



■ Features :

- Three-step analog dimming
- Built-in active PFC function
- Constant current design
- Protections: Short circuit / Over temperature
- Cooling by free air convection
- Fully isolated plastic case
- Class II power unit, no FG
- Suitable for indoor LED lighting applications
- 100% full load burn-in test
- No load power consumption <0.5W
- Low cost
- High reliability
- 2 years warranty

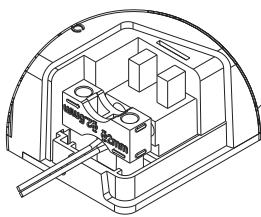
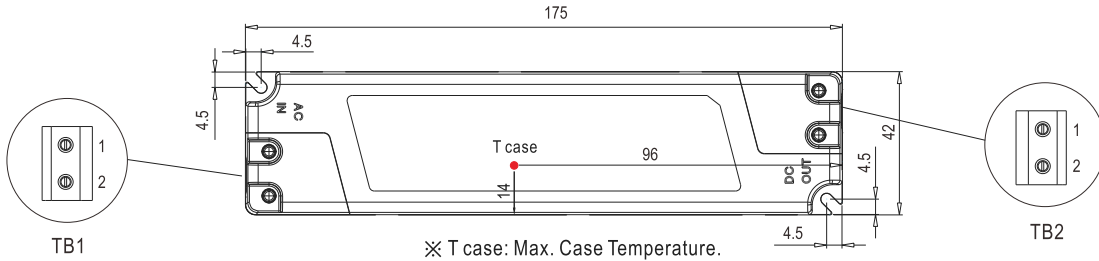
SPECIFICATION



| MODEL | PLM-40E-350 | PLM-40E-500 | PLM-40E-700 | PLM-40E-1050 | PLM-40E-1400 | PLM-40E-1750 | |
|--------------|---|---|-------------|--------------|--------------|--------------|----------|
| OUTPUT | RATED CURRENT | 350mA | 500mA | 700mA | 1050mA | 1400mA | 1750mA |
| | OPERATING VOLTAGE RANGE Note.5 | 53 ~ 105V | 40 ~ 80V | 29 ~ 57V | 19 ~ 38V | 15 ~ 29V | 12 ~ 23V |
| | CURRENT ACCURACY Note.3 | ±5.0% | | | | | |
| | RATED POWER | 36.75W | 40W | 38.5W | 39.9W | 40.6W | 40.25W |
| | RIPPLE & NOISE (max.) Note.2 | 10Vp-p | 8Vp-p | 6Vp-p | 4Vp-p | 3Vp-p | 2.5Vp-p |
| | NO LOAD OUTPUT VOLTAGE (max.) | 115V | 86V | 63V | 43V | 34V | 27V |
| | SETUP TIME | 500ms / 230VAC at full load | | | | | |
| INPUT | VOLTAGE RANGE Note.4 | 180 ~ 295VAC | | 254 ~ 416VDC | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | |
| | POWER FACTOR (Typ.) | PF ≥ 0.95/230VAC, PF>0.9/277VAC(at full load)(Please refer to "Power Factor Characteristic" curve) | | | | | |
| | TOTAL HARMONIC DISTORTION | THD< 20% when output loading≥60% at 230VAC input and output loading≥75% at 277VAC input | | | | | |
| | EFFICIENCY (Typ.) | 88% | 88% | 87% | 87% | 86% | 86% |
| | AC CURRENT (Typ.) | 0.3A/230VAC | | 0.25A/277VAC | | | |
| | INRUSH CURRENT(Typ.) | COLD START 15A(twidth=75μs 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 | 115°C ±5°C (TSW1) Protection type : Hiccup mode, recovers automatically after temperature goes down. | | | | | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +40°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, 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 (≥50% load) ; EN61000-3-3 | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level, criteria B (Surge 2KV) | | | | | |
| OTHERS | MTBF | 822.7Khrs min. MIL-HDBK-217F (25°C) | | | | | |
| | DIMENSION | 175*42*24mm (L*W*H) | | | | | |
| | PACKING | 0.175Kg; 60pcs/11.5kg/0.68CUFT | | | | | |
| NOTE | <ol style="list-style-type: none"> 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 0.1uf & 47uf parallel capacitor. 3. Please see "AC input voltage drop vs. output current characteristics" table. 4. Derating may be needed under low input voltage, please check the static characteristic for more details. 5. Constant current operation region is within 50% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design. 6. The 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 manufacturers must re-qualify EMC Directive on the complete installation again. 7. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers. | | | | | | |

