

MINI JOLLY 20 - 1...10 V & PUSH

Direct current dimmable electronic drivers with DIP-SWITCH
Alimentatori elettronici regolabili in corrente continua con DIP-SWITCH

Made in Italy

ADIM PUSH constant CURRENT (4) constant VOLTAGE (4)

IS 15885 (Part 2 / Sec 13) UL-CLASS2 EAC S (7) R - 41049751 C SA US KEMA EUR CE CCC (5) 110 M M

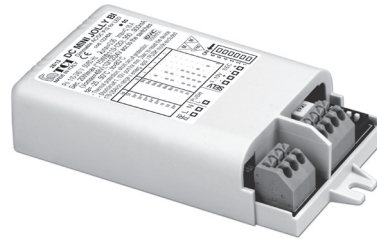
RIPPLE FREE

AM PWM (4) DIMMING

AM (5) DIMMING DIM-TO-WARM



DC MINI JOLLY



DC MINI JOLLY BI

EL SELV 60V

2kV DIFF. 4kV COMM. ACTIVE PFC DIP-SWITCH SEC. SWITCH SAFETY PROTECTIONS

Article Articollo	Code Codice	Dimming type	P out W	V out DC ⁽¹⁾	I out DC	U out V	ta °C	tc °C	λ max. Power Factor	η max. Efficiency ⁽¹⁾				
DC MINI JOLLY	125400 ⁽⁴⁾	AM/PWM	Constant current output - Uscita in corrente costante ⁽⁴⁾⁽⁵⁾	-25...+50	80 ⁽³⁾	0,95 ⁽⁶⁾	> 85							
	151400 ⁽⁵⁾	AM												
DC MINI JOLLY BI	125404 ⁽⁴⁾	AM/PWM						13 (13 ⁽²⁾)	20...53	250 mA cost.	59			
	151404 ⁽⁵⁾	AM						15 (15 ⁽²⁾)	20...52	300 mA cost.				
								18 (15 ⁽²⁾)	15...50	350 mA cost.				
								20 (15 ⁽²⁾)	15...50	400 mA cost.				
								20 (15 ⁽²⁾)	5...45	450 mA cost.				
								20 (15 ⁽²⁾)	5...40	500 mA cost.				
								20 (15 ⁽²⁾)	3...37	550 mA cost.				
								20 (15 ⁽²⁾)	3...34	600 mA cost.				
								20 (15 ⁽²⁾)	3...31	650 mA cost.				
								20 (15 ⁽²⁾)	3...29	700 mA cost.				
								20 (15 ⁽²⁾)	3...27	750 mA cost.				
		20 (15 ⁽²⁾)	3...25	800 mA cost.										
		20 (15 ⁽²⁾)	3...24	850 mA cost.										
		20 (15 ⁽²⁾)	3...23	900 mA cost.										
			Constant voltage output - Uscita in tensione costante ⁽⁴⁾											
			11 (10 ⁽²⁾)	12 cost.	900 mA max.	-								
			20 (15 ⁽²⁾)	24 cost.	900 mA max.	-								

⁽¹⁾ Referred to $V_{in} = 230$ V, 100% load - Riferito a $V_{in} = 230$ V, carico 100%

⁽³⁾ $T_c = 75^\circ\text{C}$ for $P_{out} \leq 16$ W

⁽⁶⁾ $P_{out} > 5$ W

⁽⁷⁾ 125400BIS - 151400BIS - 125404BIS - 151404BIS:
order codes for BIS marked products
codici di ordine per i prodotti marchiati BIS

Accessories not supplied - Accessori non a corredo	
Article - Articollo	Code - Codice
REG 1-10 V (12.3)	123999L
WIRELESS INTERFACES (W.)	-

Features

- Multipower driver supplied with dip-switch for the selection of the output current.
- IP20 independent driver, for indoor use (DC MINI JOLLY).
- Class II protection against electric shock for direct or indirect contact (DC MINI JOLLY).
- Driver for built-in use (DC MINI JOLLY BI).
- It can be used for lighting equipment in protection class I and II (DC MINI JOLLY BI).
- Active Power Factor Corrector.
- Current regulation $\pm 5\%$ including temperature variations.
- Input and output terminal blocks on the same side (wire cross-section up to 1,5 mm² / AWG15).
- Clamping screws on primary and secondary circuits for cables with diameter: PRI 5-8 mm / SEC 3-5 mm (DC MINI JOLLY).
- Protections:
 - against overheating and short circuits;
 - against mains voltage spikes;
 - against overloads.
- Thermal protection = C.5.a.

Caratteristiche

- Alimentatore multipotenza fornito di dip-switch per la selezione della corrente in uscita.
- Alimentatore indipendente IP20, per uso interno (DC MINI JOLLY).
- Protetto in classe II contro le scosse elettriche per contatti diretti e indiretti (DC MINI JOLLY).
- Alimentatore da incorporare (DC MINI JOLLY BI).
- Utilizzabile per apparecchi di illuminazione in classe di protezione I e II (DC MINI JOLLY BI).
- PFC attivo.
- Corrente regolata $\pm 5\%$ incluse variazioni di temperatura.
- Morsetti di entrata e uscita sullo stesso lato (sezione cavo fino a 1,5 mm² / AWG15).
- Serracavo su primario e secondario per cavi di diametro: PRI 5-8 mm / SEC 3-5 mm (DC MINI JOLLY).
- Protezioni:
 - termica e cortocircuito;
 - contro le extra-tensioni di rete;
 - contro i sovraccarichi.
- Protezione termica = C.5.a.

