

## LPF-40-24

# LPF-40-24 UL/cUL Listed LED Driver



#### MODEL SELECTION KEY



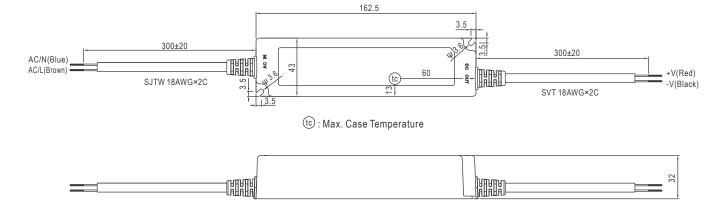
#### 40W CONSTANT VOLTAGE + CONSTANT CURRENT LED DRIVER LPF-40-24

LPF-40-24 is a 40W AC/DC LED driver featuring the dual modes constant voltage and constant current output. LPF-40-24 operates from 90~305VAC. Thanks to high efficiency up to 90%, with the fanless design, this driver is able to operate for -40°C ~ +80°C case temperature under free air convection.

#### **FEATURES**

- Constant Voltage + Constant Current mode output
- Plastic housing with Class II design
- Built-in active PFC function
- Class 2 power unit
- Fully encapsulated with IP67 level
- Typical lifetime > 50000 hours
- 5 years warranty
- Dimmable with optional Feelux FDC-L10, 0-10v dimming interface

### **MECHANICAL SPECIFICATION**



Feelux recommends using the D12P-HUB (order separately) connected to the output +V (red) + -V (black) of the LPF-40-24 driver.

| Feelux D12P-Hub | Black + |
|-----------------|---------|
|                 | White – |



#### **SPECIFICATIONS**

| OUTPUT          | SETUP, RISE TIME Note.6                    | 1000ms, 80ms / 115VAC 500ms, 80ms / 230VAC  |
|-----------------|--|---|
| 24VDC           | HOLD UP TIME (Typ.)                        | 16ms/230VAC 16ms/115VAC   |
| INPUT           | VOLTAGE RANGE Note.5                       | 90 ~ 305VAC 127 ~ 431VDC<br>(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<br>(Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)  |
|                 | TOTAL HARMONIC DISTORTION                  | THD<20% (@load ≧60%/115VC,230VAC; @load≧ 75%/277VAC)<br>(Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)  |
|                 | EFFICIENCY (Typ.)                          | 87%   |
|                 | AC CURRENT                                 | 0.6A / 115VAC 0.3A / 230VAC 0.25A/277VAC  |
|                 | INRUSH CURRENT(Typ.)                       | COLD START 50A(twidth=210µs measured at 50% Ipeak) at 230VAC; Per NEMA 410  |
|                 | MAX. No. of PSUs on 16A<br>CIRCUIT BREAKER | 12 units (circuit breaker of type B) / 20 units (circuit breaker of type C) at 230VAC   |
|                 | LEAKAGE CURRENT                            | <0.75mA / 240VAC  |
|                 | OVER CURRENT                               | 95 ~ 108%   |
|                 |  | Constant current limiting, recovers automatically after fault condition is removed  |
| PROTECTION      | SHORT CIRCUIT                              | Hiccup mode, recovers automatically after fault condition is removed  |
|                 | OVER VOLTAGE                               | 28 ~ 35V<br>Shut down and latch off o/p voltage, re-power on to recover   |
|                 | OVER TEMPERATURE                           | Shut down o/p voltage, re-power on to recover   |
| ENVIRONMENT     | WORKING TEMP.                              | Tcase=-40 ~ +80°C (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)   |
|                 | MAX. CASE TEMP.                            | Tcase=+80°C   |
|                 | WORKING HUMIDITY                           | 20 ~ 95% RH non-condensing  |
|                 | 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 &<br>EMC | SAFETY STANDARDS Note.8                    | UL8750, CSA C22.2 No. 250.0-08(except for 48V, 54V), ENEC EN61347-1, EN61347-2-13 independent, EN62384, IP67, J61347-1, J61347-2-13 approved ; design refer to UL60950-1, TUV EN60950-1 |
|                 | WITHSTAND VOLTAGE                          | I/P-O/P:3.75KVAC  |
|                 | ISOLATION RESISTANCE                       | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH  |
|                 | EMC EMISSION Note.8                        | Compliance to EN55015,EN61000-3-2 Class C (@load ≧ 60%) ; EN61000-3-3   |
|                 | EMC IMMUNITY                               | Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level (surge immunity Line-Line 2KV)  |
| OTHERS          | MTBF                                       | 438.8Khrs min. MIL-HDBK-217F (25°C)   |
|                 | DIMENSION                                  | 162.5*43*32mm (L*W*H)   |
|                 | PACKING                                    | 0.44Kg; 32pcs/15.08Kg/0.93CUFT  |

NOTE

- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.
- 2. Please refer to "DRIVING METHODS OF LED MODULE".
- 3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 4. Tolerance: includes set up tolerance, line regulation and load regulation.
- 5. De-rating may be needed under low input voltages.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com