



Наличие и актуальные цены на

LCM-25

<https://www.mean-well.ru/store/LCM-25/>



25W Multiple-Stage Constant Current Mode LED Driver

LCM-25 series

User's Manual



IS 15885 (Part 2/Sec13)
R-41027766



■ Features

- Constant Current mode output with multiple levels selectable by dip switch
- Plastic housing with class II design
- Built-in active PFC function
- Standby power consumption <0.5W
- Functions: 3 in 1 dimming (dim-to-off); synchronization up to 10 units
- 3 years warranty

■ Applications

- LED indoor lighting
- LED office lighting
- LED architectural lighting
- LED panel lighting

■ GTIN CODE

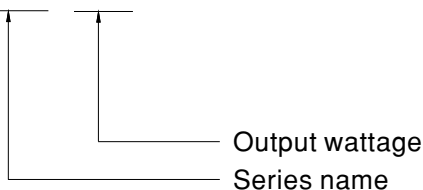
MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

■ Description

LCM-25 series is a 25W AC/DC constant current mode output LED driver featuring the multiple levels selectable by dip switch. LCM-25 operates from 180~277VAC and offers different current levels ranging between 350mA and 1050mA. Thanks to the efficiency up to 86%, with the fanless design, the entire series is able to operate for -30°C~+85°C case temperature under free air convection. LCM-25 is equipped with various functions, such as the dimming function and synchronization, so as to provide the optimal design flexibility for LED lighting system.

■ Model Encoding

LCM - 25





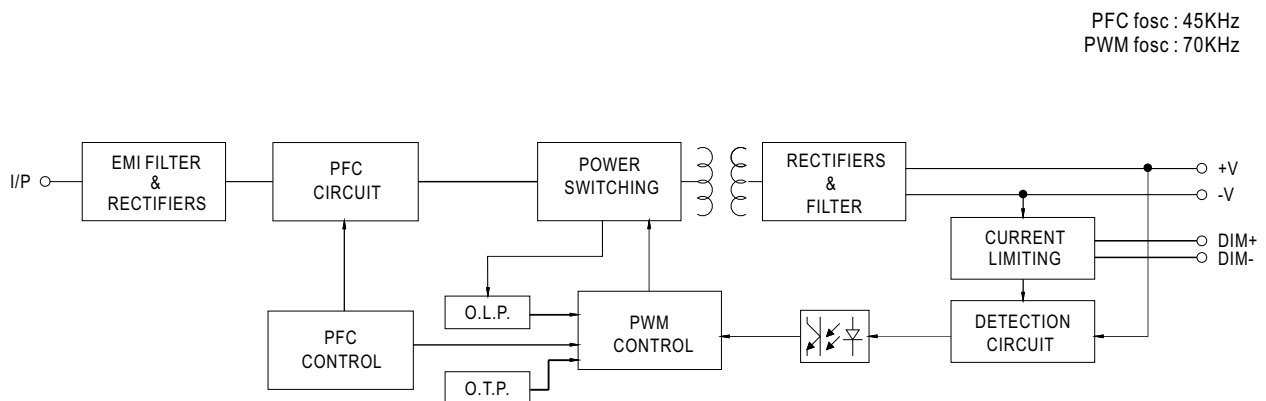
25W Multiple-Stage Constant Current Mode LED Driver

