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## 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)
- Function options: 2 in 1 dimming (dim-to-off); Auxiliary DC output; DALI
- 3 years warranty

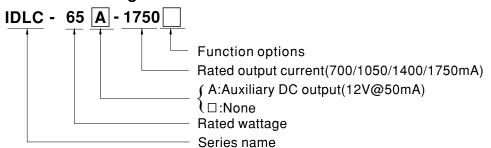
# Applications

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

# Description

IDLC-65 series is a 65W LED AC/DC driver featuring the constant current mode output with flicker free design. IDLC-65 operates from 180~295VAC and offers models with different rated current ranging between 700mA and 1750mA. Thanks to the high efficiency up to 89%, with the fanless design, the entire series is able to operate for  $-20^{\circ}\text{C} \sim +85^{\circ}\text{C}$  case temperature under free air convection. IDLC-65 is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for lighting system.

# ■ Model Encoding



Туре	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 IDLC-65 Non Auxiliary DC output models.

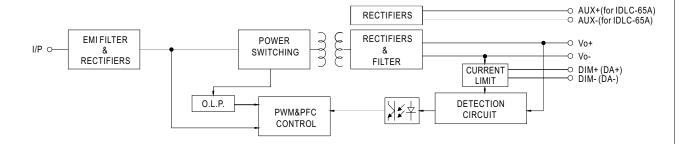


#### **SPECIFICATION**

MODEL		IDLC-65□-700□	IDLC-65□-1050□	IDLC-65 □-1400□	IDLC-65□-1750□		
	RATED CURRENT	700mA	1050mA	1400mA	1750mA		
	RATED POWER	65.1W	65.1W	64.4W	63W		
	CONSTANT CURRENT REGION Note.2	69 ~ 93V	46 ~ 62V	34 ~ 46V	27 ~ 36V		
OUTPUT	OPEN CIRCUIT VOLTAGE(max.)	118V	82V	60V	53V		
	CURRENT RIPPLE	5% max. @rated current					
	CURRENT TOLERANCE	±7.0%					
	SETUP TIME Note.4	500ms / 230VAC					
	AUXILIARY DC OUTPUT Note.5	Nominal 12V(deviation 11.4~12.6)@50mA for IDLC-65A only					
	VOLTAGE RANGE Note.3	180 ~ 295VAC (Please refer to "STATIC CHARACTERISTIC" section)					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	PF>0.95/230VAC, PF>0.9/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)					
INPUT	TOTAL HARMONIC DISTORTION	THD< 20%@load≧75%/230VAC,277VAC (Please refer to "TOTAL HARMONIC DISTORTION" section)					
	EFFICIENCY (Typ.)	89%	87%	86%	86%		
	AC CURRENT	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 IDLC-65A 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					
	WORKING TEMP.	Tcase=-20 ~ +85°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)					
	MAX. CASE TEMP.	Tcase=+85°C					
ENVIRONMENT	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY						
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 40°C)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes					
	SAFETY STANDARDS	UL8750; CSA C22.2 NO.250.13-12; ENEC EN61347-1 & EN61347-2-13 independent, AS/NZS 61347-1 & AS/NZS 61347-2-13 independent(except for DA-type), EN62384, EAC TP TC 004, GB19510.1, GB19510.14 approved					
CAFFTV 0	DALI STANDARDS Note.7	Compliance to IEC62386-101,102 for DA-Type only					
SAFETY & EMC	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 (≧75% load) ; EN61000-3-3,GB17743,GB17625.1,EAC TP TC 020					
	EMC IMMUNITY	$Compliance \ to \ EN61000-4-2, 3, 4, 5, 6, 8, 11; \ EN61547, light \ industry \ level (surge \ immunity: Line-Line: 1KV), EAC \ TP \ TC \ 0200-1000 \ Applied \ Appl$					
OTHERS	MTBF	380.7Khrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	130*75*25mm(L*W*H)					
	PACKING	0.23Kg; 54pcs/ 13.5Kg/ 0.96CUFT					
NOTE	<ol> <li>Please refer to "DRIVING M</li> <li>De-rating may be needed ut</li> <li>Length of set up time is met</li> <li>Aux. 12V will be damaged v</li> <li>The driver is considered as affected by the complete ins</li> <li>The DALI version driver doe</li> <li>The ambient temperature de</li> </ol>	Illy mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.  //ETHODS OF LED MODULE".  Inder low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.  reasured at cold first start. Turning ON/OFF the driver may lead to increase of the set up time or set up failure.  with short circuit; It will not be available when output voltage is not in constant current region or output no load condition.  a component that will be operated in combination with final equipment. Since EMC performance will be stallation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.  es not support the bit 1: Lamp failure in the Command 144 Query status of the DALI standard.  errating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).  The importance of the complex of					

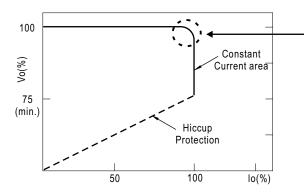
#### ■ BLOCK DIAGRAM

fosc: 70KHz



## ■ DRIVING METHODS OF LED MODULE

 $\ensuremath{\ensuremath{\mathbb{X}}}$  This series works in constant current mode to directly drive the LEDs.



