

MLCC103 / MLCV1003 LED Driver-Constant Current



Areas of application

Suitable for indoor installations

Suitable for luminaires of protection classes I and II



Product benefits

- Wide Operating Range 100...264 VAc
- O/P overload-S/C, over temperature Auto restart recovery protections,
- High efficiency and reliability,
- High quality of light.
- Small PCFR-White housing.
- Efficiency >85%.

Product features

- Supply voltage: 220...240 VAc
- Line frequency: 50 Hz | 60 Hz
- Line voltage: 100...264 VAc
- Safety according to EN 61347-1, 61347-2-13, 62384
- EMI CE suppression: to EN 55015A
- Line harmonics according to EN 61000-3-2
- Immunity according to EN 61547
- Lifetime: up to 50,000 h (temperature at $T_c = 65\text{ °C}$, max. 10 % failure rate)

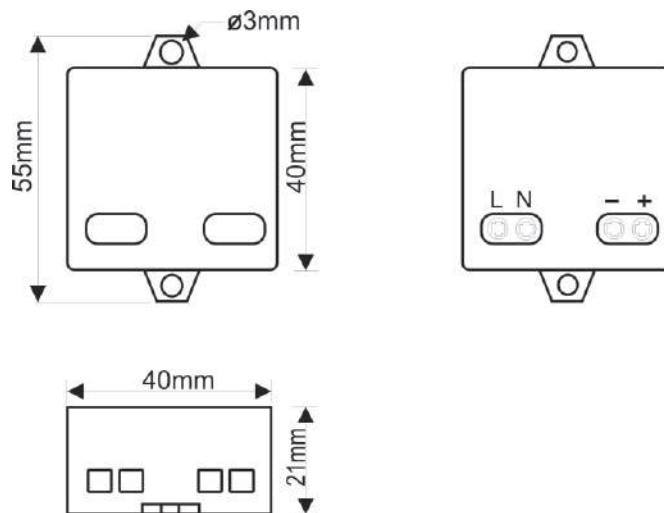
Product datasheet

Technical data

Electrical data

Nominal voltage	220...240 V
Mains frequency	50...60 Hz
Input voltage AC	190...264 Vac
Total harmonic distortion	NA
Power factor è	NA
ECG efficiency	>82%
Device power loss	<4.0 W
Inrush current	COLD START 20A(twidth=260 us measured at 50% Ipeak) at 230VAc
Surge capability (L/N-Ground)	1KV
Surge capability (L-N)	1.5KV
Nominal output voltage	4-12VDc
U-OUT (working voltage)	<60VDc
Nominal output current	350mA
Output current tolerance	±5 %
Output ripple (@100 Hz)	< 2 %
Nominal output power	4.5 W
Galvanic isolation	SELV

Dimensions & weight



Length	55mm
Width	21mm
Height	22mm
Mounting hole spacing, length	48mm

Product datasheet

Mounting hole spacing, width	45 mm
Product weight	145.00 gm
Cable cross-section, input side	0.5...1.5 mm ²
Cable cross-section, output side	0.5...1.5 mm ²
Wire preparation length, input side	6.5...7.5 mm
Wire preparation length, output side	6.5...7.5 mm

Colors & materials

Casing material	PC FR 94V0 White
-----------------	------------------

Temperatures & operating conditions

Ambient temperature range	-20...+50 °C
Maximum temperature at tc test point	75 °C
Max.housing temperature in case of fault	110 °C
Permitted rel. humidity during operation	5...85 %

Lifespan

ECG lifetime	min 30,000 h*
--------------	---------------

* At T_{case} = 65°C at T_{c point} / 10% failure rate

Additional product data

Encapsulated	No
--------------	----

Capabilities

Dimmable	No
Overheating protection	Auto-recovery
Overload protection	Auto-recovery
Short-circuit protection	Auto-recovery
No-load proof	Yes
Max. cable length to lamp/LED module	1 meter
Suitable for fixtures with prot. class	Class I
Type of connection, output side	Screw terminal

Certificates & standards







Approval marks – approval	CE , ENEC, IEC-CB, BIS
Standards	EN-61347-1:2015,+A1,EN-61347-2-23:2014+A1, EN-IEC62384:2020,IS-15885-2-23, EN-61000-3-2, EN61000-4-4&5,EN-55015-A
Type of protection	IP20

Product datasheet

Logistical data

Temperature range at storage	0.. 45 °C
------------------------------	-----------

Download Data

File
 Product page
 Safety Instructions
 ROHs & WEEE Decl.pdf
 EMI-CE & EMC report.pdf
 Installation Instructions.pdf
 CAD data.zip

Logistical Data

Product code	Product description	Packaging unit (Pieces/Box)	Dimensions (length x width x Volume height)	Gross weight
MLCC103	O/P current fix	Per tray 50pc		1.6Kg
MLCC103	O/P current fix	Shipping carton box100/Box (5 Trays/Box)		8Kg

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

Ordering Information:

M	L	C	C	X	4	0	X	2	8	-	1	E
MELCON	LED	C-Constant F-Flicker Free D- Dimming N- Non-Isolated S-Switch(AOI) H-Non-SELV	A- Analog Dim B-Bluetooth C-Current D-Dali Dim E-Emergency G-Slave Dim I- IR Remote M - Master Dim P-PWM Dim R-Potentiometer T-Triac Dim V-Voltage W-CCT-Tunable white X - W-Fi Dim Z-Zigbee	O/P Voltage			O/P Power			No.Of O/P 1- Mono/DT6 2- CCT/DT8 3- RGB 4- RGBW 5- RGBWW	E-Enclosed-IP20 P-Enclosed-IP65 O-Open Const.	

Version Change History:

Sr.	Revision	Notes	Date
1.	V0.1		28.12.2021
2.	V0.2	IEC-CB- CE certified and added logos ENEC Logo added, Order info change	21.10.2022