

Наличие и актуальные цены на

# LPF-40D-54

https://www.mean-well.ru/store/LPF-40D-54/











#### ■ Features

- · Constant Current mode output
- · Plastic housing with Class II design
- · Built-in active PFC function
- · Class 2 power unit
- IP67 rating for indoor or outdoor installations
- Function: 3 in 1 dimming
- Typical lifetime>50000 hours
- · 5 years warranty

# Applications

- LED panel lighting
- · LED downlight
- LED decorative lighting
- · LED tunnel lighting
- Moving sign

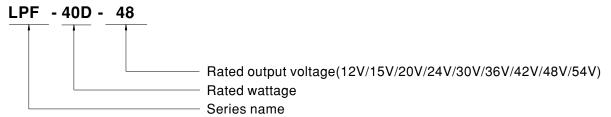
#### **■** GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

### ■ Description

LPF-40D series is a 40W AC/DC LED driver featuring the constant current output. LPF-40D operates from  $90\sim305$ VAC and offers models with different rated voltage ranging between 12V and 54V. Thanks to the efficiency up to 89%, with the fanless design, the entire series is able to operate for -40°C  $\sim$  +80°C case temperature under free air convection. The entire series is rated with IP67 ingress protection level and is suitable to work for a variety of applications at dry, damp or wet locations. LPF-40D is equipped with the 3 in 1 dimming function so as to provide the design flexibility for LED lighting system.

# ■ Model Encoding



### 40W Constant Current Mode LED Driver

# LPF-40D series

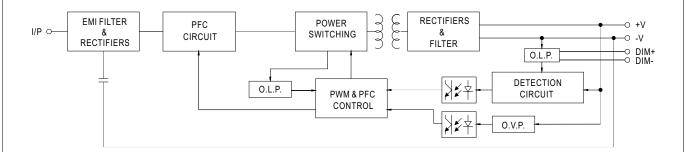
MODEL		LPF-40D-12	LPF-40D-15	LPF-40D-20	LPF-40D-24	LPF-40D-30	LPF-40D-36	LPF-40D-42	LPF-40D-48	LPF-40D-5	
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V	
OUTPUT	RATED CURRENT	3.34A	2.67A	2A	1.67A	1.34A	1.12A	0.96A	0.84A	0.76A	
	RATED POWER Note.5	40.08W	40.08W	40W	40.08W	40.2W	40.32W	40.32W	40.32W	41.04W	
	CONSTANT CURRENT REGION Note.2	7.2 ~12V	9 ~ 15V	12 ~ 20V	14.4 ~ 24V	18 ~ 30V	21.6 ~ 36V	25.2 ~ 42V	28.8 ~ 48V	32.4 ~ 54V	
	CURRENT RIPPLE	5.0% max. @rated current									
	CURRENT TOLERANCE	±5.0%									
	SETUP, RISE TIME Note.6	1000ms, 80ms / 115VAC 500ms, 80ms / 230VAC									
	HOLD UP TIME (Typ.)	16ms/230VAC 16ms/115VAC									
INPUT	VOLTAGE RANGE Note.5	90 ~ 305VAC 127 ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" section)									
	FREQUENCY RANGE	47 ~ 63Hz									
	POWER FACTOR	PF≥0.97/115VAC, PF≥0.95/230VAC, PF≥0.92/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)									
	TOTAL HARMONIC DISTORTION	THD< 20%(@load≧60%/115VC,230VAC; @load≧75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)									
	EFFICIENCY (Typ.)	84%	85%	86%	87%	88%	88%	88.5%	89%	89%	
	AC CURRENT	0.6A / 115VA			25A/277VAC						
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=210us measured at 50% lpeak) at 230VAC; Per NEMA 410									
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	12 units (circuit breaker of type B) / 20 units (circuit breaker of type C) at 230VAC									
	LEAKAGE CURRENT	<0.75mA/240VAC									
PROTECTION	OVER CURRENT	95 ~ 108%  Constant surront limiting, recovers outsmatically after fault condition is removed.									
	SHORT CIRCUIT	Constant current limiting, recovers automatically after fault condition is removed  Hiccup mode, recovers automatically after fault condition is removed.									
	SHORT CIRCUIT	15 ~ 17V		23 ~ 27V	28 ~ 35V	34 ~ 40V	41 ~ 49V	46 ~ 54V	54 ~ 63V	59 ~ 66V	
	OVER VOLTAGE					34 ~ 40 V	41~490	40~540	34 ~ 03 V	39 ~ 00 V	
	OVED TEMPEDATURE	Shut down o/p voltage, re-power on to recover  Shut down o/p voltage, re-power on to recover									
	OVER TEMPERATURE	Tcase=-40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)									
ENVIRONMENT	WORKING TEMP.	Tcase=+80°C (Please refer to OUTPUT LOAD VS TEMPERATURE Section)									
	MAX. CASE TEMP.	20 ~ 95% RH non-condensing									
	WORKING HUMIDITY										
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)									
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes									
SAFETY & EMC	SAFETY STANDARDS Note.8	UL8750, CSA C22.2 No. 250.0-08, ENEC BS EN/EN61347-1, BS EN/EN61347-2-13 independent, BS EN/EN62384, EAC TP TC 004, IP67 GB19510.1, GB19510.14 approved; design refer to UL60950-1									
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC									
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH									
	EMC EMISSION Note.8	Compliance to BS EN/EN55015,BS EN/EN61000-3-2 Class C (@load ≥ 60%) ; BS EN/EN61000-3-3, GB/T 17743 , GB17625.1,EAC TP TC 020									
	EMC IMMUNITY					<del>-</del>			ine-Line 2KV),E	AC TP TC 0	
OTHERS	MTBF	3439.0K hrs r	nin. Telcord	ia SR-332 (Bel	lcore); 394.	9Khrs min. I	MIL-HDBK-217	F (25°C)			
	DIMENSION	162.5*43*32n	nm (L*W*H)								
	PACKING	0.45Kg; 32pc	s/15.4Kg/0.93	CUFT							
NOTE	Please refer to "DRIVING M     Ripple & noise are measured     Tolerance: includes set up to     De-rating may be needed ur     Length of set up time is mea     The driver is considered as a complete installation, the final (as available on https://www.	All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.  Please refer to "DRIVING METHODS OF LED MODULE".  Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  Tolerance: includes set up tolerance, line regulation and load regulation.  De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.  Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time.  The driver 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 manufacturers must re-qualify EMC Directive on the complete installation again.  (as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)  To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED driver can only be used behind a switch without permanently connected to the mains.									

