

# Constant Voltage LED Power Supply

SL75-12VFM

SL75-24VFM



## Product description

SL75-12/24VFM is an indoor 4 in 1 dimming (Triac+ (0-10V, PWM, Potentiometer)) dimming constant voltage LED driver .Its input voltage range is 220-240VAC and the working range is -20 C~+45C natural cooling and heat dissipation. This product is not only cost-effective, but also integrates 4 dimming methods. In order to improve the safety of the product, open circuit, short circuit and overload protection functions are added to the circuit. This series of products is designed for LED lighting and is suitable for indoor IP20 locations with LED lamps. Complies with European lighting equipment safety regulations while ensuring the safety of users and lighting systems during installation.

## Standards

EN61347-1  
EN61347-2-13  
EN61547  
EN55015  
EN61000-3-2  
EN61000-3-3  
EN62384  
EN62493

## Characteristics

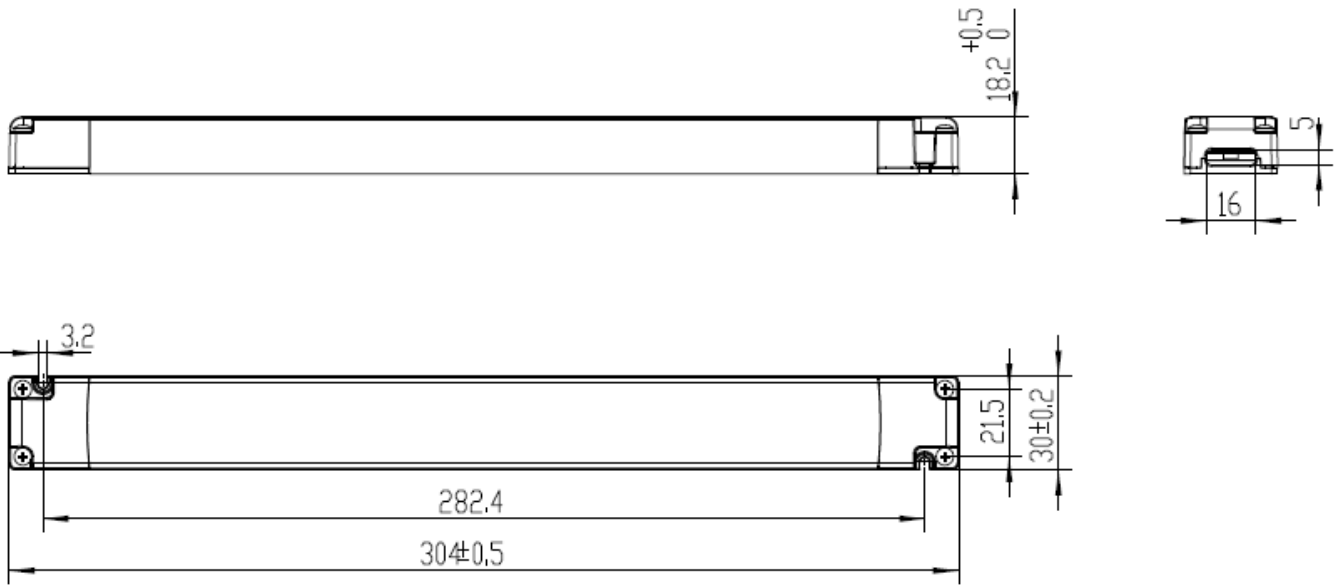
- .Suitable for Triac leading and trailing dimmers
- Suitable for (0-10V, PWM, Potentiometer) dimmer, .
- .Isolated type;
- .Complies with the latest standards
- .AC(220-240VAC)
- . IP20
- .Active PFC
- .Suitable for indoor environments
- .Protection type: short circuit/over temperature/over voltage protection
- .Using plastic shell, filled with glue inside
- . Built-in lightning protection device, capable of meeting differential mode and common mode 1kV
- . Complies with European lighting equipment safety regulations
- .Dimming range: 1-100% (thyristor)
- .Dimming range: 0-100% (three-in-one)
- 5 years warranty

