

# ON/OFF Constant Voltage LED Driver



UT-50-xx-IP44

## Features



- Independent 16mm ultra thin design
- Moisture protection solution for cabinets and mirror cabinets
- Flicker-free, complying with CE Erp directive
- Primary and secondary sides come with leads
- Protections: opencircuit, shortcircuit, overload, overtemperature
- DC input compatible (176-280Vdc)
- SELV equivalent
- Suitable for protection class I & II luminaires
- Protection class II
- IP44 design



## Selection Guide

Model No.	Nominal Voltage (V)	Nominal Current (A)	Power Factor (λ)	THD (%)	Max. Output (W)	Output Current (A)	Output Voltage (V)	Efficiency Full Load (%)
UT-50-12-IP44	220-240	0.30	0.95	20	50	0-4.17	12	88
UT-50-24-IP44	220-240	0.30	0.95	20	50	0-2.08	24	88

**Note:** 1. The product picture is for reference only. For details, please refer to the actual product.

2. All parameters NOT specially mentioned are measured at 25°C of ambient temperature, 230VAC input, 50Hz, full load and after warm-up.

## Input Parameters

Parameter	Condition	Min.	Typ.	Max.
Input Voltage Range	AC Input	198VAC	230VAC	264VAC
	DC Input	176VDC	--	280VDC
Input Frequency Range	AC Input	47Hz	50/60Hz	63Hz
No-load Power Consumption	@230VAC, 50Hz	--	--	0.5W
Inrush Current	Cold start@230VAC, 50Hz, full load	35A/200us		
Max.units Per Circuit Breaker*	B10	7		
	B13	9		
	B16	11		
	B20	14		
	C10	15		
	C13	20		
	C16	25		
	C20	31		

**Note:** \*These are max. values calculated out of inrush current! Please consider not to exceed the maximum rated continuous current of the circuit breaker. Calculation uses typical values from ABB series S200 as a reference. Actual values may differ due to used circuit breaker types and installation environment.

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## Output Parameters

Parameter	Condition	Min.	Typ.	Max.
Output Accuracy	@230VAC, 50Hz, full load	--	±5%	--
Ripple & Noise*	Low frequency<120Hz,@230VAC, 50Hz, full load	--	--	15%
Pst LM	@230VAC, 50Hz, full load	--	--	1
SVM	@230VAC, 50Hz, full load	--	--	0.4
Galvanic Isolation	SELV			
Over-Temperature Protection (OTP)	Auto-Recovery If Fault Is Removed			
Short-Circuit Protection (SCP)	Auto-Recovery If Fault Is Removed			
Over-Current Protection (OCP)	Auto-Recovery If Fault Is Removed			

**Note:** \*Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.

## General Parameters

Parameter	Condition	Value
Ambient Temperature Range $t_a$		-20 ... +45°C
Maximum Case Temperature $t_c$	Measured on $t_c$ point indicated of the product label	90°C
Max.case Temp.In Fault Condition		110°C
Storage Temperature Range		-20...70°C
Relative Humidity	Non condensing	5..85%
Surge Transient Protection	L-N L/N-PE	2 2kV
Environmental Rating		Indoor
IP Rating		IP44
Mains Switching Cycles		>100,000
Expected Lifetime	$T_{cmax}=90^{\circ}C$ , 0.2%/1000h failure rate	50,000h

## Physical Parameters

Housing Material	PC
Type of Connection	Cable
Dimensions(LxWxH)	175x58x16mm
Mounting Hole Spacing	163x50mm
Weight	156g (Typ.)

## Standards\*

Safety Standards	EN 61347-1, EN 61347-2-13, EN 62493
Performance	EN 62384
EMC Standards	EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547

