



■ Features :

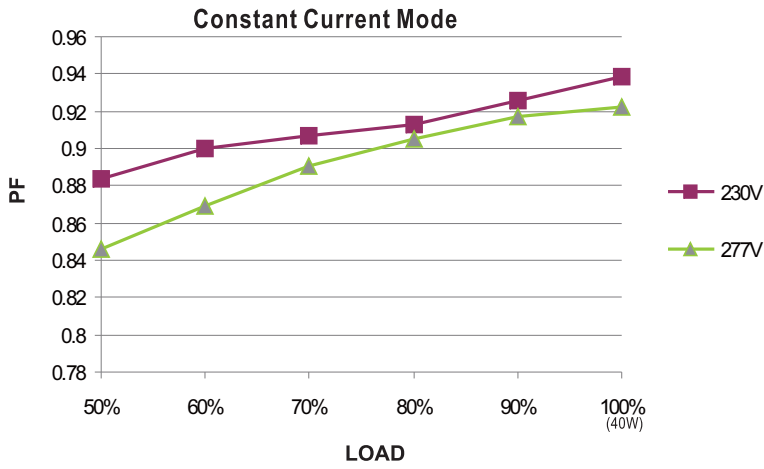
- AC phase-cut dimming
- Work with leading edge and trailing edge TRIAC dimmers
- Built-in active PFC function
- Constant current design
- Protections: Short circuit / Over temperature
- Cooling by free air convection
- Fully isolated plastic case
- IP30 design
- Class II power unit, no FG
- Suitable for indoor LED lighting applications
- 100% full load burn-in test
- Low cost
- High reliability
- 3 years warranty

SPECIFICATION



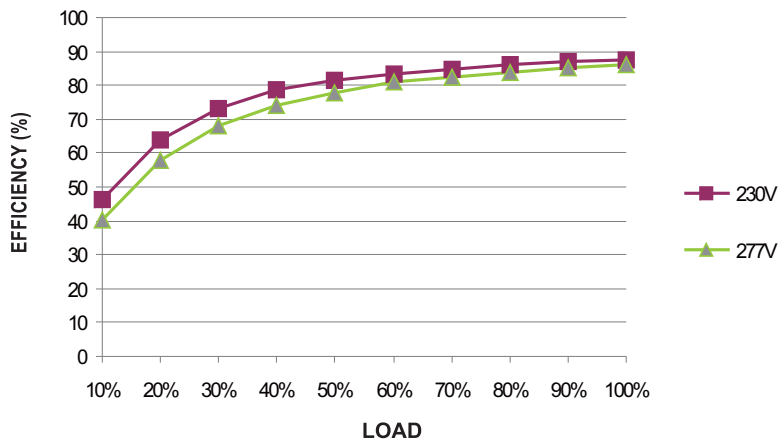
| MODEL | PCD-40-350B | PCD-40-500B | PCD-40-700B | PCD-40-1050B | PCD-40-1400B | PCD-40-1750B | |
|-----------------|--|---|-------------|--------------|--------------|--------------|----------|
| OUTPUT | RATED CURRENT | 350mA | 500mA | 700mA | 1050mA | 1400mA | 1750mA |
| | OPERATING VOLTAGE RANGE | 70 ~ 108V | 45 ~ 80V | 34 ~ 57V | 22 ~ 38V | 17 ~ 29V | 13 ~ 23V |
| | CURRENT ACCURACY | ±5.0% | | | | | |
| | RATED POWER | 37.8W | 40W | 39.9W | 39.9W | 40.6W | 40.25W |
| | RIPPLE & NOISE (max.) Note.1 | 9.5Vp-p | 5.0Vp-p | 3.1Vp-p | 2.6Vp-p | 2.5Vp-p | 2.4Vp-p |
| | NO LOAD OUTPUT VOLTAGE (max.) | 118V | 100V | 63V | 50V | 35V | 35V |
| SETUP TIME | 1200ms / 230VAC at full load | | | | | | |
| INPUT | VOLTAGE RANGE | 180~295VAC | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | |
| | POWER FACTOR (Typ.) | PF>0.9/230VAC, PF>0.9/277VAC at full load (Please refer to "Power Factor Characteristic" curve) | | | | | |
| | TOTAL HARMONIC DISTORTION | THD< 20% when output loading≥60%(PCD-40-350B loading≥65%)at 240VAC input and output loading≥75% at 277VAC input | | | | | |
| | EFFICIENCY (Typ.) | 87% | 87% | 86% | 86% | 85% | 85% |
| | AC CURRENT (Typ.) | 0.35A/230VAC 0.3A/277VAC | | | | | |
| | INRUSH CURRENT(Typ.) | COLD START 11A (twidth=50μs measured at 50% Ipeak) at 230VAC | | | | | |
| LEAKAGE CURRENT | <0.5mA / 240VAC | | | | | | |
| PROTECTION | SHORT CIRCUIT | Hiccup mode, recovers automatically after fault condition is removed. | | | | | |
| | OVER TEMPERATURE | 105°C ±5°C (TSW1) Protection type : Shut down o/p voltage, auto-recovery | | | | | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +50°C (Refer to "Derating Curve") | | | | | |
| | 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, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes | | | | | |
| SAFETY & EMC | SAFETY STANDARDS | ENEC EN61347-1, EN61347-2-13 independent, EN62384 approved | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3.75KVAC | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH | | | | | |
| | EMC EMISSION | Compliance to EN55015, EN61000-3-2 Class C ; EN61000-3-3 | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level(Surge 2KV), criteria B | | | | | |
| OTHERS | MTBF | 362.331Khrs min. MIL-HDBK-217F (25°C) | | | | | |
| | DIMENSION | 128*60*31.5mm (L*W*H) | | | | | |
| | PACKING | 0.23Kg/30pcs/7.9Kg/0.58CUFT | | | | | |
| NOTE | 1. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 2. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers. | | | | | | |