## Specifications

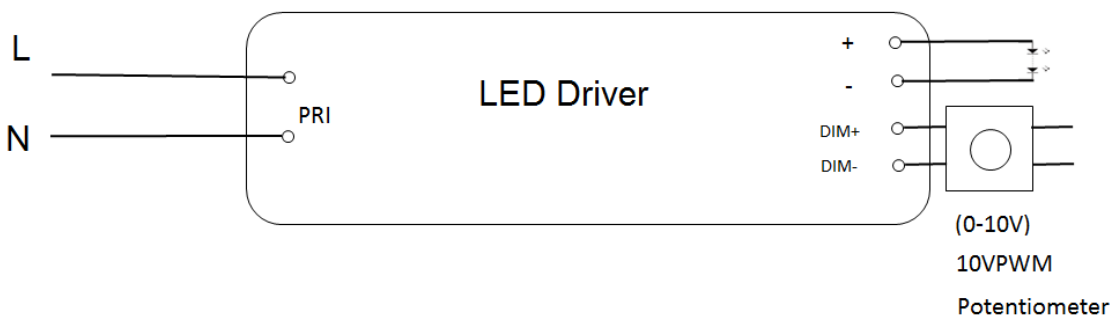
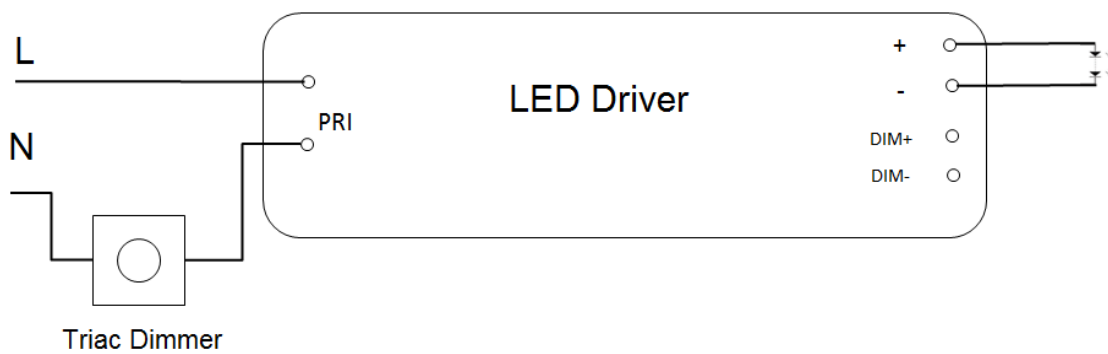
Model		SL75-12VFM	SL75-24VFM
<b>Output</b>	output power(W)	15-75	15-75
	output voltage range(V)	12	24
	output current(A)	1.25 6.25A	0.625 3.125A
	output voltage tolerance	5%	5%
	Line Regulation	2%	2%
	Load Regulation	5%	5%
	Dimming mode	Triac.0-10VPWMPotentiometer	Triac.0-10VPWMPotentiometer
	SVM	0.1	0.1
	Pst	0.1	0.1
	turn on time(S)	0.5	0.5
<b>Input</b>	rated DC supply voltage(Vdc)	NA	NA
	rated supply voltage(Vac)	220-240	220-240
	voltage range(Vac)	198-264	198-264
	line frequency(Hz)	50/60	50/60
	input current(A)	0.4@230V	0.4@230V
	efficiency (TYPE)	89.4%@full load	90.5%@full load
	power factor	0.98@full load	0.98@full load
	Displacementfactor	0.98	0.98
	THD(typ.) THD	<10%@full load 230V	<10%@full load 230V
	inrush current(Ipk) Ipk	65A@twidth=250us	65A@twidth=250us
Leakage current (mA)	0.75@240Vac 60Hz	0.75@240Vac 60Hz	
<b>Protection</b>	short circuit protection	Yes(latch off)	Yes(latch off)
	over load protection	exceed maximum rated load times 1.1-1.6 latch off	exceed maximum rated load times 1.1-1.6 latch off
	Over voltage protection	Yes(latch off)	Yes(latch off)
	Over temperature protection	Yes(latch off)	Yes(latch off)
	surge capacity	L-N: 1KV	L-N: 1KV
	Withstand voltage	Input-Output3750V/5mA/1min	Input-Output3750V/5mA/1min
<b>Ambient and Life</b>	Ta(C)	-20-45	-20-45
	Tc max.(C)	max.85	max.85
	Storage Temperature(C)	-40...80	-40...80
	ambient humidity range	5%...85%RH, Not condensing	5%...85%RH, Not condensing

