PI MALPICA, CL E, 11  
50016 ZARAGOZA (Spain)

Name and address of the manufacturer

ESPECIALIDADES LUMINOTÉCNICAS, S.A.U.  
PI MALPICA, CL E NAVE 11  
50016 ZARAGOZA (Spain)

Name and address of the factory

SAME AS ABOVE

Note: When more than one factory, please report on page 2

Additional Information on page 2

Ratings and principal characteristics

See Annex

Trademark (if any)

ELT

Customer's Testing Facility (CTF) Stage used

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Model / Type Ref.

See references on the Annex

Additional information (if necessary may also be reported on page 2)

Additional Information on page 2

A sample of the product was tested and found to be in conformity with

IEC 61347-1:2015  
IEC 61347-2-13:2014 + AMD1:2016  
IEC 62384:2006 + AMD1:2009

As shown in the Test Report Ref. No. which forms part of this Certificate

201402130051-M3, 201402130050-M3, 2018010013B1-2,  
2018010013B1-1

This CB Test Certificate is issued by the National Certification Body

AENOR INTERNACIONAL S.A.U.  
CI Génova, 6  
ES-28004 MADRID (SPAIN)

Date: 2018-03-08

  
Signature: Rafael GARCÍA MEIRO  
Chief Executive Officer

# ANNEX TO CB CERTIFICATE N° ES1785-M1

## CERTIFIED REFERENCES AND THEIR MAIN RATINGS

**Product: ELECTRONIC CONTROL GEAR FOR LED MODULES**

**Trade Mark: ELT**

Reference	Voltage and frequency supply	Total power and power factor	Voltage or current stabilized output	Tc maximum	Classification	Suitable for supply voltage dimmer	Additional data
DLC 137 / 1200-E-C2-1 ... 10 V	220-240 V~; 0 ... 50/60 Hz	47 W; PF: 0,97	Stabilized current: 1200 mA, at 31 V max.	80 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; 1-10 V dimming
DLC 137 / 1200-E-1 ... 10 V	220-240 V~; 0 ... 50/60 Hz	43 W; PF: 0,94	Stabilized current: 1200 mA, at 31 V max.	80 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; 1-10 V dimming
DLC 142 / 1050-E-C2-1 ... 10 V	220-240 V~; 0 ... 50/60 Hz	56 W; PF: 0,96	Stabilized current: 1050 mA, at 40 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; 1-10 V dimming
DLC 142 / 1050-E-1 ... 10 V	220-240 V~; 0 ... 50/60 Hz	47 W; PF: 0,97	Stabilized current: 1050 mA, at 40 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; 1-10 V dimming
DLC 142 / 1400-E-C2-1 ... 10 V	220-240 V~; 0 ... 50/60 Hz	43 W; PF: 0,94	Stabilized current: 1400 mA, at 30 V max.	80 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; 1-10 V dimming
DLC 142 / 1400-E-1 ... 10 V	220-240 V~; 0 ... 50/60 Hz	48 W; PF: 0,96	Stabilized current: 1400 mA, at 30 V max.	80 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; 1-10 V dimming
DLC 142 / 350-E-C2-1 ... 10 V	220-240 V~; 0 ... 50/60 Hz	47 W; PF: 0,96	Stabilized current: 350 mA, at 117 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; 1-10 V dimming
DLC 142 / 350-E-1 ... 10 V	220-240 V~; 0 ... 50/60 Hz	47 W; PF: 0,96	Stabilized current: 350 mA, at 117 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; 1-10 V dimming
DLC 142 / 500-E-C2-1 ... 10 V	220-240 V~; 0 ... 50/60 Hz	47 W; PF: 0,96	Stabilized current: 500 mA, at 80 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; 1-10 V dimming
DLC 142 / 500-E-1 ... 10 V	220-240 V~; 0 ... 50/60 Hz	47 W; PF: 0,96	Stabilized current: 500 mA, at 80 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; 1-10 V dimming
DLC 142 / 700-E-C2-1 ... 10 V	220-240 V~; 0 ... 50/60 Hz	47 W; PF: 0,95	Stabilized current: 700 mA, at 60 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; 1-10 V dimming
DLC 142 / 700-E-1 ... 10 V	220-240 V~; 0 ... 50/60 Hz	47 W; PF: 0,95	Stabilized current: 700 mA, at 60 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; 1-10 V dimming