LCM-25 series

SPECIFICATION

| MODEL | | LCM-25 | | | | | |
|--------------|--|---|--|---------|----------------|---------|---------|
| OUTPUT | CURRENT LEVEL | Current level selectable via DIP switch, please refer to "DIP SWITCH TABLE" section | | | | | |
| | | 350mA | 500mA | 600mA | 700mA(default) | 900mA | 1050mA |
| | RATED POWER | 18.9W | 25.2W | | | | |
| | DC VOLTAGE RANGE | 6 ~ 54V | 6 ~ 50V | 6 ~ 42V | 6 ~ 36V | 6 ~ 28V | 6 ~ 24V |
| | OPEN CIRCUIT VOLTAGE (max.) | 59V | | | 41V | | |
| | CURRENT RIPPLE | 5.0% max. @rated current | | | | | |
| | CURRENT TOLERANCE | ±5% | | | | | |
| | SETUP TIME | Note.3 | 500ms / 230VAC | | | | |
| INPUT | VOLTAGE RANGE | Note.2 | 180 ~ 277VAC 254 ~ 392VDC (Please refer to "STATIC CHARACTERISTIC" section) | | | | |
| | FREQUENCY RANGE | | 47 ~ 63Hz | | | | |
| | POWER FACTOR (Typ.) | | PF≥0.94/230VAC, PF≥0.91/277VAC @full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section) | | | | |
| | TOTAL HARMONIC DISTORTION | | THD< 20%(@load≥50%/230VAC; @load≥75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section) | | | | |
| | EFFICIENCY (Typ.) | Note.4 | 86% | | | | |
| | AC CURRENT (Typ.) | | 0.17A/230VAC 0.15A/277VAC | | | | |
| | INRUSH CURRENT (Typ.) | | COLD START 20A(twidth=260μs measured at 50% Ipeak) at 230VAC; Per NEMA 410 | | | | |
| | MAX. No. of PSUs on 16A CIRCUIT BREAKER | | 26 units (circuit breaker of type B) / 44 units (circuit breaker of type C) at 230VAC | | | | |
| | LEAKAGE CURRENT | | <0.5mA / 240VAC | | | | |
| | STANDBY POWER CONSUMPTION | Note.5 | <0.5W | | | | |
| PROTECTION | SHORT CIRCUIT | | Constant current limiting, recovers automatically after fault condition is removed | | | | |
| | OVER TEMPERATURE | | Shut down o/p voltage, recovers automatically after temperature goes down | | | | |
| FUNCTION | DIMMING | | Please refer to "DIMMING OPERATION" section | | | | |
| | SYNCHRONIZATION | | Please refer to "SYNCHRONIZATION OPERATION" section | | | | |
| ENVIRONMENT | WORKING TEMP. | | Tcase=-30 ~ +85℃ (Please refer to "OUTPUT LOAD vs TEMPERATURE" section) | | | | |
| | MAX. CASE TEMP. | | Tcase=+85℃ | | | | |
| | WORKING HUMIDITY | | 20 ~ 90% RH non-condensing | | | | |
| | STORAGE TEMP., HUMIDITY | | -40 ~ +80℃, 10 ~ 95% RH | | | | |
| | TEMP. COEFFICIENT | | ±0.03%/℃ (0 ~ 50℃) | | | | |
| | VIBRATION | | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | |
| SAFETY & EMC | SAFETY STANDARDS | | UL8750, CSA C22.2 No.250.13-12, ENEC BS EN/EN61347-1, BS EN/EN61347-2-13, BS EN/EN62384 independent, GB19510.14,GB19510.1, BIS IS15885, EAC TP TC 004 approved | | | | |
| | WITHSTAND VOLTAGE | | I/P-O/P:3.75KVAC | | | | |
| | ISOLATION RESISTANCE | | I/P-O/P:>100M Ohms / 500VDC / 25℃ / 70% RH | | | | |
| | EMC EMISSION | | Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C(@load≥ 50%) ; BS EN/EN61000-3-3; GB/T 17743, GB17625.1, EAC TP TC 020 | | | | |
| | EMC IMMUNITY | | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61547, light industry level(surge immunity Line-Line 2KV), EAC TP TC 020 | | | | |
| OTHERS | MTBF | | 3298.3K hrs min. Telcordia SR-332 (Bellcore) ; 298.7K hrs min. MIL-HDBK-217F (25℃) | | | | |
| | DIMENSION | | 105*68*23mm (L*W*H) | | | | |
| | PACKING | | 0.16Kg ; 72pcs/12.5Kg/1.04CUFT | | | | |
| NOTE | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25℃ of ambient temperature. 2. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details. 3. 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. 4. Efficiency is measured at 500mA/50V output set by DIP switch. 5. Standby power consumption is measured at 230VAC. 6. 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) 7. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft). 8. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains. ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx | | | | | | |

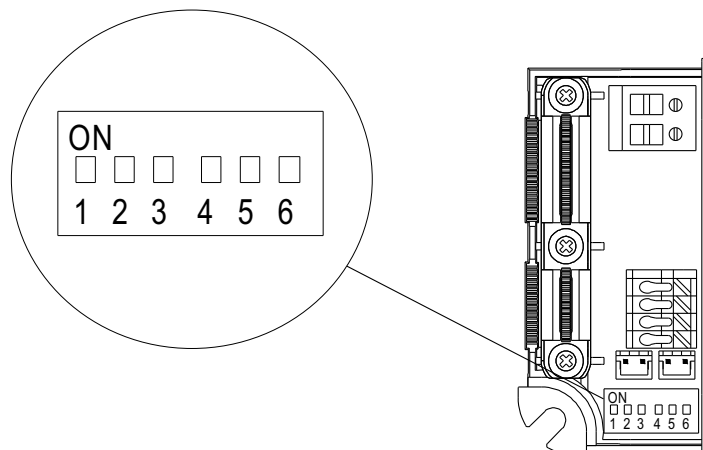
■ BLOCK DIAGRAM



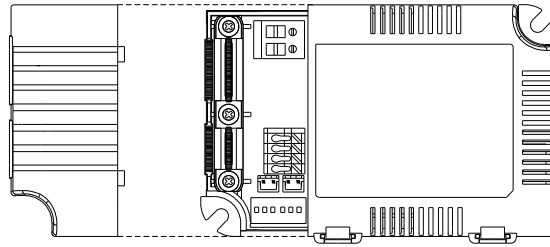
■ DIP SWITCH TABLE

LCM-25 is a multiple-stage constant current driver, selection of output current through DIP switch is exhibited below.

| I _o \ DIP S.W. | 1 | 2 | 3 | 4 | 5 | 6 |
|---------------------------|------|------|------|------|------|------|
| 350mA | ---- | ---- | ---- | ---- | ---- | ---- |
| 500mA | ON | ---- | ---- | ---- | ---- | ---- |
| 600mA | ON | ON | ---- | ---- | ---- | ---- |
| 700mA(factory default) | ON | ON | ON | ---- | ---- | ON |
| 900mA | ON | ON | ON | ON | ---- | ON |
| 1050mA | ON | ON | ON | ON | ON | ON |



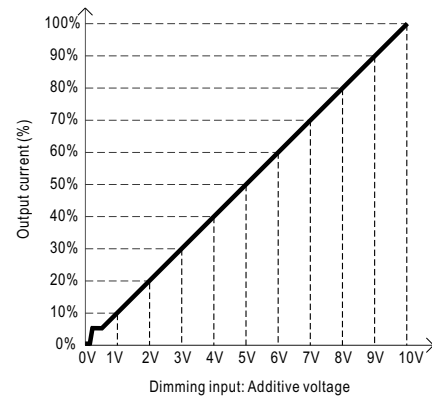
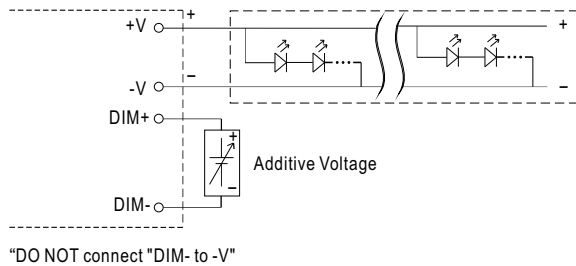
DIMMING OPERATION