- 9. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (tc) point (or TMP, per DLC), is about 75°C or less. 10. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com
- 11. The ambient temperature derating of  $3.5^{\circ}$ C/1000m with fanless models and of  $5^{\circ}$ C/1000m with fan models for operating altitude higher than 2000m(6500ft).
- 12. For any application note and IP water proof function installation caution, please refer our user manual before using. https://www.meanwell.com/Upload/PDF/LED\_EN.pdf
- X Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



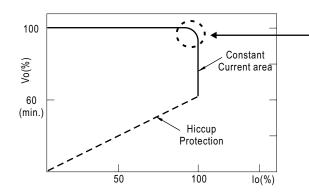
### ■ BLOCK DIAGRAM

fosc: 100KHz



### ■ DRIVING METHODS OF LED MODULE

\* This series works in constant current mode to directly drive the LEDs.



Typical output current normalized by rated current (%)

In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Should there be any compatibility issues, please contact MEAN WELL.

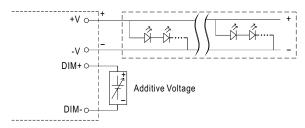


#### **■ DIMMING OPERATION**

#### $\divideontimes$ 3 in 1 dimming function

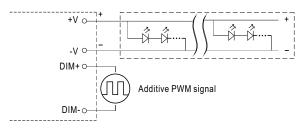


- Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-:
   1 ~ 10VDC, or 10V PWM signal or resistance.
- Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers.
- Dimming source current from power supply: 100µA (typ.)
- O Applying additive 1 ~ 10VDC



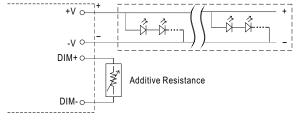
"DO NOT connect "DIM- to -V"

O Applying additive 10V PWM signal (frequency range 100Hz ~ 3KHz):

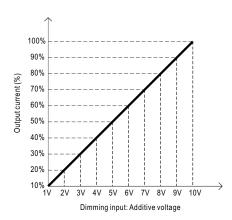


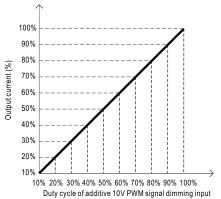
"DO NOT connect "DIM- to -V"