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## CERTIFIED REFERENCES AND THEIR MAIN RATINGS

Reference	Voltage and frequency supply	Total power and power factor	Voltage or current stabilized output	Tc maximum	Classification	Suitable for supply voltage dimmer	Additional data
DLC 150 / 700-E-1...10 V	220-240 V~; 0 ... 50/60 Hz	56 W; PF: 0,96	Stabilized current: 700 mA, at 72 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; 1-10 V dimming
DLC 150 / 700-1...10 V-EN-3	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,96	Stabilized current: 700 mA, at 72 V max.	75 °C	To build-in	No	Short-circuits withstand; class II; terminals connection; 1-10 V dimming
DLCM 42 / 1200...1400-E-BT	220-240 V~; 0 ... 50/60 Hz	50 W; PF: 0,96	Stabilized current: 1200 -1400 mA, at 30 V max.	80 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 90 °C; BLUETOOTH
DLCM 42 / 1200...1400-E-C2-BT	220-240 V~; 0 ... 50/60 Hz	50 W; PF: 0,96	Stabilized current: 1200 -1400 mA, at 30 V max.	80 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 90 °C; BLUETOOTH
DLCM 42 / 1200...1400-E-C2-DALI	220-240 V~; 0 ... 50/60 Hz	50 W; PF: 0,96	Stabilized current: 1200 -1400 mA, at 30 V max.	80 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 90 °C; DALI dimming
DLCM 42 / 1200...1400-E-DALI	220-240 V~; 0 ... 50/60 Hz	50 W; PF: 0,96	Stabilized current: 1200 -1400 mA, at 30 V max.	80 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 90 °C; DALI dimming
DLCM 48 / 900...1050-E-BT	220-240 V~; 0 ... 50/60 Hz	56 W; PF: 0,97	Stabilized current: 900 -1050 mA, at 46 V max.	80 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 90 °C; BLUETOOTH
DLCM 48 / 900...1050-E-C2-BT	220-240 V~; 0 ... 50/60 Hz	56 W; PF: 0,97	Stabilized current: 900 -1050 mA, at 46 V max.	80 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 90 °C; BLUETOOTH
DLCM 48 / 900...1050-E-C2-DALI	220-240 V~; 0 ... 50/60 Hz	56 W; PF: 0,97	Stabilized current: 900 -1050 mA, at 46 V max.	80 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 90 °C; DALI dimming
DLCM 48 / 900...1050-E-DALI	220-240 V~; 0 ... 50/60 Hz	56 W; PF: 0,97	Stabilized current: 900 -1050 mA, at 46 V max.	80 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 90 °C; DALI dimming
DLCM 50 / 250...350-E-BT	220-240 V~; 0 ... 50/60 Hz	58 W; PF: 0,98	Stabilized current: 250 -350 mA, at 143 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 85 °C; BLUETOOTH
DLCM 50 / 250...350-E-C2-BT	220-240 V~; 0 ... 50/60 Hz	58 W; PF: 0,98	Stabilized current: 250 -350 mA, at 143 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 85 °C; BLUETOOTH
DLCM 50 / 250...350-E-C2-DALI	220-240 V~; 0 ... 50/60 Hz	58 W; PF: 0,98	Stabilized current: 250 -350 mA, at 143 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 85 °C; DALI dimming

