

FTPC100V-DA-WP series

100W LED Constant voltage Switching Power Supply, DALI2 and push dimming, IP67



■ Features:

- Constant voltage design
- European AC input range
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Isolation class II
- Built-in active PFC function
 - Linear shape
- DALI2 and push dimming function
 - Dimming range: 1-100%

IP67

ELECTRICAL SPECIFICATION

MODEL	FTPC100V12-DA-WP	FTPC100V24-DA-WP
OUTPUT		
Rated Voltage	12V	24V
Rated Current	8.33A	4.16A
Rated Power	100W	
No Load Output Voltage (max.)	12.6V	25.2V
Line Regulation	± 1%	
Load Regulation	± 6%	
Voltage Tolerance [3]	± 5%	
Ripple & Noise (max.) [2]	100mV _{p-p}	150mV _{p-p}
Setup, Rise Time [4]	1s, 500ms / 230VAC at full load	
Hold up Time (typ.)	1.5ms / 230VAC at full load	
INPUT		
Voltage Range	180 ÷ 264VAC	
Frequency Range	47 ÷ 63Hz	
Power Factor (typ.)	PF > 0.9 / 230VAC at full load	
Efficiency (typ.)	92%	92%
AC current (typ.)	0.6A / 230VAC	
Inrush current (max.)	50A / 230VAC (25°C)	
DIMMING		
Dimming Range	1 – 100% of rated output current	
Suitable dimmers	DALI or PUSH DIMMING	

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PROTECTIONS

Over Current	Range: 110% - 150%
	Type: Hiccup mode auto-recovery.
Short Circuit	Type: Hiccup mode auto-recovery.
Over Voltage	< 15V < 26V
	Type: Hiccup mode auto-recovery.
Over Temperature	Range: 115°C ± 10°C
	Type: shut down output voltage. Re-power on to recovery.

WORKING ENVIRONMENT

Working Temperature	-40°C ÷ +60°C
Working Humidity	15 ÷ 95% RH non-condensing
Storage Temperature and Humidity	-40°C ÷ +80°C, 10 ÷ 95% RH non-condensing

SAFETY AND EMC REGULATIONS

Safety Standards	Compliance to EN61347-1, EN61347-2-13
Dali Standards	Compliance to IEC 62386-101, 102,207
Withstand Voltage	IN/OUT: 5.3kVDC
EMC Emission	Compliance to EN55015
EMC Immunity	Compliance to EN61000-4-2, -3, -4, -5, 6, -8, -11, EN55024, EN61547
Harmonic Current	Compliance to EN61000-3-2

OTHERS

Dimensions	407.6 x 37 x 21.4mm (L x W x H)
Weight and Packing	0.6kg; 20pcs./ctn, ctn dimensions: 14.4kg, 44 x 20 x 21.5 cm

EAN Code



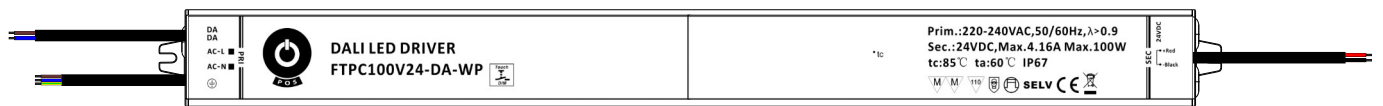
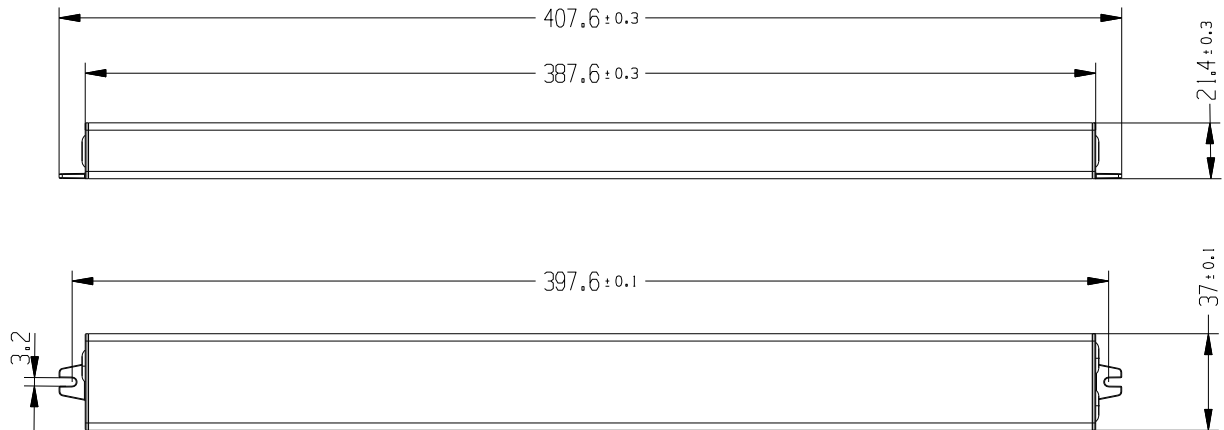
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF i 47µF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation and load regulation.
4. Setup and rise time is measured from 0 to 90% rated output voltage.
5. Power supply is considered as component not indented to apply by end-user. Power supply meets safety and EMC standards however the final equipment with power supply must be re-quality to comply with EMC Directives.

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MECHANICAL SPECIFICATION



DALI :

DA (Brown) / DA (Blue) :
H05RN-F 2*1.0mm² VDE,
Length: 300 ± 50mm.

INPUT :

AC-L (Brown) / AC-N (Blue) / AC-PE (Yellow-Green) :
H05RN-F 3*1.0mm² VDE,
Length: 230 ± 50mm.

OUTPUT :

+Red / -Black
SJTW 18AWG*2C, 2x0.824mm²
Length: 240mm ± 50mm.

PUSH DIMMING WIRING DIAGRAM



Push Dimming

No.	Push Time	Function
1.	< 0.05 sec	No status change
2.	0.1-1 sec	Output On / Output Off
3.	1.5-10 sec	Dimming up / Dimming down
4.	> 11 sec	100% brightness setting

Remarks:

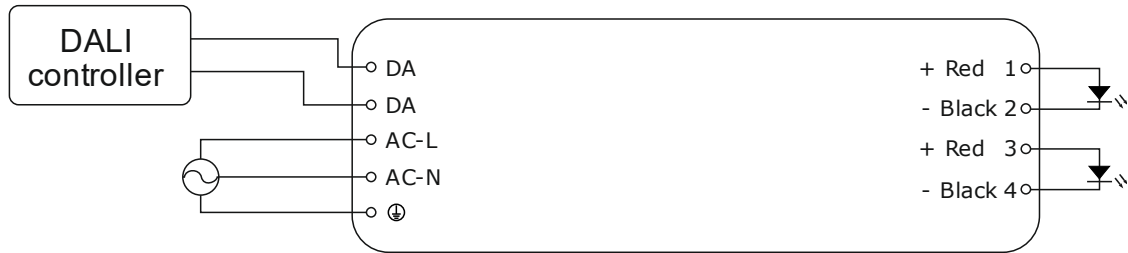
1. SW1 – monostable (doorbell) switch
2. Factory setting is 100% brightness

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DALI WIRING DIAGRAM



PIN ASSIGNMENT		
Function	Description DALI	Description Push Dimming
DA	DA signal	Neutral wire
DA	DA signal	Live wire
AC-N		Input: AC-N
AC-L		Input: AC-L
AC-PE		Input: AC-PE
+Red		Output: U_{OUT+}
-Black		Output: U_{OUT-}