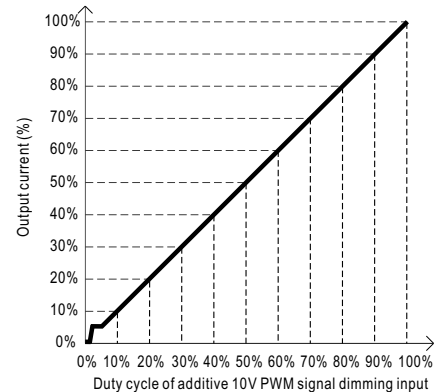
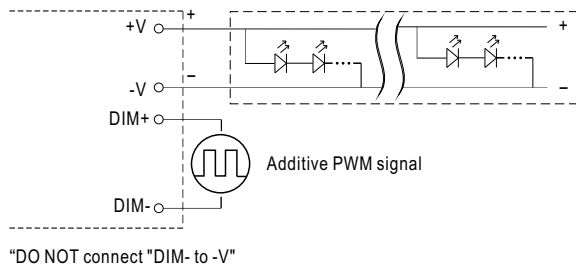
※ 3 in 1 dimming function

- Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-: 0 ~ 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: 100 μ A (typ.)

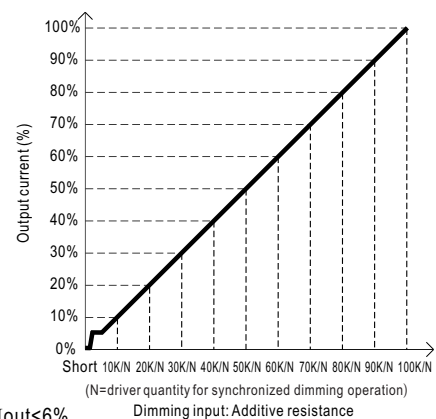
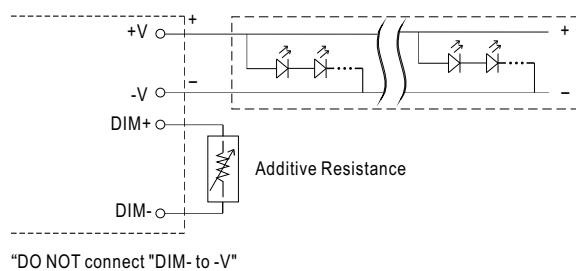
◎ Applying additive 0 ~ 10VDC



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



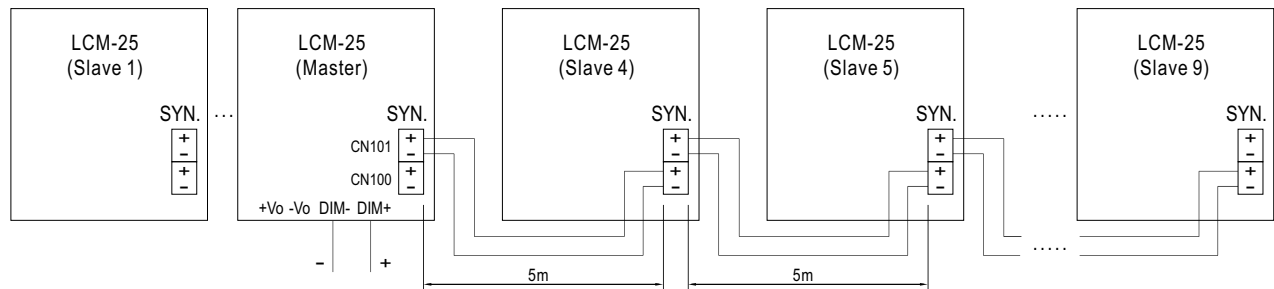
◎ Applying additive resistance:



- Note :
1. Min. dimming level is about 6% and the output current is not defined when $0\% < I_{out} < 6\%$.
 2. The output current could drop down to 0% when dimming input is about 0k Ω or 0Vdc, or 10V PWM signal with 0% duty cycle.
 3. Please do not activate “temperature compensation” when performing dimming operation.