Power Factor Characteristic



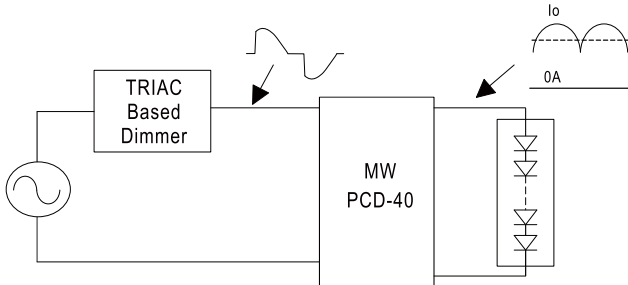
EFFICIENCY vs LOAD (PCD-40-500B)

PCD-40 series possess superior working efficiency that up to 87% can be reached in field applications.



AC Dimming Operation

⊙ The following diagram depicts a typical installation utilizing the PCD-40 :



Under direct driving, the power supply will work in "constant current mode (CC)" and output voltage of the power supply will be clamped by sum of forward voltage (V_F) of the LED strip.

⊙ Dimmer Compatibility Chart

| Manufacturer | Dimmer Model | |
|--------------|----------------------------|---------------------|
| LUTRON | SKYLARK SF-12P-277 | (277VAC / 60Hz) |
| LUTRON | DVF-103P-277 | (277VAC / 60Hz) |
| JUNG | Licht-Management 225 TDE | (230VAC / 50Hz) |
| JUNG | Licht-Management 225 NV DE | (230VAC / 50Hz) |
| BERKER | Tronic-Drehdimmer 286710 | (230-240VAC / 50Hz) |
| CLIPSAL | 32E450UDM | (220-240VAC / 50Hz) |
| CLIPSAL | NO 32E450TM | (220-240VAC / 50Hz) |
| CLIPSAL | NO 32E450LM | (220-240VAC / 50Hz) |
| CLIPSAL | Cat 400T | (230-240VAC / 50Hz) |

Conduction angle: 30 degrees(min.) / 180 degrees(max.)