Rated Voltage
Tensione Nominale
110 ÷ 127 V⁽²⁾
220 ÷ 240 V

Frequency
Frequenza
50-60 Hz

AC Operation range
Tensione di utilizzo AC
99 ÷ 264 V

DC Operation range
Tensione di utilizzo DC
(see page info15)
176 ÷ 280 V
(NO PUSH mode function)

Power - Potenza
1 ÷ 20 W

iTHD
 $\leq 10\%$ ⁽¹⁾

Stand by power
 $\leq 0,5$ W

Output current ripple
 $\leq 3\%$ ⁽¹⁾

Standards compliance
CSA C22.2 no. 223 ⁽²⁾
EN 50172 (VDE 0108)
EN 55015
EN 61000-3-2
EN 61000-3-3
EN 61347-1
EN 61347-2-13
EN 61547
EN 62384
UL 1310 ⁽²⁾
VDE 0710-T14

Max. pcs for CB B16A
(see page info17)
50 pcs

In rush current
5A 50μsec

7 YEARS WARRANTY 3% FAILURE RATE
10 YEARS WARRANTY 5% FAILURE RATE

PRODUCER'S LIABILITY TCI
WARRANTY WITH ELECTRONIC COMPONENTS 10 YEARS ACCORDING TO THE EUROPEAN CONDITIONS

3.1.1

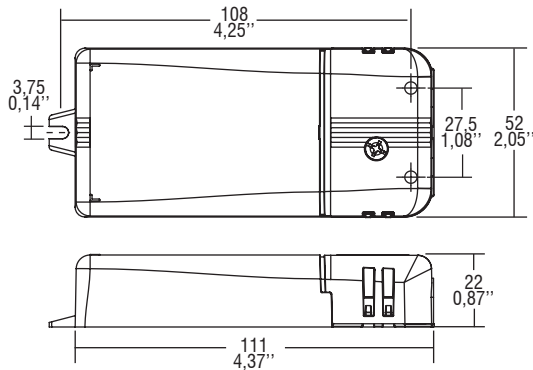
Dimmable multipower drivers - Compact case - 1-10V & PUSH
Alimentatori multipotenza regolabili - Formato compatto - 1-10V & PUSH

MINI JOLLY 20 - 1...10 V & PUSH

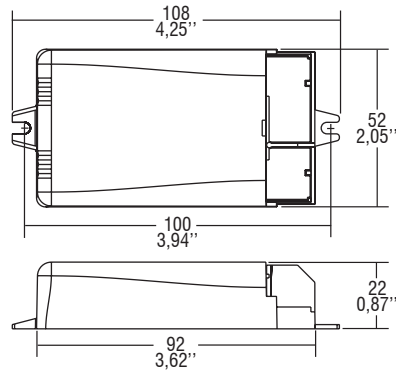
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Made in Italy

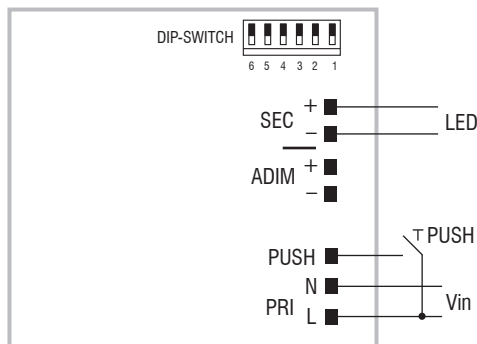
IP 20 **SCREW FIXING** **Ø55 2.17"** Weight - Peso gr. 108 / 3,8 oz.
 Pcs - Pezzi 50



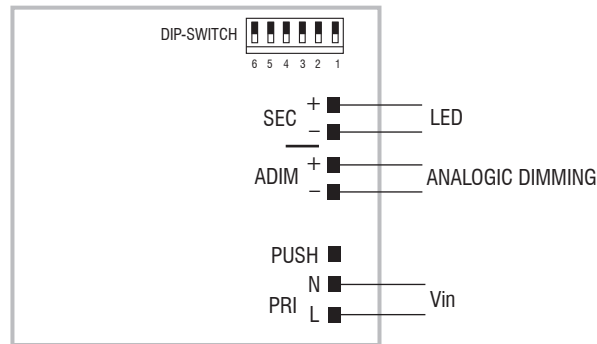
BUILT-IN **SCREW FIXING** Weight - Peso gr. 98 / 3,5 oz.
 Pcs - Pezzi 50



Wiring diagram - Schema di collegamento (Max. LED distance on page info8 - Massima distanza LED a pagina info8)



PUSH diagram - Collegamento PUSH



ADIM diagram - Collegamento ADIM

Operation Mode

- Light regulation 0/1 - 100 % by means of PUSH function, 0/1...10 V local interface ($I=0,35$ mA) or 100 Kohm potentiometer.
- ⁽⁴⁾ **Default dimming AM+PWM:** 1-25% PWM 2 kHz+25-100% AM.
- ⁽⁴⁾ **Full PWM dimming (240 Hz - 1-100%) and Constant Voltage 12/24V available by removing JP4 on the driver. Enable JP4 to switch to AM+PWM.**
- ⁽⁶⁾ **Full AM DIMMING: 1-100%.**
- Light regulation 0/1 - 100 % by means of PUSH function (L mains voltage: 170 Kohm):
 - a short push to turn on and off;
 - a longer push to increase or decrease light intensity;
 - regulation automatically stops at minimum and maximum values;
 - for another on, regulation or off command, release the push button and give the desired command again;
 - **dimming level memory at mains restore.**
- Maximum length of the cable, from push button to last driver, must be max. 15 m / 49 ft. In case of applications where the cable is longer than 15 m / 49 ft, keep this separate from the 110 - 240 Volt mains cable.
- ATTENTION: only use normally open push buttons with no incorporated warning light.
- Specific dimming terminal connection with a 0/1...10 Vdc electronic potentiometer (0/1...10 V local dimming, double insulation required for external connection).