■ SYNCHRONIZATION OPERATION

- Synchronization up to 10 drivers (1 master + 9 slaves)
- Dimming operating range : 10%~100%
- Sync cable length : < 5m
- Sync cable type : Flat cable
- Sync cable cross section area : 22 – 24 AWG (0.2~0.3mm²)

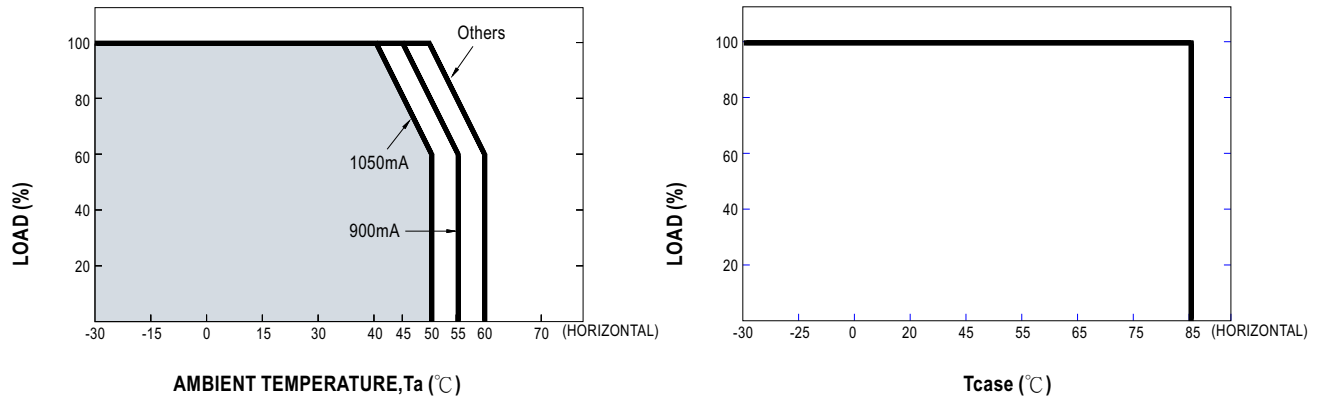


- CN100, CN101 : used to synchronously control the LCM units in parallel.

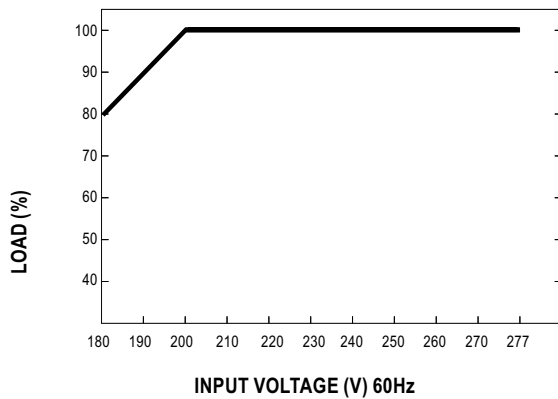
NOTE: 1. Please make sure all units are set to 100% dimming setting (factory default) before synchronizing.

2. Min. Dimming operating range depends on dimmer setting.

■ OUTPUT LOAD vs TEMPERATURE



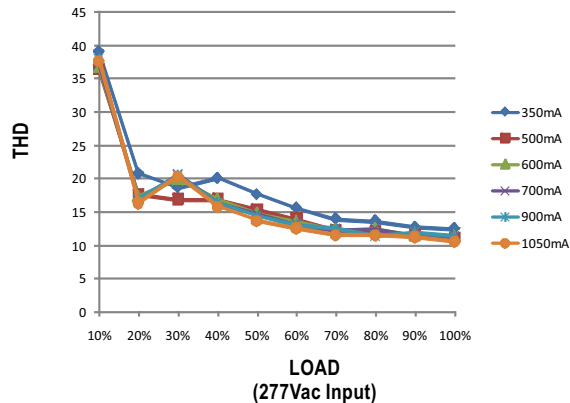
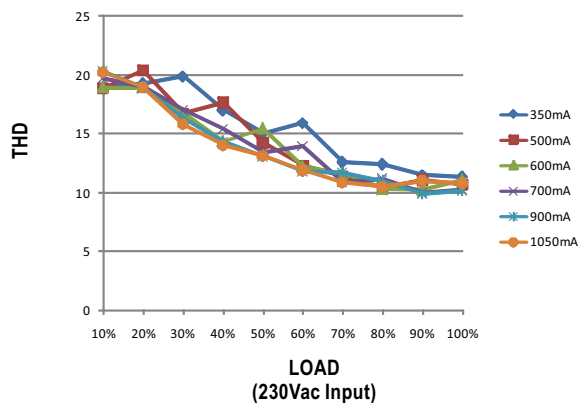
■ STATIC CHARACTERISTIC



