

## MLCV 2424

LED Driver / SMPS / POWER ADAPTER



### Areas of application

- Suitable for SELV installations
- Suitable for In-door Installations LED Strips power supply



### Product benefits

- Wide Operating Range 185-265 Vac
- Safety requirement due to Input Over Voltage, O/P overload-S/C, over temperature Auto recovery protections,
- High efficiency and reliability,
- High quality of light.
- Efficiency >85%.

### Product features

- Supply voltage: 220...240 V
- Line frequency: 50 Hz | 60 Hz
- Line voltage: 185...265 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 30,000 h (temperature at  $T_c = 65^\circ\text{C}$ , max. 10 % failure rate)

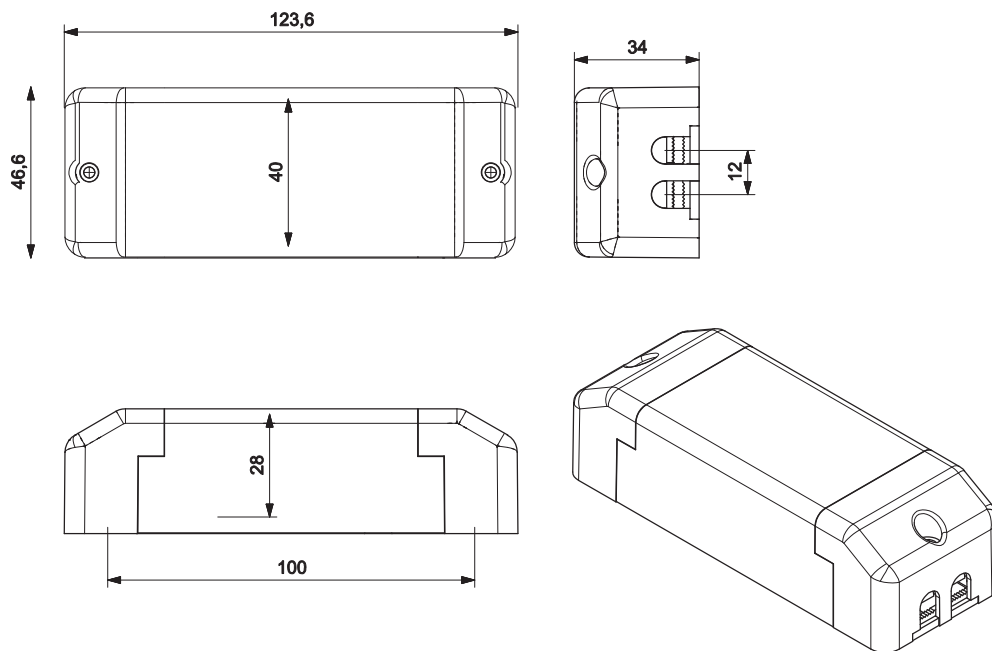
# Product datasheet

## Technical data

### Electrical data

Nominal voltage	220...240 V
Mains frequency	50...60 Hz
Input voltage AC	185-265 VAc
ECG efficiency	>85 %
Device power loss	<4.0 W
Inrush current	8 A
Max. ECG no. on circuit breaker 10 A (Type-B)	8
Max. ECG no. on circuit breaker 16 A (Type-B)	16
Max. ECG no. on circuit breaker 25 A (Type-B)	24
Surge capability (L/N-Ground)	2.5 kV
Surge capability (L-N)	2 kV
Nominal output voltage	24VDc
U-OUT (working voltage)	24VDc
Nominal output current	1000 mA (1 A)
Output current tolerance	±5 %
Output ripple (@100 Hz)	< 2 %
Nominal output power	14.5...28.5 W
Galvanic isolation	SELV

### Dimensions & weight



Length	123 mm
Width	46.6 mm
Height	34 mm
Mounting hole spacing, length	100 mm

## Product datasheet

Mounting hole spacing, width	100 mm
Product weight	145.00 gm
Cable cross-section, input side	0.5...1.5 mm <sup>2</sup>
Cable cross-section, output side	0.5...1.5 mm <sup>2</sup>
Wire preparation length, input side	6.5...7.5 mm
Wire preparation length, output side	6.5...7.5 mm

### Colors & materials

Casing material	FR 94V0 ABS/PC
-----------------	----------------

### 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<sub>case</sub> = 65°C at T<sub>c</sub> point / 10% failure rate