For additional details for regulations see pages info12-14.

Modalità di funzionamento

- Regolazione della luminosità 0/1 - 100 % mediante funzione PUSH, interfaccia locale 0/1...10 V ($I=0,35$ mA) o potenziometro da 100 Kohm.
 - ⁽⁴⁾ **Regolazione default AM+PWM:** 1-25% PWM 2 kHz+25-100% AM.
 - ⁽⁴⁾ **Regolazione solo PWM (240 Hz - 1-100%) e Constant Voltage 12/24V attuabile tramite la rimozione di JP4. Inserire JP4 per abilitare AM+PWM.**
 - ⁽⁶⁾ **Regolazione solo AM: 1-100%.**
 - Regolazione della luminosità 0/1 - 100 % mediante la funzione PUSH (tensione di rete L; 170 Kohm):
 - una pressione breve per accendere e spegnere;
 - una pressione prolungata per aumentare o diminuire l'intensità luminosa;
 - la regolazione si ferma automaticamente ai valori minimi e massimi;
 - per un nuovo comando accensione, regolazione o spegnimento, rilasciare il pulsante e dare nuovamente il comando desiderato;
 - **ripristino del livello di dimming al ritorno alimentazione.**
 - La lunghezza massima del cavo, dal pulsante all'ultimo trasformatore, deve essere max. 15 m / 49 ft. In caso di applicazioni dove il cavo superi i 15 m / 49 ft, tenere lo stesso separato dal cavo di rete 110 - 240 Volt.
 - ATTENZIONE: usare solo pulsanti di tipo normalmente aperto privi di spia luminosa incorporata.
 - Provisto di morsetto specifico per la regolazione collegando un potenziometro elettronico 0/1...10 Vdc (dimmerazione locale 0/1...10 V, per connessioni esterne all'apparecchio garantire il doppio isolamento).
- Per ulteriori dettagli sulle regolazioni vedi pagine info12-14.

3.1.1

Dimmable multipower drivers - Compact case - 1-10V & PUSH
 Alimentatori multipotenza regolabili - Formato compatto - 1-10V & PUSH

LED Intelligent Driver

- Dimming interface: 0-10V (1-10V/10V PWM/RX), Push DIM.
- T-PWM™ digital dimming
- With soft-on and fade in function, visual more comfortable.
- Automatic recognition of 0-10V, 1-10V input signal.
- Dimming range: 0-100%, LED start at 0.01% possible.
- 0-100% flicker-free, High frequency exemption level.
- Innovative thermal management technology, intelligent power life protection.
- Multiple current & wide voltage, suitable for different power LED.
- Non-load output voltage 0V to prevent damages to LED caused by poor contact.
- Short circuit / Over-heat / Over load / Non-load protection, recover automatically.
- Suitable for internal lights application for I/II/III
- Up to 50000-hour life time.
- 5 years warranty (Rubycon capacitor).

T-PWM™
Super depth dimming technology

Flicker-free
IEEE 1789

Dimmable:
0.01-100%



TUV Certificate No. B 17 06 01119 001
RCM Equipment registration No: E2017013627 Ref: ESV170365
ENEC Certificate No. U6 17 07 01119 004
CE EMC Certificate No. BST1702498520001Y-1EC-1
LVD Certificate No. BST1709992470001Y-15C-2

5 in 1 dimming

0-10V
1-10V
PWM
RX
Push DIM

5 years
warranty



RoHS

SELV



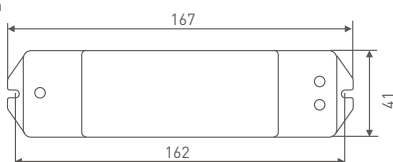
Class 2



Specification

Model	AD-15-100-700-E1A1	AD-25-150-900-E1A1	AD-36-200-1200-E1A1	
OUTPUT	Output Voltage	10-54Vdc		
	Max Output Voltage	58Vdc		
	Non-load Output Voltage	0Vdc		
	Output Current	100-700mA	150-900mA	200-1200mA
	Output Power	1W-15W	1.5-25W	2W-36W
	Strobe Level	Almost flicker-free / High frequency exemption level.		
	Dimming Range	0-100%, LED start at 0.01% possible.		
	PWM Frequency	≤3600Hz		
	Current Accuracy	±5%		
Ripple & Noise	≤2V			
INPUT	Dimming Interface	0-10V (1-10V/PWM/RX), Push DIM		
	Input Voltage Range	220-240Vac ±10%		
	Frequency	50/60Hz		
	Input Current	<0.15A	<0.2A	<0.3A
	Power Factor	PF>0.90/230Vac, at full load	PF>0.93/230Vac, at full load	PF>0.95/230Vac, at full load
	THD	≤20% at 230Vac, at full load		
	Efficiency(typ.)	83%	84%	87%
	Inrush Current(typ.)	Cold start 2.48A at 230Vac (twidth=25.1μs measured at 50% Ipeak)	Cold start 2.28A at 230Vac (twidth=36μs measured at 50% Ipeak)	Cold start 6.32A at 230Vac (twidth=60.1μs measured at 50% Ipeak)
	Anti Surge	L-N: 1kV		
Leakage Current	<0.5mA/230Vac			
ENVIRONMENT	Working Temperature	ta: 50°C tc: 90°C		
	Working Humidity	20 ~ 95%RH, non-condensing		
	Storage Temp., Humidity	-40°C ~ 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.		
PROTECTION	Over-heat Protection	Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, auto recovers.		
	Over Load Protection	Shut down the output when rated power ≥102%, auto recovers.		
	Short Circuit Protection	Shut down automatically if short circuit occurs, auto recovers.		
	Non-load Protection	Shut down the output if no load, auto recovers when load back to normal.		
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac		
	Isolation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH		
	Safety Standards	IEC/EN61347-1, IEC/EN61347-2-13		
	EMC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11 EN61547		
Strobe Test Standard	IEEE 1789			
OTHERS	Dimension	167×41×32mm(L×W×H)		
	Packing	168×43×35mm(L×W×H)		
	Weight[G.W.]	165g±10g		