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## CERTIFIED REFERENCES AND THEIR MAIN RATINGS

Reference	Voltage and frequency supply	Total power and power factor	Voltage or current stabilized output	Tc maximum	Classification	Suitable for supply voltage dimmer	Additional data
DLCM 50 / 250...350-E-DALI	220-240 V~; 0 ... 50/60 Hz	58 W; PF: 0,98	Stabilized current: 250 -350 mA, at 143 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 85 °C; DALI dimming
DLCM 50 / 400...500-E-BT	220-240 V~; 0 ... 50/60 Hz	58 W; PF: 0,97	Stabilized current: 400 -500 mA, at 100 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 85 °C; BLUETOOTH
DLCM 50 / 400...500-E-C2-BT	220-240 V~; 0 ... 50/60 Hz	58 W; PF: 0,97	Stabilized current: 400 -500 mA, at 100 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 85 °C; BLUETOOTH
DLCM 50 / 400...500-E-C2-DALI	220-240 V~; 0 ... 50/60 Hz	58 W; PF: 0,97	Stabilized current: 400 -500 mA, at 100 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 85 °C; DALI dimming
DLCM 50 / 400...500-E-DALI	220-240 V~; 0 ... 50/60 Hz	58 W; PF: 0,97	Stabilized current: 400 -500 mA, at 100 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 85 °C; DALI dimming
DLCM 50 / 600...700-E-BT	220-240 V~; 0 ... 50/60 Hz	58 W; PF: 0,97	Stabilized current: 600 -700 mA, at 72 V max.	70 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 80 °C; BLUETOOTH
DLCM 50 / 600...700-E-C2-BT	220-240 V~; 0 ... 50/60 Hz	58 W; PF: 0,97	Stabilized current: 600 -700 mA, at 72 V max.	70 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 80 °C; BLUETOOTH
DLCM 50 / 600...700-E-C2-DALI	220-240 V~; 0 ... 50/60 Hz	58 W; PF: 0,97	Stabilized current: 600 -700 mA, at 72 V max.	70 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 80 °C; DALI dimming
DLCM 50 / 600...700-E-DALI	220-240 V~; 0 ... 50/60 Hz	58 W; PF: 0,97	Stabilized current: 600 -700 mA, at 72 V max.	70 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 80 °C; DALI dimming
LC 137 / 1200-E-C2	220-240 V~; 0 ... 50/60 Hz	43 W; PF: 0,97	Stabilized current: 1200 mA, at 31 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C
LC 137 / 1200-E-C2-FAN	220-240 V~; 0 ... 50/60 Hz	43 W; PF: 0,97	Stabilized current: 1200 mA, at 31 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; fan output
LC 137 / 1200-E	220-240 V~; 0 ... 50/60 Hz	43 W; PF: 0,97	Stabilized current: 1200 mA, at 31 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C
LC 137 / 1200-E-FAN	220-240 V~; 0 ... 50/60 Hz	43 W; PF: 0,97	Stabilized current: 1200 mA, at 31 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; fan output



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## CERTIFIED REFERENCES AND THEIR MAIN RATINGS

Reference	Voltage and frequency supply	Total power and power factor	Voltage or current stabilized output	Tc maximum	Classification	Suitable for supply voltage dimmer	Additional data
LC 142 / 1400-E-C2	220-240 V~; 0 ... 50/60 Hz	48 W; PF: 0,98	Stabilized current: 1400 mA, at 30 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C
LC 142 / 1400-E-C2-FAN	220-240 V~; 0 ... 50/60 Hz	48 W; PF: 0,98	Stabilized current: 1400 mA, at 30 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; fan output
LC 142 / 1400-E	220-240 V~; 0 ... 50/60 Hz	48 W; PF: 0,98	Stabilized current: 1400 mA, at 30 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C
LC 142 / 1400-E-FAN	220-240 V~; 0 ... 50/60 Hz	48 W; PF: 0,98	Stabilized current: 1400 mA, at 30 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; fan output
LC 148 / 1050-E-C2	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 1050 mA, at 46 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C
LC 148 / 1050-E-C2-FAN	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 1050 mA, at 46 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; fan output
LC 148 / 1050-E	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 1050 mA, at 46 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C
LC 148 / 1050-E-FAN	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 1050 mA, at 46 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; fan output
LC 150 / 350-E-C2	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 350 mA, at 143 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C
LC 150 / 350-E-C2-FAN	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 350 mA, at 143 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; fan output
LC 150 / 350-E	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 350 mA, at 143 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C
LC 150 / 350-E-FAN	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 350 mA, at 143 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; fan output
LC 150 / 500-E-C2	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 500 mA, at 100 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C
LC 150 / 500-E-C2-FAN	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 500 mA, at 100 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; fan output

