



**Features**

- Constant Current mode output
- Flicker free design
- Plastic housing with class II design
- Built-in active PFC function
- No load power consumption<0.5W(Blank-Type), Standby power consumption<0.5W(DA-Type)
- IP67 rating for indoor or outdoor installations
- Function options: 2 in 1 dimming (dim-to-off); Auxiliary DC output; DALI
- 3 years warranty

**Applications**

- LED panel lighting
- LED flood lighting
- Indoor LED lighting

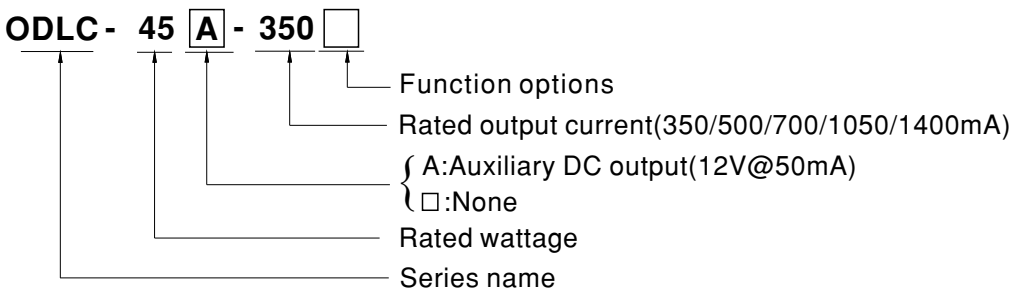
**GTIN CODE**

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

**Description**

ODLC-45 series is a 45W LED AC/DC driver featuring the constant current mode output with flicker free design. ODLC-45 operates from 90~295VAC and offers models with different rated current ranging between 350mA and 1400mA. Thanks to the efficiency up to 86%, with the fanless design, the entire series is able to operate for -20°C~+85°C case temperature under free convection. The design of plastic housing and IP67 ingress protection level allows this series to fit indoor wet applications. ODLC-45 is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for lighting system.

**Model Encoding**



Type	Function	Note
Blank	2 in 1 dimming (0~10VDC and 10V PWM)	In Stock
DA	DALI control technology	In Stock

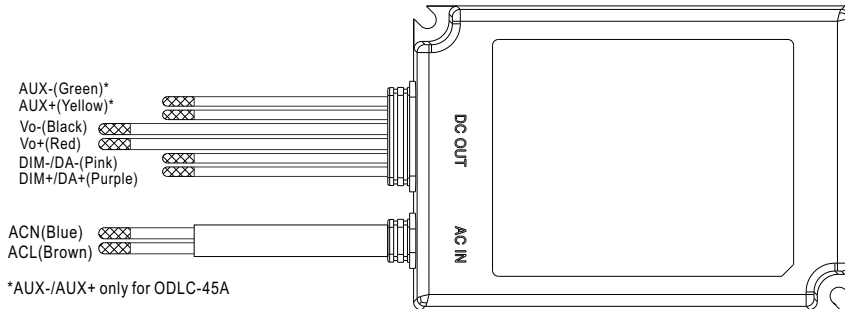
Note: The DALI control model(DA Type) only for ODLC-45 Non Auxiliary DC output models.