Mechanical Specification

Case No. PLM-40 Unit:mm



NOTE: The input and output lines for using $\square 0.5-1.5\text{mm}^2$. Fixed bar has 1.5mm, 2.0mm, 2.5mm, 3.0mm four grooves, you can choose according to the actual use of wire diameter.

Terminal Pin No. Assignment (TB1) :
SWITCLAB DG235-7.5-2P(GRAY)

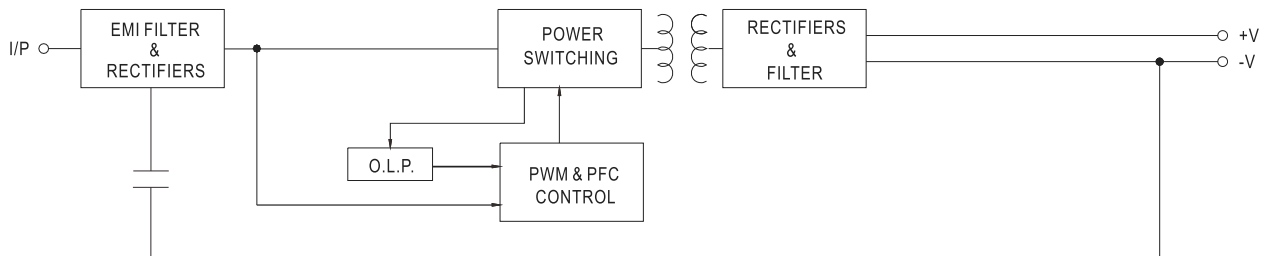
| Pin No. | Assignment |
|---------|------------|
| 1 | AC/L |
| 2 | AC/N |

Terminal Pin No. Assignment (TB2) :
SWITCLAB DG235-7.5-2P(BLUE)

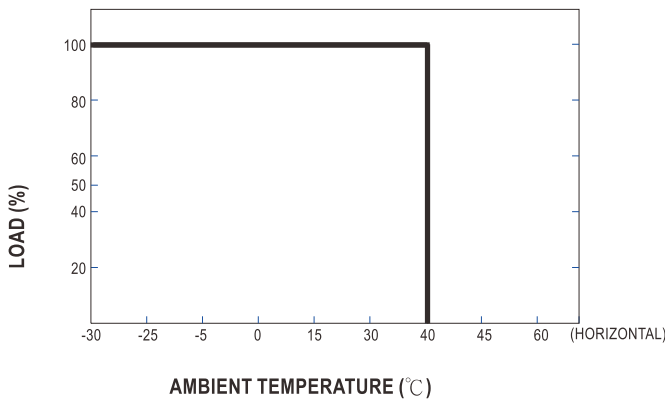
| Pin No. | Assignment |
|---------|------------|
| 1 | -V |
| 2 | +V |