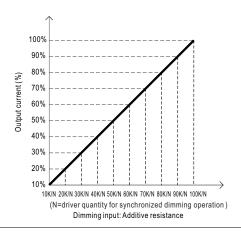
Applying additive resistance:



"DO NOT connect "DIM- to -V"

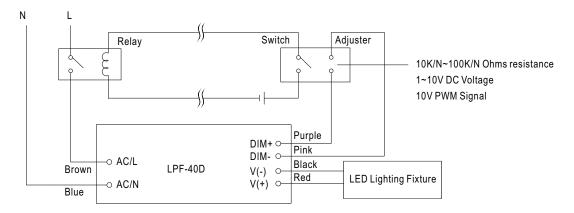






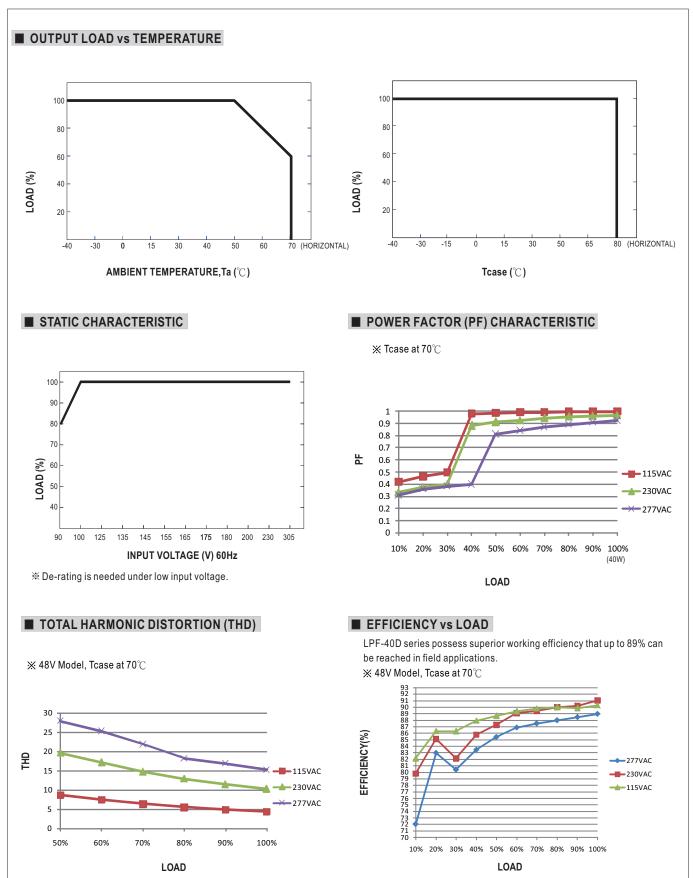


Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.



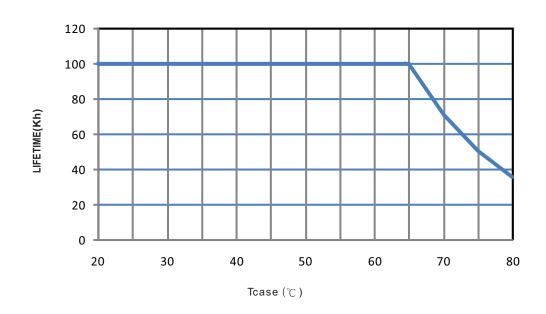
Using a switch and relay can turn ON/OFF the lighting fixture.







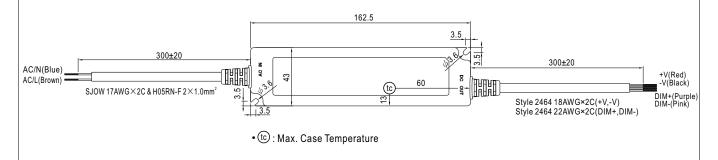
# **■** LIFE TIME





### **■ MECHANICAL SPECIFICATION**

CASE NO.: LPF-60B Unit:mm Tolerance:±1





### ■ Recommend Mounting Direction



#### **■ INSTALLATION MANUAL**

 $Please\ refer\ to: http://www.meanwell.com/manual.html$