※ De-rating is needed under low input voltage.

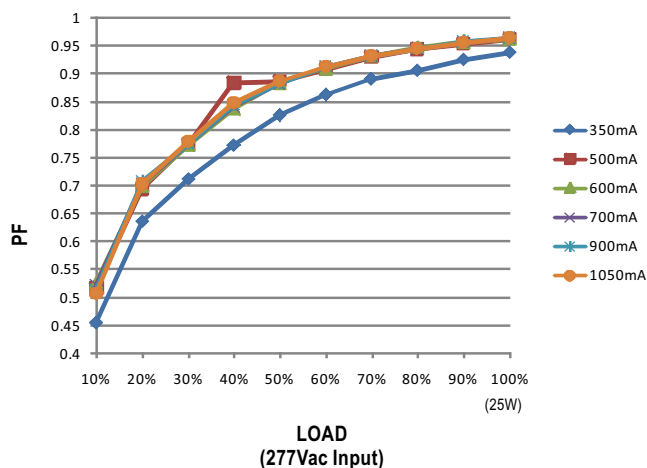
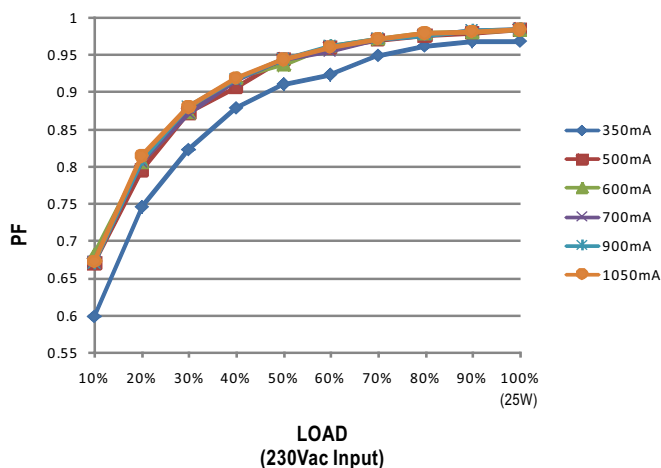
TOTAL HARMONIC DISTORTION (THD)

※ Tcase at 75℃



POWER FACTOR (PF) CHARACTERISTIC

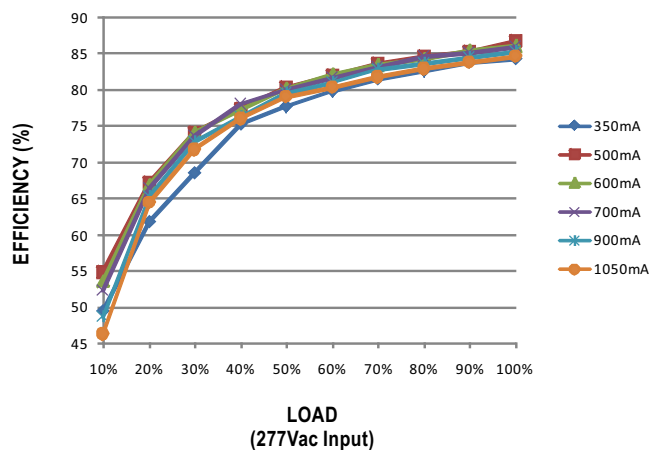
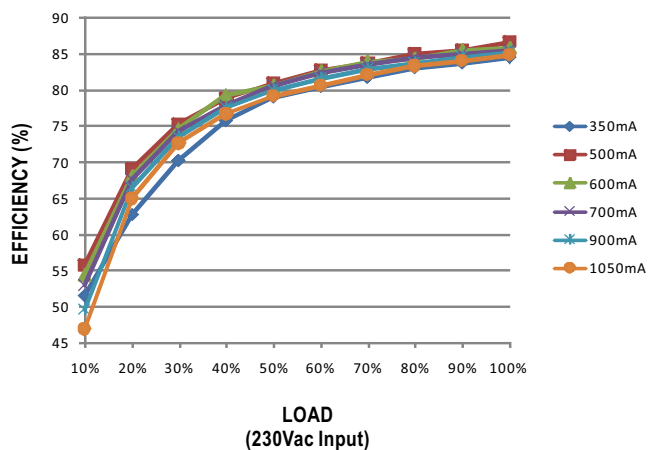
※ Tcase at 75℃