Dimensions Unit: mm



LED Current Selection

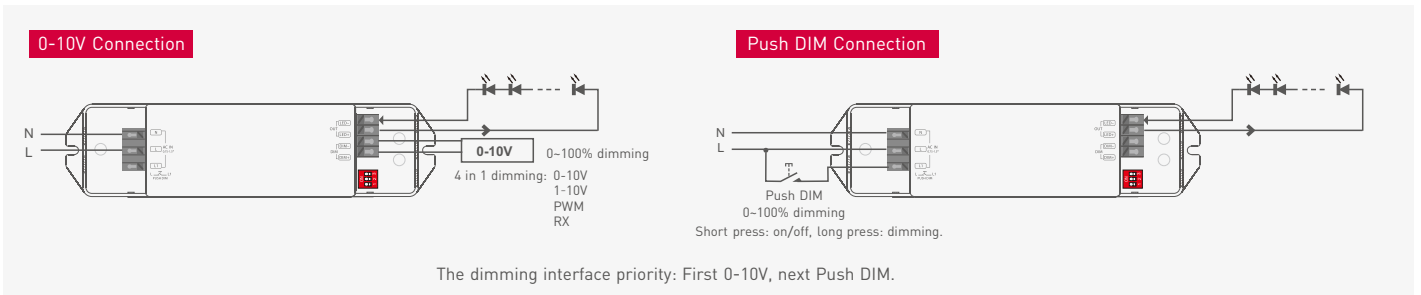
Quick options: DIP switch for 8 optional currents' quick selection (see the table below).

Model	DIP Switch	⬇⬇⬇	⬇⬇⬆	⬇⬆⬆	⬆⬆⬆	⬆⬆⬆	⬆⬆⬆	⬆⬆⬆	⬆⬆⬆	ON OFF
	Output Current	100mA	180mA	300mA	350mA	450mA	500mA	600mA	700mA	
	Output Voltage	10-54V	10-54V	10-50V	10-43V	10-34V	10-30V	10-25V	10-22V	
	Output Power	1W-5.4W	1.8W-9.72W	3W-15W	3.5W-15.05W	4.5W-15.3W	5W-15W	6W-15W	7W-15.4W	
Model	DIP Switch	⬇⬇⬇	⬇⬇⬆	⬇⬆⬆	⬆⬆⬆	⬆⬆⬆	⬆⬆⬆	⬆⬆⬆	⬆⬆⬆	ON OFF
	Output Current	150mA	250mA	300mA	350mA	500mA	600mA	700mA	900mA	
	Output Voltage	10-54V	10-54V	10-54V	10-54V	10-50V	10-42V	10-36V	10-28V	
	Output Power	1.5W-8.1W	2.5W-13.5W	3W-16.2W	3.5W-18.9W	5W-25W	6W-25.2W	7W-25.2W	9W-25.2W	
Model	DIP Switch	⬇⬇⬇	⬇⬇⬆	⬇⬆⬆	⬆⬆⬆	⬆⬆⬆	⬆⬆⬆	⬆⬆⬆	⬆⬆⬆	ON OFF
	Output Current	200mA	350mA	500mA	600mA	700mA	900mA	1050mA	1200mA	
	Output Voltage	10-54V	10-54V	10-54V	10-54V	10-52V	10-40V	10-35V	10-30V	
	Output Power	2W-10.8W	3.5W-18.9W	5W-27W	6W-32.4W	7W-36.4W	9W-36W	10.5W-36.75W	12W-36W	

* After current setting by DIP switch, power off and then power on to make the new current effective.

* E.g. LED 3.2V/pcs: 10-54V can power 3-16pcs LEDs in series, 10-22V can power 3-6pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