**SPECIFICATION**

MODEL		ODLC-45□-350□	ODLC-45□-500□	ODLC-45□-700□	ODLC-45□-1050□	ODLC-45□-1400□
OUTPUT	RATED CURRENT	350mA	500mA	700mA	1050mA	1400mA
	RATED POWER	33.25W	45W	44.8W	45.15W	44.8W
	CONSTANT CURRENT REGION <small>Note.2</small>	57 ~ 95V	54 ~ 90V	38 ~ 64V	26 ~ 43V	19 ~ 32V
	OPEN CIRCUIT VOLTAGE <sub>(max.)</sub>	118V	115V	84V	63V	50V
	CURRENT RIPPLE	5% max. @rated current				
	CURRENT TOLERANCE	±7.0%				
	SETUP TIME <small>Note.4</small>	500ms / 230VAC 1200ms/115VAC				
	AUXILIARY DC OUTPUT <small>Note.5</small>	Nominal 12V(deviation 11.4~12.6)@50mA for ODLC-45A only				
INPUT	VOLTAGE RANGE <small>Note.3</small>	90 ~ 295VAC (Please refer to "STATIC CHARACTERISTIC" section)				
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR (Typ.)	PF>0.95/115VAC, PF>0.92/230VAC, PF>0.9/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)				
	TOTAL HARMONIC DISTORTION	THD< 20%(@load≥60%/230VAC; @load≥75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION" section)				
	EFFICIENCY (Typ.)	86%	85%	85%	85%	85%
	AC CURRENT	0.6A/115VAC 0.4A/230VAC 0.3A/277VAC				
	INRUSH CURRENT (Typ.)	COLD START 30A(twidth=100μs measured at 50% Ipeak) at 230VAC; Per NEMA 410				
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	32 units (circuit breaker of type B) / 32 units (circuit breaker of type C) at 230VAC				
	LEAKAGE CURRENT	<0.75mA / 277VAC				
	NO LOAD/STANDBY POWER CONSUMPTION	No load power consumption<0.5W for Blank-Type,<1.2W for ODLC-45A Standby power consumption<0.5W for DA-Type				
PROTECTION	SHORT CIRCUIT	Hiccup mode,auto-recovery after fault condition is removed for DA type; Hiccup mode,re-power on to recovery for other type				
ENVIRONMENT	WORKING TEMP.	Tcase=-20 ~ +85°C (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)				
	MAX. CASE TEMP.	Tcase=+85°C				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 40°C)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
SAFETY & EMC	SAFETY STANDARDS	UL8750(type"HL"),CSA C22.2 NO.250.13-12;ENEC BS EN/EN61347-1 & BS EN/EN61347-2-13 independent, BS EN/EN62384; BIS IS15885( for ODLC-45-700,1050,700DA,1050DA only), EAC TP TC 004,IP67 approved				
	DALI STANDARDS	Compliance to IEC62386-101, 102 for DA-Type only				
	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 BS EN/EN55015, BS EN/EN61000-3-2 Class C (@load ≥ 60%) ; BS EN/EN61000-3-3, GB17743,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:1KV),EAC TP TC 020					
OTHERS	MTBF	3513.4K hrs min. Telcordia SR-332 (Bellcore) ;340.8K hrs min. MIL-HDBK-217F (25°C)				
	DIMENSION	111*77*28.5mm(L*W*H)				
	PACKING	0.42Kg; 24pcs/ 11Kg/ 0.72CUFT				
NOTE	<ol style="list-style-type: none"> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.</li> <li>Please refer to "DRIVING METHODS OF LED MODULE".</li> <li>De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.</li> <li>Length of set up time is measured at cold first start. Turning ON/OFF the driver may lead to increase of the set up time.</li> <li>Aux. 12V will be damaged with short circuit; It will not be available when output voltage is not in constant current region or output no load condition.</li> <li>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.</li> <li>The DALI version driver does not support the bit 1: Lamp failure in the Command 144 Query status of the DALI standard.</li> <li>The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</li> <li>For any application note and IP water proof function installation caution, please refer our user manual before using. <a href="https://www.meanwell.com/Upload/PDF/LED_EN.pdf">https://www.meanwell.com/Upload/PDF/LED_EN.pdf</a></li> <li>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.</li> </ol>					