EFFICIENCY vs LOAD

LCM-25 series possess superior working efficiency that up to 86% can be reached in field applications.

※ Tcase at 75℃

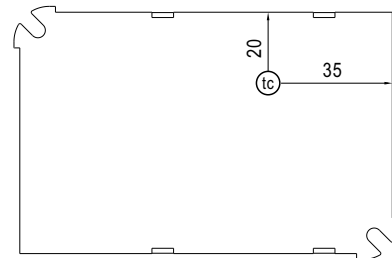
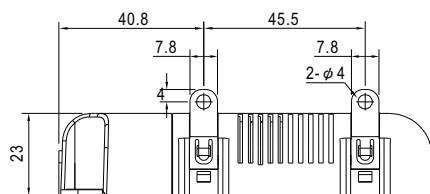
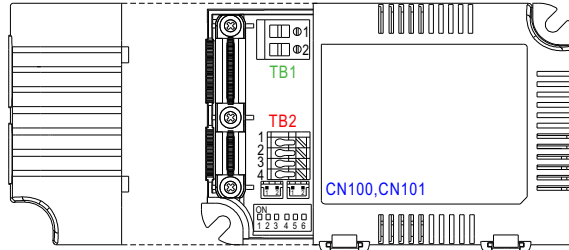
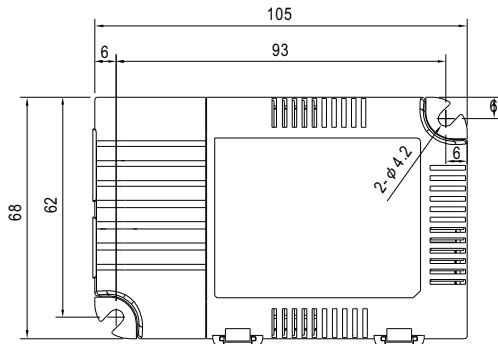


MECHANICAL SPECIFICATION

Case No. LCM-25

Unit: mm

Tolerance: ±1



Bottom View

• (tc) : Max. Case Temperature

※ Terminal Pin No. Assignment(TB1)

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

※ Terminal Pin No. Assignment(TB2)

| Pin No. | Assignment | Pin No. | Assignment |
|---------|------------|---------|------------|
| 1 | +V | 3 | DIM- |
| 2 | -V | 4 | DIM+ |

※ SYN. Connector(CN100/CN101): JST B2B-PH-KL or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|----------------------------|-------------------------------------|
| 1 | - | JST PHR-2 or equivalent | JST SPH-002T-P0.5S or equivalent |
| 2 | + | | |

Note: Please use wires with a cross section of 0.5~2.5mm² (14~20AWG) for TB1 and wires with a cross section of 0.5~1.5 mm² (16~20AWG) for TB2. Please use wires with a cross section of 0.126~0.205mm² (24~26AWG) for CN100/CN101

INSTALLATION MANUAL

Please refer to: <http://www.meanwell.com/manual.html>