Wiring Diagram



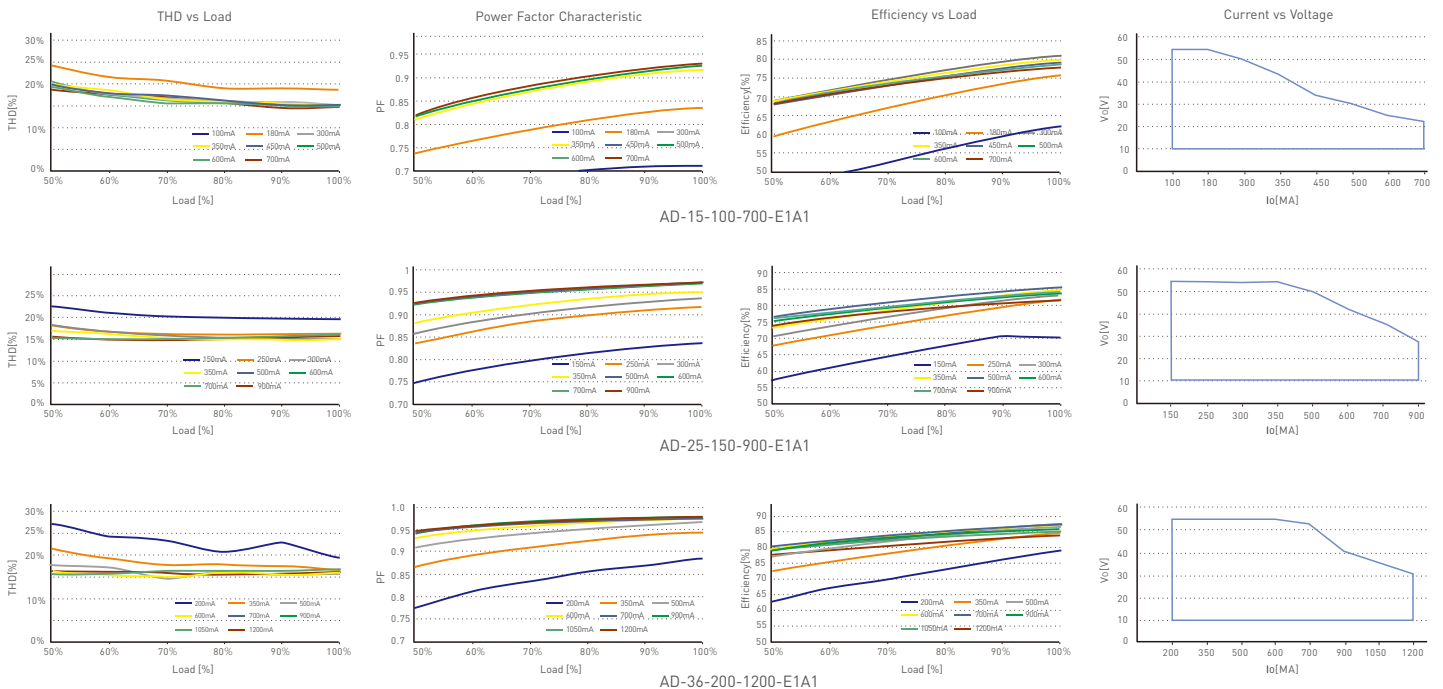
Push Dimming



Reset Switch

- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the light level goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

Relationship Diagrams



Flicker Test Form

IEEE 1789

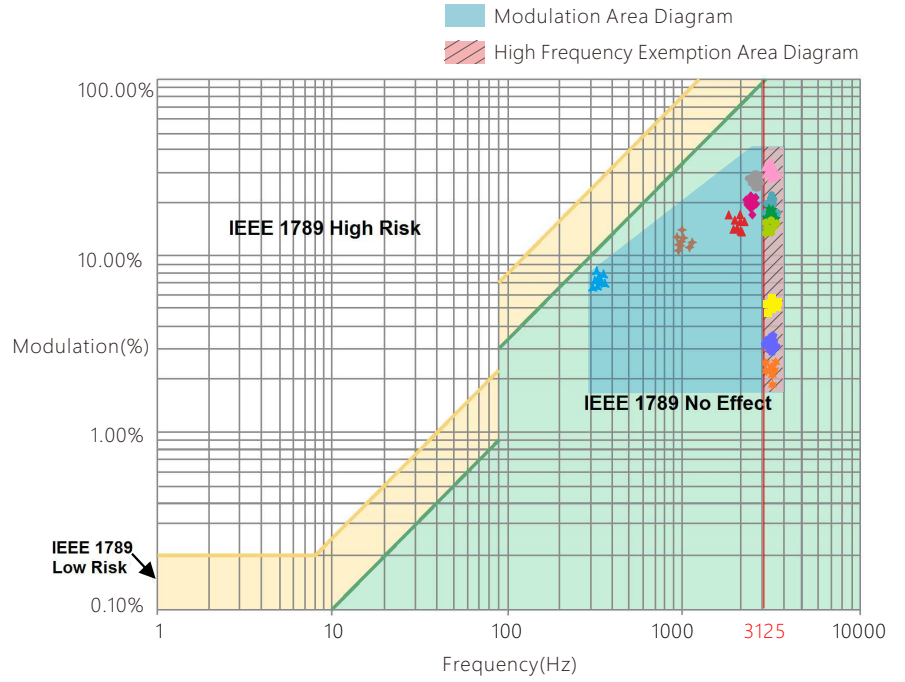
Limit of Modulation in low risk area	
Waveform frequency of Optical output	limit (%)
$f \leq 8\text{Hz}$	0.2
$8\text{Hz} < f \leq 90\text{Hz}$	$0.025 \times f$
$90\text{Hz} < f \leq 1250\text{Hz}$	$0.08 \times f$
$f > 1250\text{Hz}$	Exemption assessment
Limit of Modulation in no effect area	
Waveform frequency of Optical output	limit (%)
$f \leq 10\text{Hz}$	0.1
$10\text{Hz} < f \leq 90\text{Hz}$	$0.01 \times f$
$90\text{Hz} < f \leq 3125\text{Hz}$	$[0.08/2.5] \times f$
$f > 3125\text{Hz}$	Exemption assessment (High frequency exemption)

Brightness

- ▲ 0.1%
- ◆ 1%
- ▲ 5%
- ◆ 10%
- 20%
- ▲ 30%
- 40%
- ★ 50%
- 60%
- 70%
- 80%
- ★ 90%
- ◆ 100%

Marks in the right chart were tested results of different current ranges.

The output frequency is 0Hz in 100% brightness and its corresponding modulation is 0%, which could not be shown in the right chart.



