

# FTMC60V-DA series

60W LED Constant voltage Switching Power Supply, DALI and push dimming



PRELIMINARY

## ■ Features:

- Constant voltage design
- European AC input range
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Isolation class I
- Linear shape
- DALI and push dimming function



## © ELECTRICAL SPECIFICATION

MODEL	FTMC60V12-DA	FTMC60V24-DA
<b>OUTPUT</b>		
Rated Voltage	12V	24V
Rated Current	5A	2.5A
Rated Power	60W	
Power Range	0 ÷ 60W	
Dimming Range	1 - 100%	
Line Regulation	± 1%	
Load Regulation	± 2%	
Voltage Tolerance [2]	± 5%	
Ripple & Noise (max.) [3]	150mV <sub>P-P</sub>	160mV <sub>P-P</sub>
Setup, Rise, Holdup time [4]	0.55s, 2s, 7ms	

<b>INPUT</b>		
Voltage Range	220 ÷ 240VAC	
Frequency Range	50/60Hz	
Power Factor (typ.)	PF > 0.98/ 230VAC at full load	
Efficiency (typ.)	88%	90%
AC current (typ.)	0.4A / 230VAC	
Inrush current (max.)	50A / 230VAC(25°C)	

<b>PROTECTIONS</b>		
Over Current	Range: 110 ÷ 150%	
	Type:Type: hiccup mode. Recovers automatically after fault condition is removed.	
Over Voltage	15VDC	26VDC
	Type:Type: hiccup mode. Recovers automatically after fault condition is removed.	
Short Circuit	Type: hiccup mode. Recovers automatically after fault condition is removed.	
Over Temperature	Range: 110°C ± 10°C	
	Type: shut down output voltage. Re-power on to recovery.	

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## WORKING ENVIRONMENT

<b>Working Temperature</b>	-40°C ÷ 50°C
<b>Working Humidity</b>	15 ÷ 95% RH non-condensing
<b>Storage Temperature and Humidity</b>	-40°C ÷ 80°C, 10 ÷ 95% RH non-condensing

## SAFETY AND EMC REGULATIONS

<b>Safet Standards</b>	Compliance to EN61347-1, EN61347-2-13
<b>Withstand Voltage</b>	IN/OUT: 5.3kVDC/1min
<b>Isolation Resistance</b>	IN/OUT: 50MΩ/500VDC/25°C/70%
<b>EMC Emission</b>	Compliance to EN55015
<b>EMC Immunity</b>	Compliance to EN61547; EN61000-4-2, -3, -4, -5, -6;
<b>Harmonic Current</b>	Compliance to EN61000-3-3; EN61000-3-2 class C (≥ 100% load)

## OTHERS

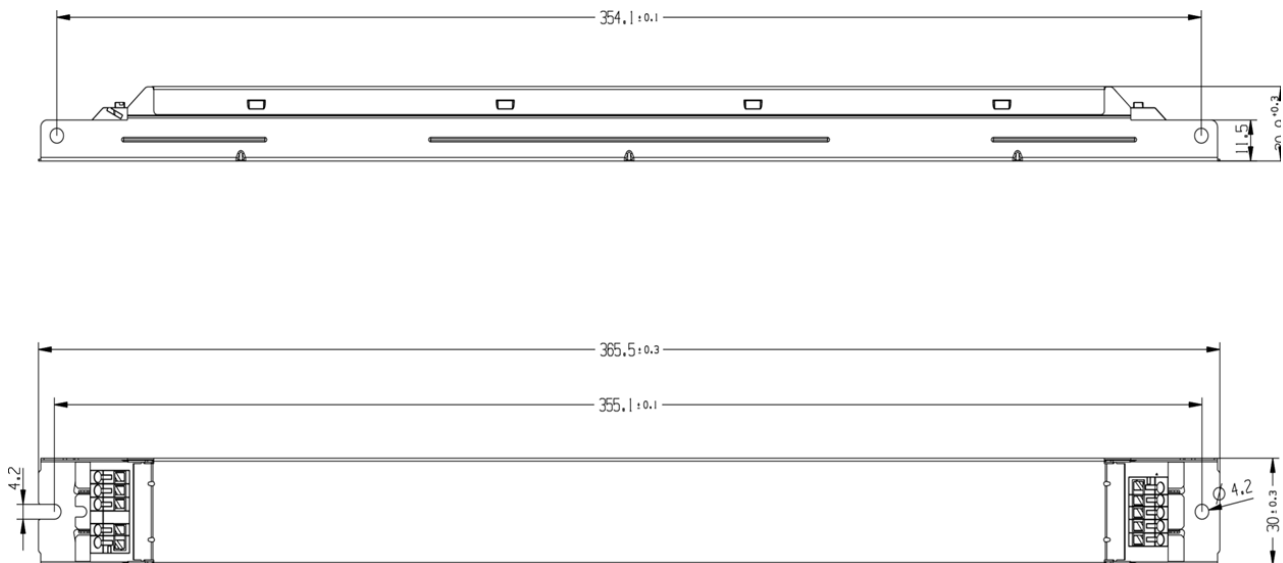
<b>Dimensions</b>	365.5 x 30 x 21mm (L x W x H)
<b>Weight and Packing</b>	0.29kg; 50pcs./ctn; ctn dimensions: 39 x 21 x 33cm

EAN Code



1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Tolerance includes set up tolerance, line regulation and load regulation.
3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
4. Setup and rise time is measured from 0 to 90% rated output voltage.
5. Power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment must be re-qualify to comply with EMC Directives.

## © MECHANICAL SPECIFICATION



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## © PUSH DIMMING WIRING DIAGRAM



FUNCTION	Push time
No status change	<0.05 sec.
Push on/off	0.1-1 sec.
Dimming up or down	1.5-10 sec.
Set 100% brightness	>11 sec.

Factory setting 100%

Each time press will change the dimming direction

## © DALI WIRING DIAGRAM



PIN ASSIGNMENT	
Function	Description
DA	DA signal/ neutral wire
DA	DA signal/ line wire
AC/N	Input: AC/N
AC/L	Input: AC/L
Vout +	Output: $U_{out+}$
Vout -	Output: $U_{out-}$