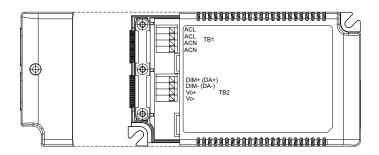
Typical output current normalized by rated current (%)

In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Should there be any compatibility issues, please contact MEAN WELL.

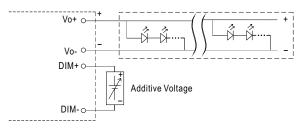


#### **■ DIMMING OPERATION**



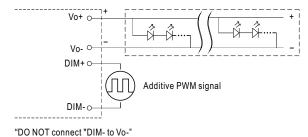
#### **\* 2** in 1 dimming function

- 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.
- O Applying additive 0 ~ 10VDC

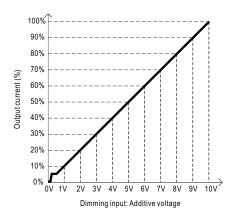


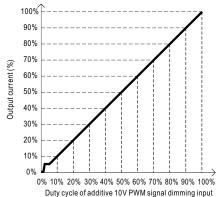
"DO NOT connect "DIM- to Vo-"

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



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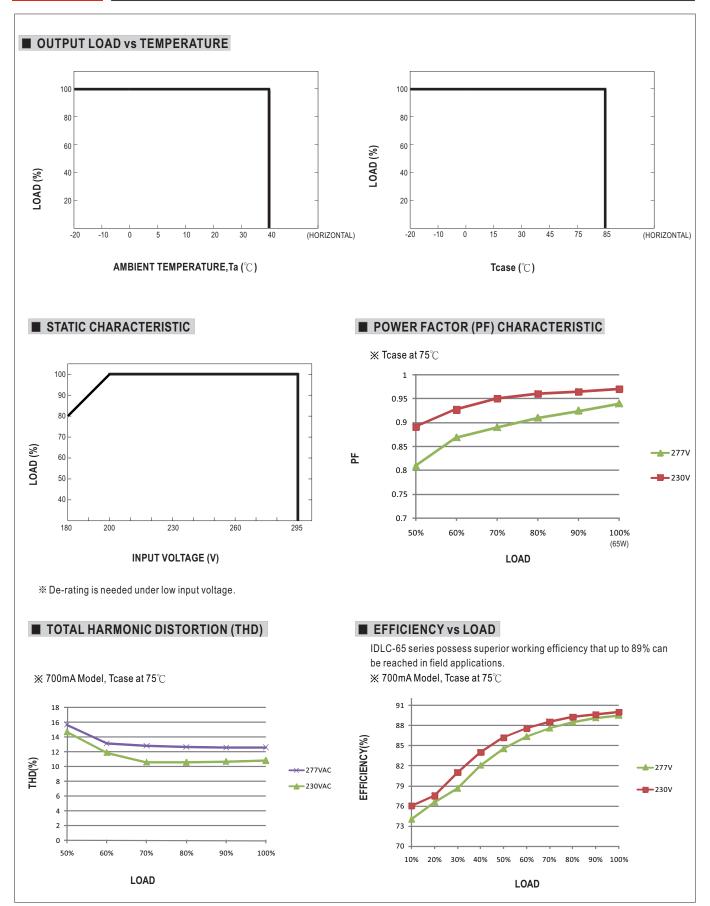
Note: 1. Min. dimming level is about 8% and the output current is not defined when 0% < Iout < 8%.

2. The output current could drop down to 0% when dimming input is about 0Vdc or 10V PWM signal with 0% duty cycle.

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

- · Apply DALI signal between DA+ and DA-.
- DALI protocol comprises 16 groups and 64 addresses.
- $\boldsymbol{\cdot}$  First step is fixed at 8% of output.

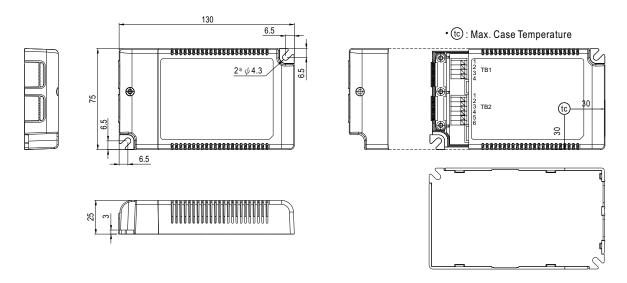




## **■** MECHANICAL SPECIFICATION

Case No.IDLC-65A

Unit:mm



NOTE: Please use wires with a cross section of 0.75~1.5mm² for TB1 and wires with a cross section of 0.5~1.5mm² for TB2.

Terminal Pin No. Assignment(TB1)

Pin No.	Assignment			
1	ACL			
2	ACL			
3	ACN			
4	ACN			

IDLC-65 Terminal Pin No. Assignment(TB2)

Pin No.	Assignment			
1	DIM+ (DA+)			
2	DIM- (DA-)			
3	Vo+			
4	Vo-			

IDLC-65A

Terminal Pin No. Assignment(TB2)

Pin No.	Assignment	Pin No.	Assignment					
1	DIM+	4	Vo-					
2	DIM-	5	AUX+					
3	Vo+	6	AUX-					

## ■ INSTALLATION MANUAL

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