SWITCH TO BRIGHTER FUTURE

Product data sheet: LIM-12D

Features

- Independent design
- Dimmable constant current driver
- Low ripple current, flicker-free
- DALI-2 certified
- Configurable constant current output via dip-switch
- Switch-Dim function
- Dimming range 0.1...100%
- Push wire connections
- Protections: opencircuit, shortcircuit, overload, overtemperature
- SELV equivalent
- Suitable for use in emergency lighting systems
- Suitable for protection class II luminaires
- Protection class II
- Nominal life-time up to 50,000 h
- 5-year guarantee

Applications

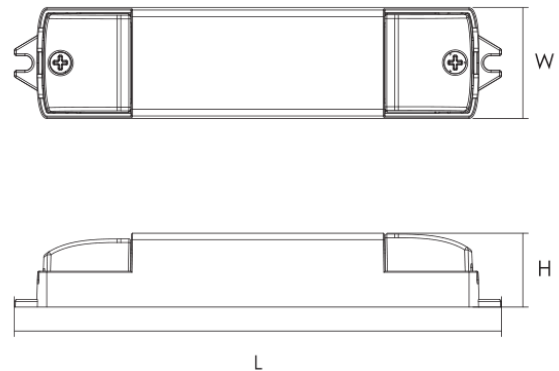
- Office
- Shop
- Hospitality
- Public areas

Approbations & Certifications

CE, CB, DALI-2

Housing properties

- Housing material: plastic, white.
- Type of protection IP20



Electrical Specifications

Type		Unit	LIM-12D								
INPUT	Nominal voltage	V	220 – 240								
	Nominal frequency	Hz	0 / 50 / 60								
	AC voltage range	V	198 – 264								
	DC voltage range	V	176 - 370								
	Nominal current	A	0.08								
	THD (Full load)	%	≤ 25								
	Power factor (Full load)		0.90C								
	Efficiency (Full load)	%	80								
	NO load	W	≤ 0.5								
	Protection class		II								
	Inrush current(Cold start)	A pk	15(th = 100 μs)								
	Max.units per circuit breaker		B10: 46 B16: 74 C10: 93 C16: 149								
	OUTPUT	Nominal voltage range	V	2 - 42	2 - 42	2 - 42	2 - 40	2 - 22	2 - 20	2 - 18	2 - 17
Maximum voltage(Open Circuit)		Vdc	≤ 54								
Nominal current		mA	150	200	250	300	550	600	650	700	
Current accuracy		%	+/- 5								
Current ripple 100Hz		%	≤ 20								
Pst LM			≤ 1								
SVM			≤ 0.4								
Nominal power range		W	0.3 – 6.3	0.4 – 8.4	0.5 – 10.5	0.6 - 12	1.1 - 12	1.2 - 12	1.3 - 12	1.4 - 12	
Maximum power		W	12								
Galvanic isolation			SELV								
ENVIRONMENT		Ambient temperature range ta	°C	-20 ...+45							
		Maximum case temperature tc	°C	85							
		Max. Case temp. In fault conditio	°C	110							
	Storage temperature range	°C	-20 ...+70								
	Relative humidity	%	5 ... 85 (Not condensing)								
	Surge transient protection	kV	1 2 (L/N LN/PE acc to. EN 61547 Clause 5.7)								
	Environmental rating		Indoor								
	IP rating		IP 20								
	Mains switching cycles		> 100,000								
Expected lifetime	h	50,000 (0.2% / 1'000 h failure rate)									

*All parameters NOT specially mentioned are measured at 230VAC input ,rated current and 25°C of ambient temperature

Protections

Over temperature

Yes

Over load

Yes

No load

Yes

Short-circuit

Yes

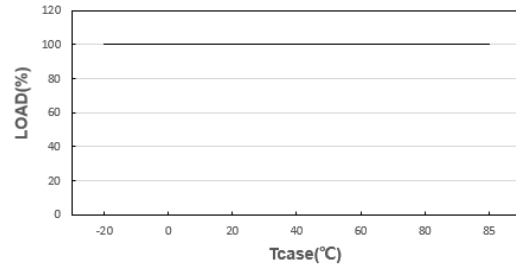
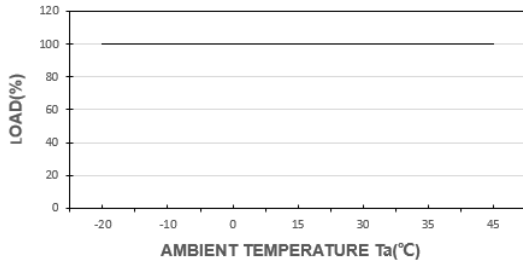
Input overvoltage