Block Diagram

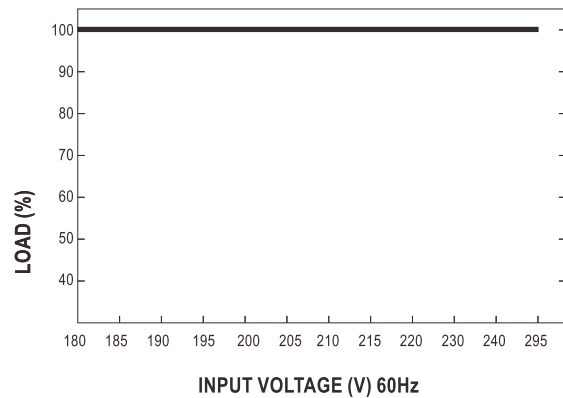
fosc : 67KHz



Derating Curve

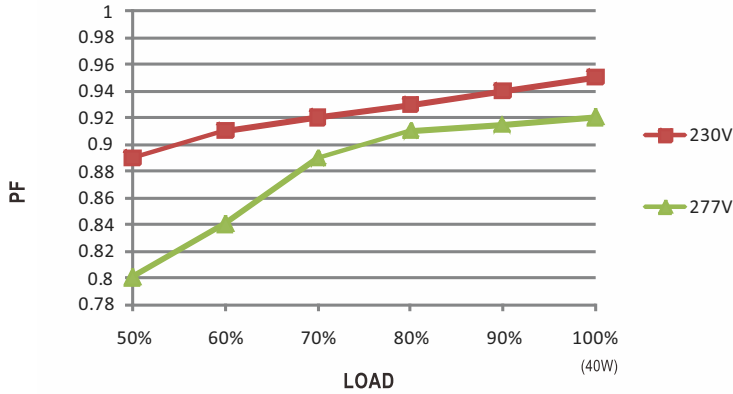


Static Characteristics



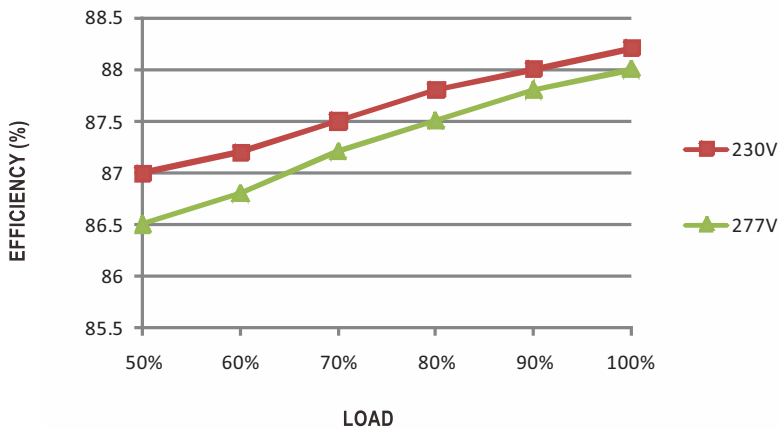
Power Factor Characteristic

Constant Current Mode



EFFICIENCY vs LOAD (PLM-40E-350)

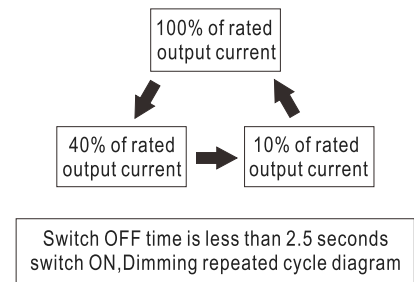
PLM-40E series possess superior working efficiency that up to 88% can be reached in field applications.



Three-step analog dimming

3-level analog dimming control using a wall switch

| three-step analog dimming | STEP 1 | STEP 2 | STEP 3 |
|-----------------------------|----------------|--|--|
| | Switch turn ON | Switch turn OFF Less than 2.5 seconds Switch turn ON | Switch turn OFF Less than 2.5 seconds Switch turn ON |
| percentage of rated current | 100% | 40% | 10% |



NOTE: if the OFF time is longer than 2.5 seconds, once switch on again, PLM-40E will provide 100% of rated output current

AC input voltage drop vs. output current characteristics

| | | | | |
|---------------|------|------|-----|-----|
| AC input drop | 10% | 8% | 5% | 3% |
| Io drop | <18% | <13% | <8% | <6% |

NOTE: Output current will return to the rated value within 50ms



Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

Наши контакты:

Телефон: +7 812 627 14 35

Электронная почта: sales@st-electron.ru

Адрес: 198099, Санкт-Петербург,
Промышленная ул, дом № 19, литера Н,
помещение 100-Н Офис 331