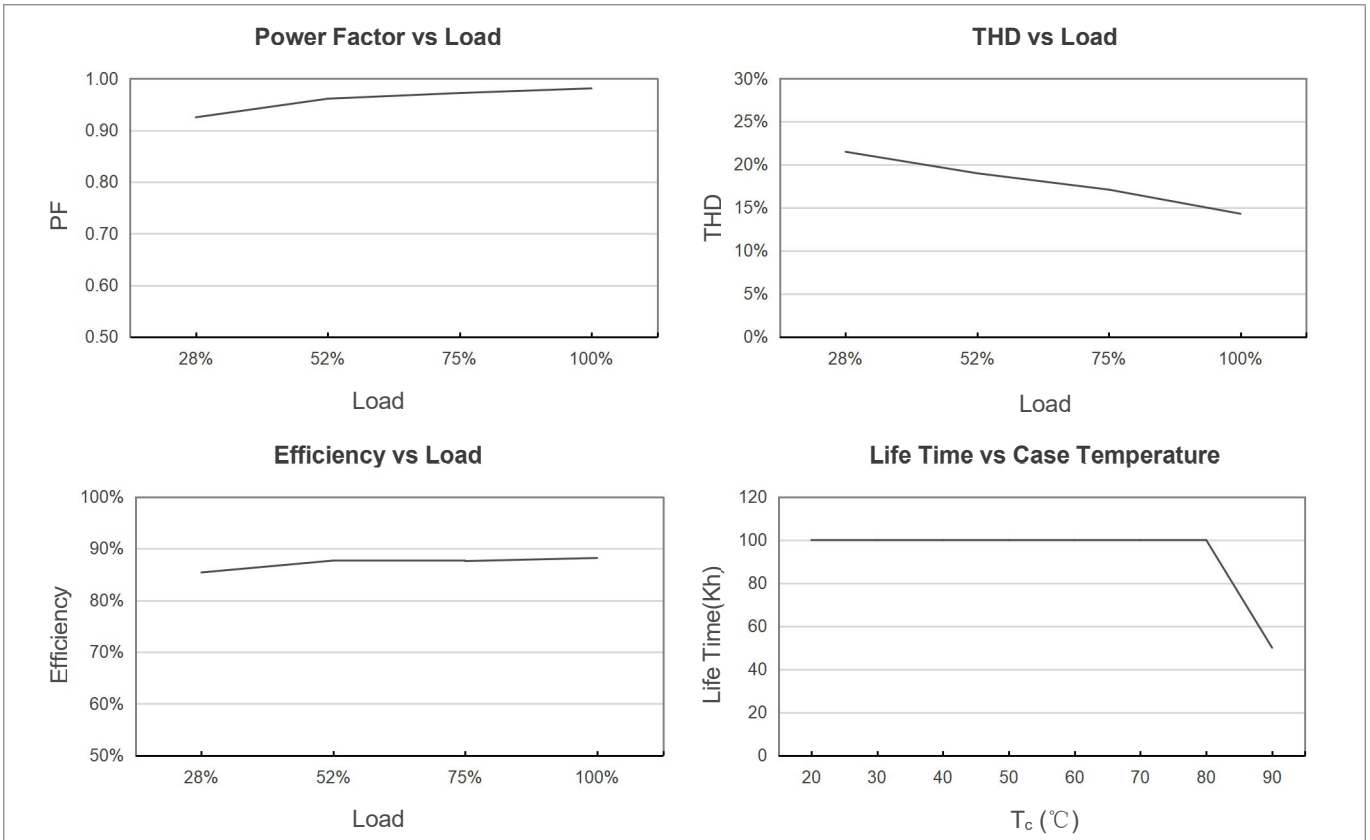
**Note:** \*The above refers to the standards the product design complies with. For specific certifications obtained, please refer to page 1.

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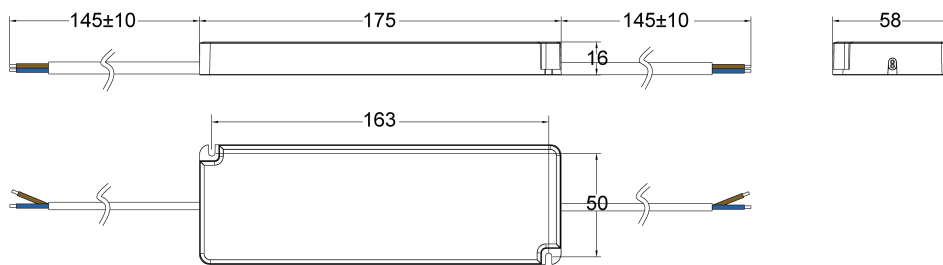
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## Product Characteristic Curve

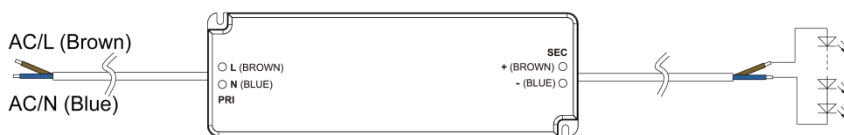


## Appearance of size

### Dimension Drawing (mm)



### Wiring Diagram



### Wire information

Function	Wire color	Type
VAC in (L)	Brown	VDE H03VVH2-F 2x0.75
VAC in (N)	Blue	VDE H03VVH2-F 2x0.75
LED+	Brown	VDE H03VVH2-F 2x0.75
LED-	Blue	VDE H03VVH2-F 2x0.75

Note: 1. Hot plug-in is not supported. Always connect or disconnect LED loads with the power completely turned off.

2. 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.