### Additional product data

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

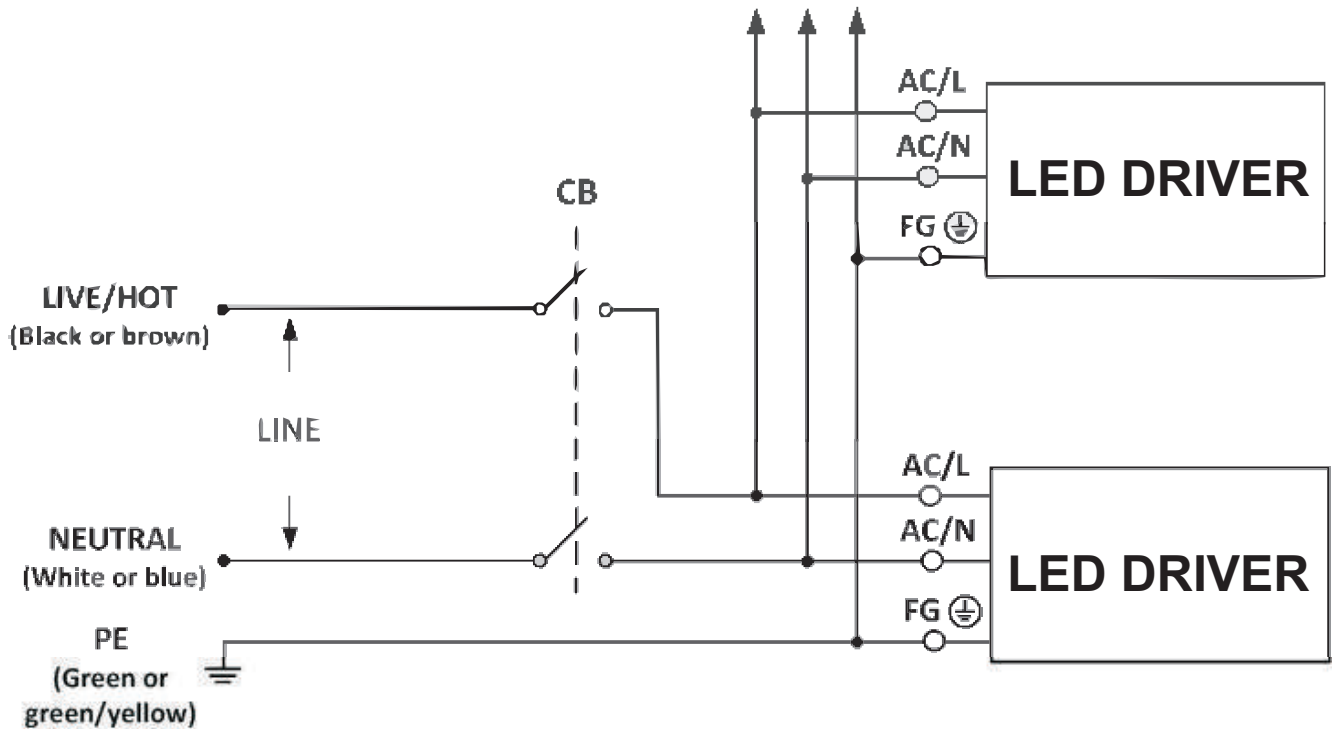
### Capabilities

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	II
Type of connection, output side	Screw Fit terminals UL 94 V0

### 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
Type of protection	IP20

# Installation Instructions



## Installation Instructions:







- \* Before installation or maintenance work, please disconnect the power supply from the Mains. Ensure that it cannot be re-connected inadvertently as precaution!
- \* Keep proper ventilation around the unit and do not stack any object on it. Also a **10-15 cm** clearance must be kept when the adjacent device is a heat source.
- \* Mounting orientations other than standard orientation or operate under high ambient temperature may increase the internal component temperature and will require a de-rating in output current. Please refer to the specification sheet to receive the optimum mounting position and information about the de-rating curve.
- \* Current rating of an approved primary /secondary cable should be greater than or equal to that of the unit. Please refer to its specification.
- \* For LED power supplies with waterproof connectors, verify that the linkage between the unit and the lighting fixture is tight so that water cannot intrude into the system.
- \* For dimmable LED power supplies, make sure that your dimming controller is capable of Source/Sink Power Supply units.
- \* For those with “3 in 1” dimming or “2 in 1” dimming function, e.g. MLDA series, the output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-: 0/1 ~ 10VDC, 10V PWM signal or resistance. Please refer to DIMMING OPERATION Section of individual model specification sheet from <https://www.melconindia.com> for details.
- \* Note that the dimmable LED power supply series Please follow installation instructions accordingly.

# 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
MLCV2424	CV SMPS/ Adapter	Per tray 20pc	240 mm x 210 mm x 80 mm	3.16 kg
MLCV2424	CV SMPS/ Adapter	Shipping carton box100/Box (5 Trays/Box)	240 mm x 210 mm x 80 mm	3.70 dm <sup>3</sup> 19.00 Kg

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:

<b>M</b>	<b>L</b>	<b>C</b>	<b>V</b>	<b>X</b>	<b>2</b>	<b>4</b>	<b>X</b>	<b>2</b>	<b>4</b>	<b>-</b>	<b>1</b>	<b>E</b>
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	V-0.1	Installation Instruction added	02.12.2019
2	V-0.2	CB-CE certification added	30.12.2021
3	V-0.3	ENEC certification added	19.10.2022