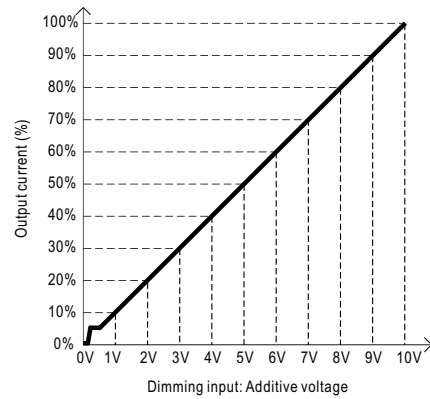
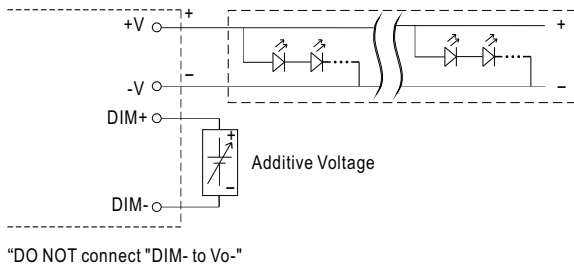
■ DIMMING OPERATION



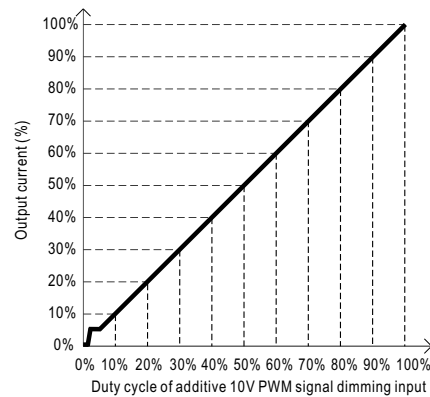
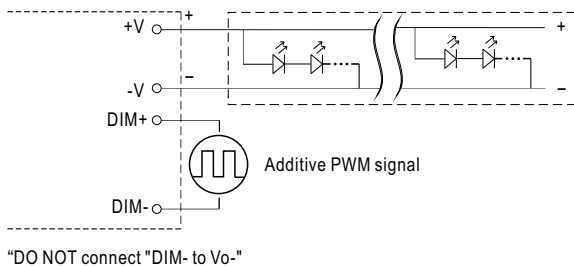
※ 2 in 1 dimming function

- Output constant current level can be adjusted by applying one of the two methodologies between DIM+ and DIM-: 0 ~ 10VDC, or 10V PWM signal.
- Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers.

◎ Applying additive 0 ~ 10VDC



◎ Applying additive 10V PWM signal (frequency range 300Hz ~ 3KHz):

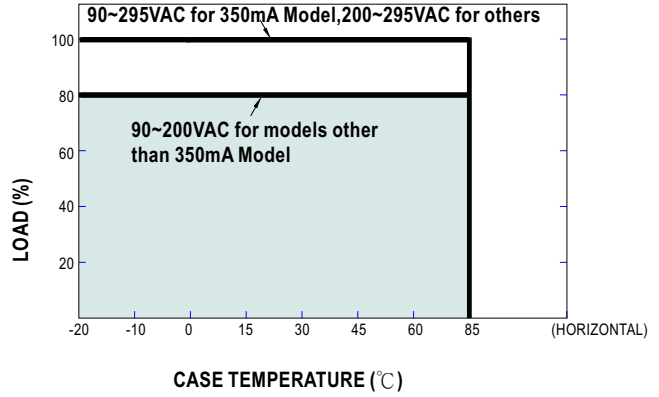
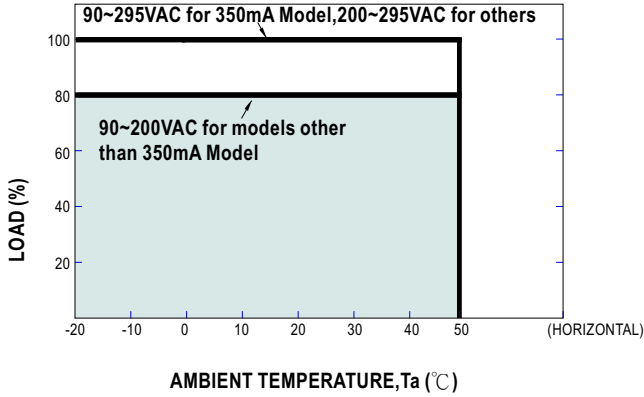