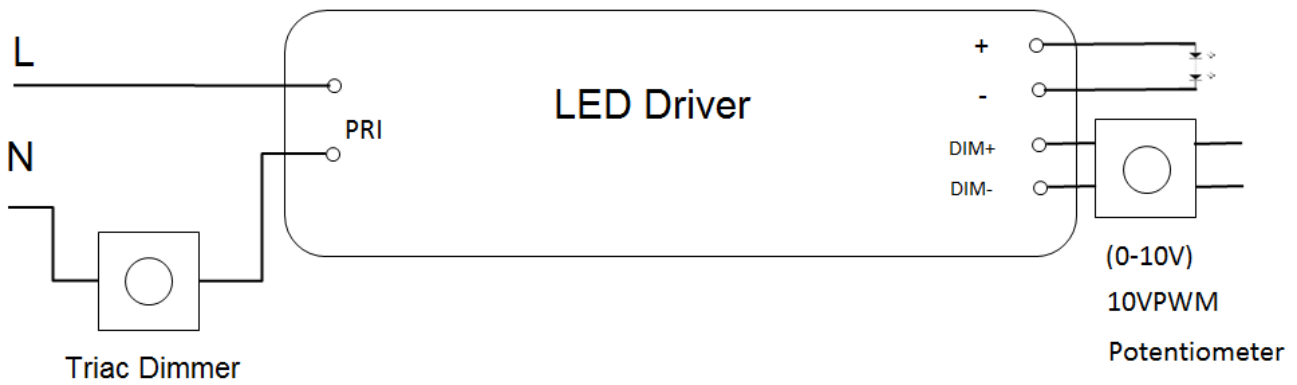
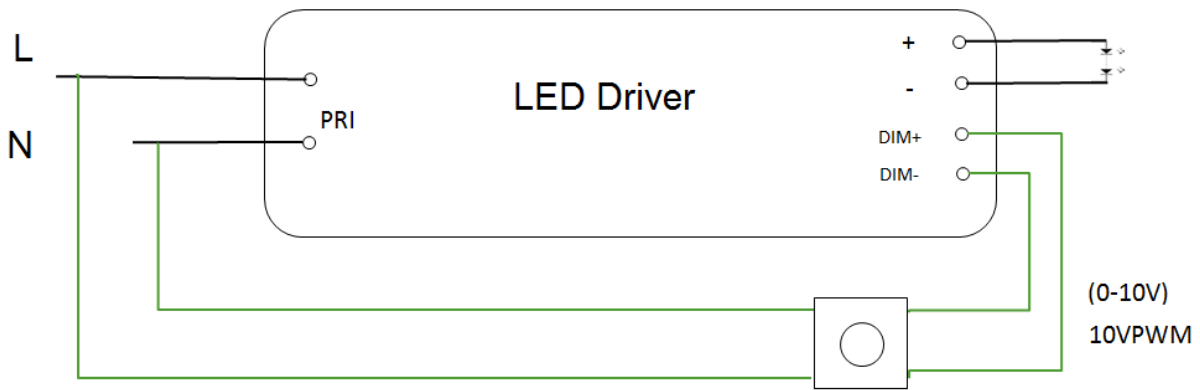
	nominal life-time (hrs)	50'000@Tc 80	50'000@Tc 80
<b>Other</b>	dimensions (LWH)(mm)	304*30*18.2	304*30*18.2
	weight(g)	260	260
	casing material	PC	PC
	housing colour		
	type of protection	IP20	IP20
	protection class	class II	class II
	certificate		
<b>Note</b>	<p>1.Tolerance:includes set up tolerance, line regulation and load regulation.</p> <p>2.Tested at full load,230Vac.Refer to"Power Factor" and "EFFICIENT"curve graphs.</p> <p>3.Calculate the models average efficiency for each test voltage by testing at 100%, 75%, 50%, and 25% of rated current and then computing the simple arithmetic average of these four values.</p> <p>4.All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25 of ambient temperature.</p> <p>5.The power supply 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.</p>		