Maximum allowed input voltage 264V AC

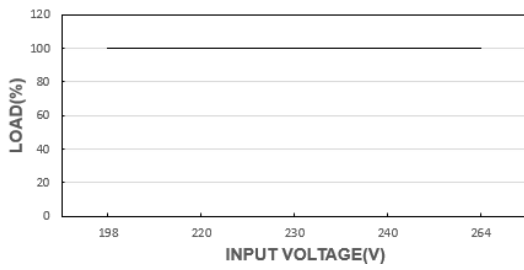
Output overvoltage

Yes, Limitation of Output voltage < 54V

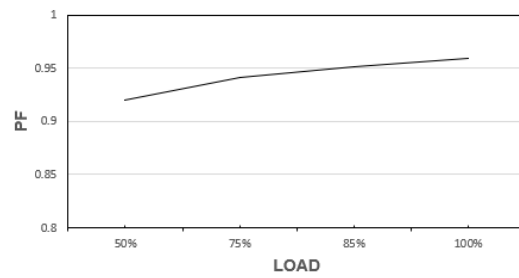
OUTPUT LOAD vs TEMPERATURE



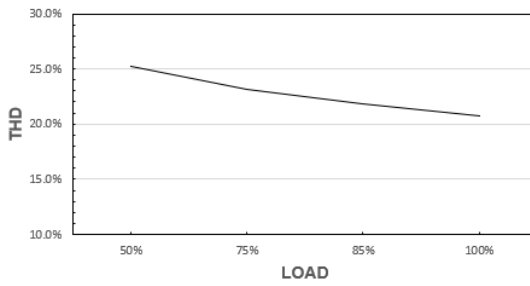
STATIC CHARACTERISTIC



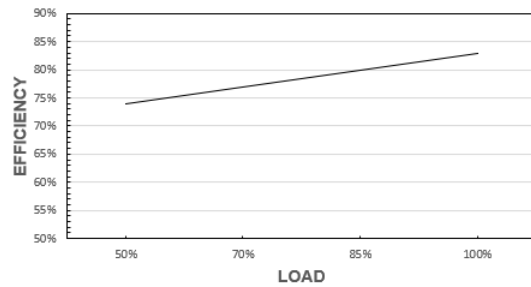
POWER FACTOR (PF) CHARACTERISTIC



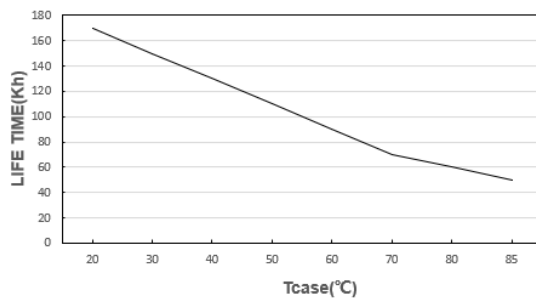
TOTAL HARMONIC DISTORTION (THD)



EFFICIENCY vs LOAD



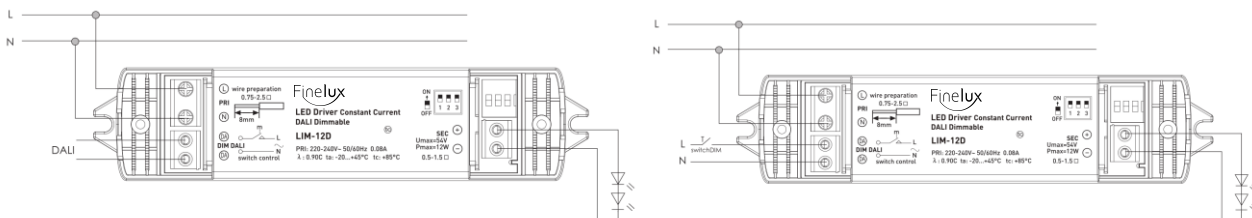
LIFE TIME



*The graph is for reference only, and the detailed values refer to the parameter table

Wiring Diagram

Terminal:	Captured terminal screws
Max. cable length – DALI system:	300 m
Dimensions(LxWxH):	132x30x20 mm
Mounting hole spacing, length	126.3 mm
Weight:	110 g



PRI

Cable cross-section:	0.75-2.5□/AWG 18-14
Stripping:	6mm

SEC

Cable cross-section:	0.5-1.5□/AWG 20-16
Stripping:	6mm

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.

Remarks

-Touch current: lower than 0.7 mA, according to EN 60598-1 annex. G and EN 61347-1 annex A

Standards

EN 61347-1
EN 61347-2-13
EN 62384
EN 55015
EN 61000-3-2
EN 61000-3-3
EN 61547
EN 60598-1
EN 62386-101
EN 62386-102
EN 62386-207
EN 62386-209
IEE1789
(EU) 2019/2020

SWITCH TO BRIGHTER FUTURE

Product data sheet: IE-45D

Features

- Independent design
- Dimmable constant current driver
- Low ripple current, flicker-free
- DALI-2 certified
- Configurable constant current output via dip-switch
- Switch-Dim function
- Dimming range 0.1...100%
- Push wire connections
- Protections: open circuit, short circuit, overload, overtemperature
- SELV equivalent
- Suitable for use in emergency lighting systems
- Suitable for protection class II luminaires
- Protection class II
- Nominal life-time up to 50,000 h
- 5-year guarantee

Applications

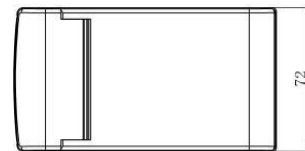
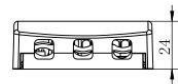
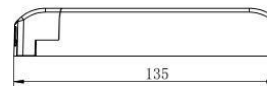
- Office
- Shop
- Hospitality
- Public areas

Approbations & Certifications

CE, CB, DALI-2

Housing properties

- Housing material: plastic, white.
- Type of protection IP20



Electrical Specifications

Type		Unit	IE-45D						
INPUT	Nominal voltage	V	220 – 240						
	Nominal frequency	Hz	0 / 50 / 60						
	AC voltage range	V	198 – 264						
	DC voltage range	V	176 - 370						
	Nominal current	A	0.15	0.2	0.23	0.26			
	THD (Full load)	%	≤25			≤15			
	Power factor (Full load)		0.90c			0.95			
	Efficiency (Full load)	%	87						
	NO load	W	≤ 0.5						
	Protection class		II						
	Inrush current(Cold start)	A pk	20(th = 100 μs)						
	Max.units per circuit breaker		B10: 23 B16: 37 C10: 46 C16: 74						
	OUTPUT	Nominal voltage range	V	25-70	25-70	25-70	25-64	25-56	25-50
Maximum voltage(Open Circuit)		Vdc	≤ 80						
Nominal current		mA	350	500	600	700	800	900	1050
Current accuracy		%	+/- 5						
Current ripple 100Hz		%	≤ 20						
Pst LM			≤ 1						
SVM			≤ 0.4						
Nominal power range		W	9-24.5	12.5-35	15-42	17.5-45	20-45	22.5-45	22.5-45
Maximum power		W	45						
Galvanic isolation			SELV						
ENVIRONMENT	Ambient temperature range ta	°C	-20 ...+50						
	Maximum case temperature tc	°C	85						
	Max. Case temp. In fault condition	°C	110						
	Storage temperature range	°C	-20 ...+70						
	Relative humidity	%	5 ... 85 (Not condensing)						
	Surge transient protection	kV	1 2 (L/N LN/PE acc to. EN 61547 Clause 5.7)						
	Environmental rating		Indoor						
	IP rating		IP 20						
	Mains switching cycles		> 100,000						
Expected lifetime	h	50,000 (0.2% / 1'000 h failure rate)							