※ DALI Interface (primary side; for DA-Type)

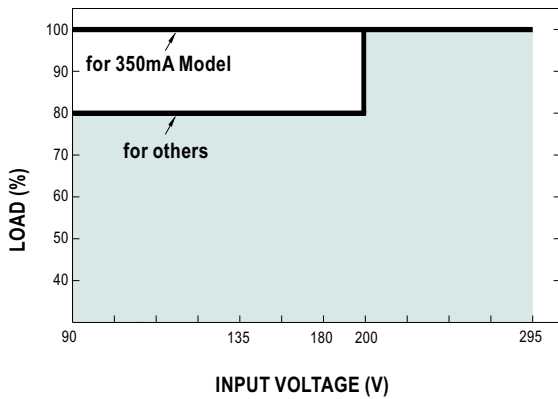
- Apply DALI signal between DA+ and DA-.
- DALI protocol comprises 16 groups and 64 addresses.
- First step is fixed at 8% of output.

Note : 1. Min. dimming level is about 8% and the output current is not defined when  $0% < I_{out} < 8%$ .  
 2. The output current could drop down to 0% when dimming input is about 0Vdc or 10V PWM signal with 0% duty cycle.

**OUTPUT LOAD vs TEMPERATURE**

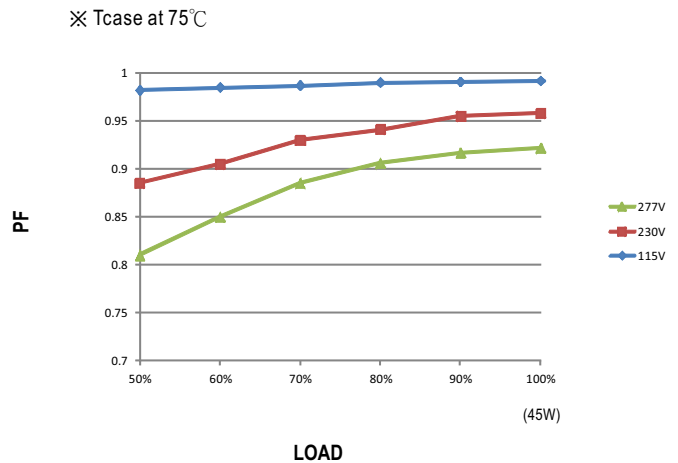


**STATIC CHARACTERISTIC**

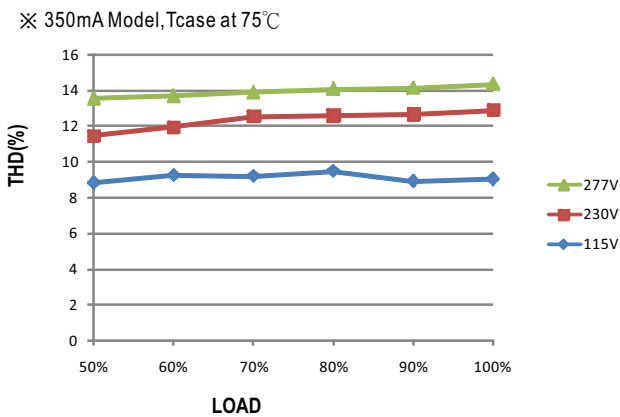


※ De-rating is needed under low input voltage.