## Dimensions(mm)



## Wiring Diagram

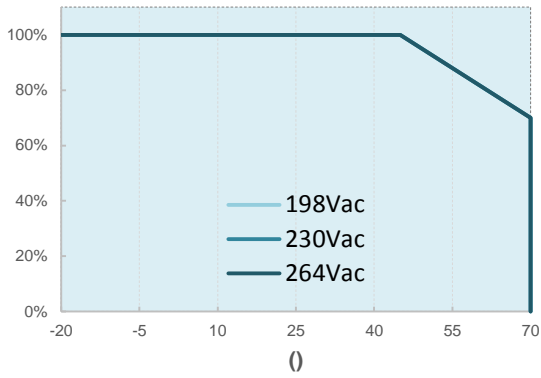




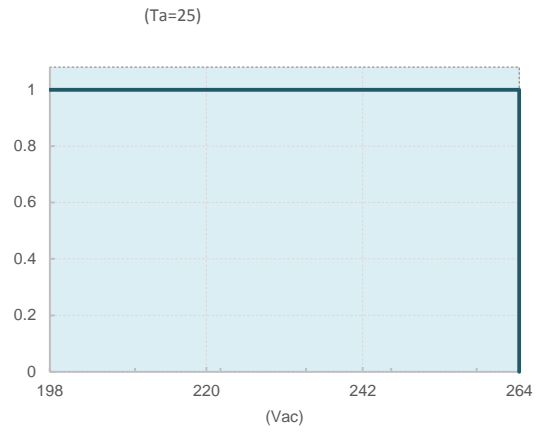
AC	H03VVH2-F 2*0.75mm <sup>2</sup>
DC	12V: + H03VVH2-F 2*1.0mm <sup>2</sup> 24V: + H03VVH2-F 2*0.75mm <sup>2</sup>

# Electrical curves

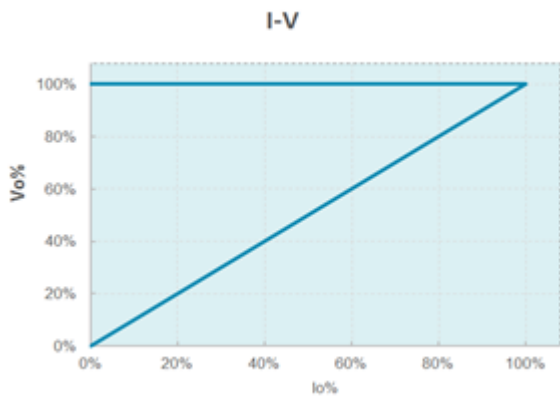
**Fig. 1 Output load-Temperature curve**



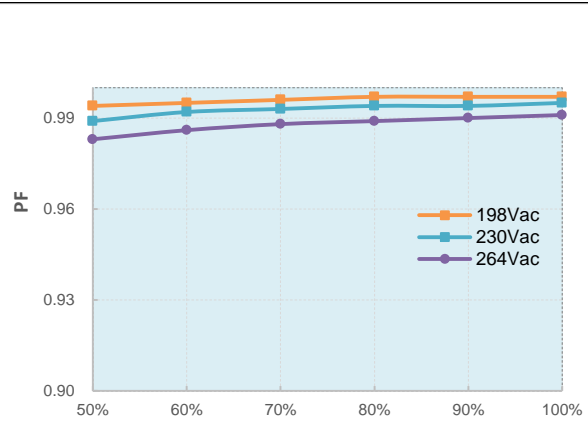
**Fig. 2 Static characteristic curve**



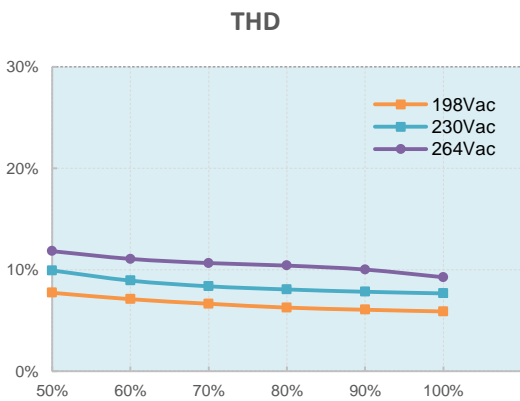
**Fig. 3 I-V curve**



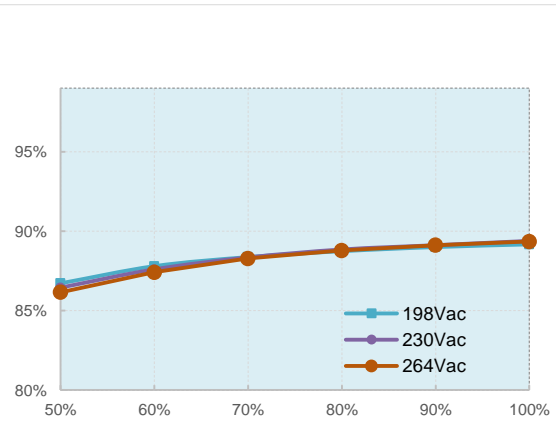
**Fig. 4 Power factor characteristic curve**



**Fig.5 Total harmonic distortion curve THD**



**Fig.6 Efficiency-Load curve**



## MCBS

Model \ MCBS	B10	B13	B16	B20	C10	C13	C16	C20
SL75-12VFM	10	13	16	20	12	16	20	25
SL75-24VFM	10	13	16	20	12	16	20	25

## Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SL75-12VFM			
SL75-24VFM			

## Revision history

Date	Rev.	Remark
2023.7.6	A0	Initial release.
2023.11.23	A1	Official release