*All parameters NOT specially mentioned are measured at 230VAC input ,rated current and 25°C of ambient temperature

Protections

Over temperature

Yes

Over load

Yes

No load

Yes

Short-circuit

Yes

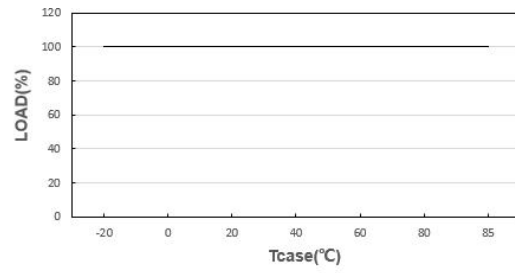
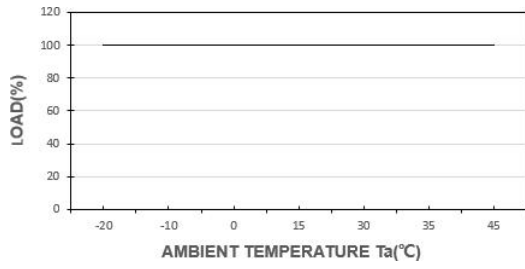
Input overvoltage

Maximum allowed input voltage 264V AC

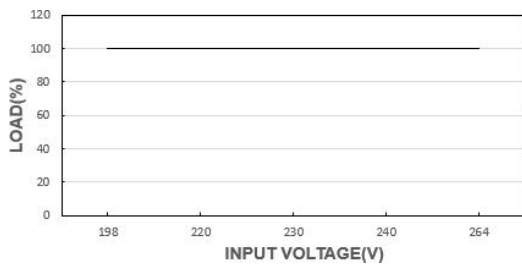
Output overvoltage

Yes, Limitation of Output voltage < 80V

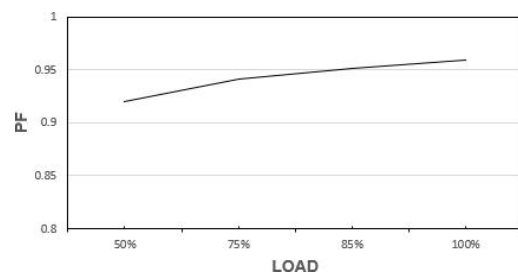
OUTPUT LOAD vs TEMPERATURE



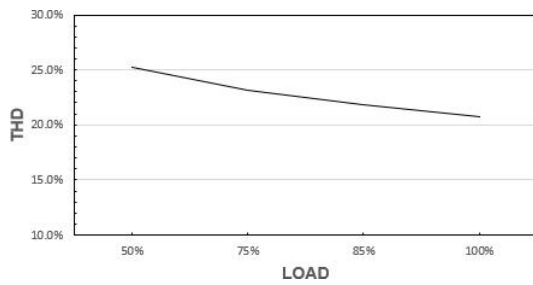
STATIC CHARACTERISTIC



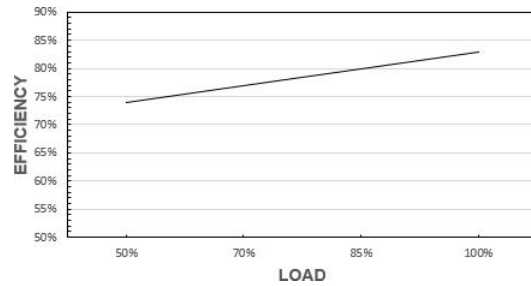
POWER FACTOR (PF) CHARACTERISTIC



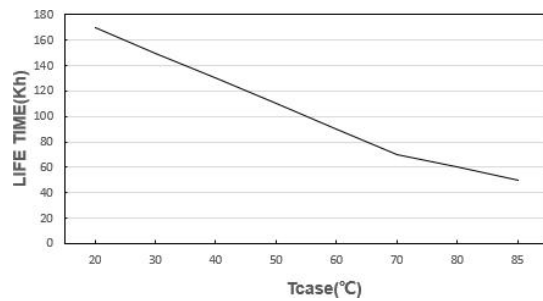
TOTAL HARMONIC DISTORTION (THD)



EFFICIENCY vs LOAD



LIFE TIME



*The graph is for reference only, and the detailed values refer to the parameter table

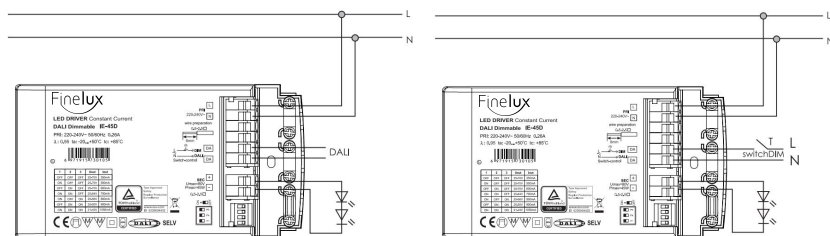
Wiring Diagram

Terminal: Push in terminals

Max. cable length – DALI system: 300 m

Dimensions(LxWxH): 135x72x24 mm

Weight: 180 g



PRI

Cable cross-section: 0.5-2.5□/AWG 20-14

Stripping: 8mm

SEC

Cable cross-section: 0.5-2.5□/AWG 20-14

Stripping: 8mm

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.

Remarks

-Touch current: lower than 0.7 mA, according to EN 60598-1 annex. G and EN 61347-1 annex A

Standards

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- IEE1789
- (EU) 2019/2020