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## CERTIFIED REFERENCES AND THEIR MAIN RATINGS

Reference	Voltage and frequency supply	Total power and power factor	Voltage or current stabilized output	Tc maximum	Classification	Suitable for supply voltage dimmer	Additional data
LC 150 / 500-E	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 500 mA, at 100 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C
LC 150 / 500-E-FAN	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 500 mA, at 100 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; fan output
LC 150 / 700-E-C2	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 700 mA, at 72 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C
LC 150 / 700-E-C2-FAN	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 700 mA, at 72 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; fan output
LC 150 / 700-E	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 700 mA, at 72 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C
LC 150 / 700-E-FAN	220-240 V~; 0 ... 50/60 Hz	55 W; PF: 0,98	Stabilized current: 700 mA, at 72 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; fan output
LC 150 / 900-E-C2	220-240 V~; 0 ... 50/60 Hz	56 W; PF: 0,98	Stabilized current: 900 mA, at 55 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C
LC 150 / 900-E-C2-FAN	220-240 V~; 0 ... 50/60 Hz	56 W; PF: 0,98	Stabilized current: 900 mA, at 55 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; fan output
LC 150 / 900-E	220-240 V~; 0 ... 50/60 Hz	56 W; PF: 0,98	Stabilized current: 900 mA, at 55 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C
LC 150 / 900-E-FAN	220-240 V~; 0 ... 50/60 Hz	56 W; PF: 0,98	Stabilized current: 900 mA, at 55 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; fan output
LC 48C/1050-E-C2	230 V~; 0 ... 50/60 Hz	56 W; PF: 0,98	Stabilized current: 1050 mA; maximum output power: 26 - 48 W	80 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 90 °C
LC 48C/1050-E	230 V~; 0 ... 50/60 Hz	56 W; PF: 0,98	Stabilized current: 1050 mA; maximum output power: 26 - 48 W	85 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 95 °C
LC 50C/700-E-C2	230 V~; 0 ... 50/60 Hz	59 W; PF: 0,98	Stabilized current: 700 mA; maximum output power: 26 - 50 W	80 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 90 °C
LC 50C/700-E	230 V~; 0 ... 50/60 Hz	59 W; PF: 0,98	Stabilized current: 700 mA; maximum output power: 26 - 50 W	85 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 95 °C

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## CERTIFIED REFERENCES AND THEIR MAIN RATINGS

Reference	Voltage and frequency supply	Total power and power factor	Voltage or current stabilized output	Tc maximum	Classification	Suitable for supply voltage dimmer	Additional data
LCM 42 / 350 ... 1050-E-C2	220-240 V~; 0 ... 50/60 Hz	47 W; PF: 0,95	Stabilized current: 350-1050 mA, at 72 V max.	75 °C	Independent	No	Short-circuits withstand; class II; terminals connection; thermal protection at tc = 100 °C; multi-current drive
LCM 42 / 350 ... 1050-E	220-240 V~; 0 ... 50/60 Hz	47 W; PF: 0,95	Stabilized current: 350-1050 mA, at 72 V max.	75 °C	To build-in	No	Short-circuits withstand; class I; terminals connection; thermal protection at tc = 100 °C; multi-current drive