**POWER FACTOR (PF) CHARACTERISTIC**



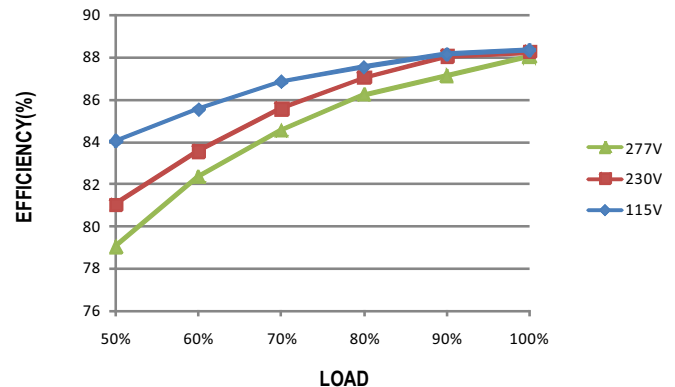
**TOTAL HARMONIC DISTORTION (THD)**



**EFFICIENCY vs LOAD**

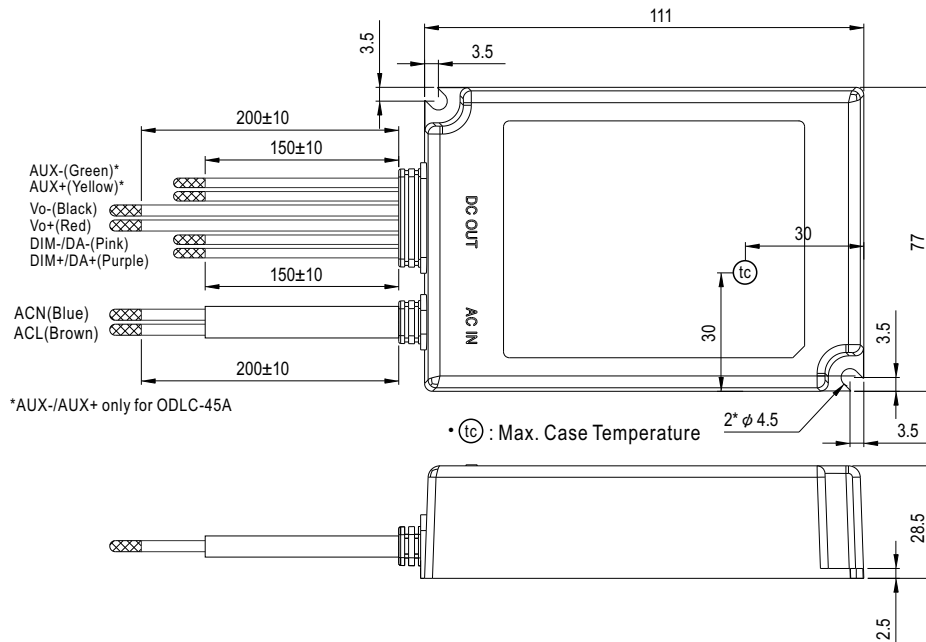
ODLC-45 series possess superior working efficiency that up to 86% can be reached in field applications.

※ 350mA Model,  $T_{case}$  at 75°C



## MECHANICAL SPECIFICATION

Case No. ODLC-45 Unit:mm



\*AUX-/AUX+ only for ODLC-45A

•  $t_c$  : Max. Case Temperature

2°  $\phi$  4.5

AC wire No. Assignment(AC IN)

ACN(Blue)	SVT 18AWG
ACL(Brown)	SVT 18AWG

ODLC-45

DC wire No. Assignment(DC OUT)

Vo-(Black)	UL1007 18AWG
Vo+(Red)	UL1007 18AWG
DIM-/DA-(Pink)	UL1007 22AWG
DIM+/DA+(Purple)	UL1007 22AWG

ODLC-45A

DC wire No. Assignment(DC OUT)

Vo-(Black)	UL1007 18AWG
Vo+(Red)	UL1007 18AWG
DIM-(Pink)	UL1007 22AWG
DIM+(Purple)	UL1007 22AWG
AUX-(Green)	UL1007 20AWG
AUX+(Yellow)	UL1007 20AWG

## INSTALLATION MANUAL

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