# Constant Voltage LED Power Supply FCV Ultrathin Series

SLD75-24VFD-EU SLD75-48VFD-EU SLD100-24VFD-EU SLD100-48VFD-EU



### Product description:

This type of power supply is an exclusively designed stabilized power supply for LED lamp. With constant voltage (CV) technology, it is suitable for constant voltage lamps (24V/48V) connected in parallels. As dimming with PWM output, a switch is not recommend to be connected between power supplier and lamps.

The built-in protection circuit will shut down the power supply in case of such faults as: open circuit, short circuit, over load. The power supply will restart automatically after fault correction.



#### Standards:

EN61347-1

EN61347-2-13

EN61547

EN55015

EN61000-3-2

EN61000-3-3

EN62384

EN62493

EN62386:101,102,207

### **Characteristics:**

- Independent power supply for constant voltage LED lamp
- Class II protection against electric shock from direct and indirect contact
- Ultraslim design only 22mm on height
- Standby power consumption≤0.5W
- Meet L-N 1KV surge immunity level
- Open circuit, short circuit, over load and over temperature protection
- Auto restart after removal of fault conditions
- Class I and II lamp application
- ECO design, comply with ERP directives
- Comply with DALI2.0 deepin dimming to 0.1%
- Warranty: 5 Years

Official version Last update: 19 May, 2022

Page: 1 of 5

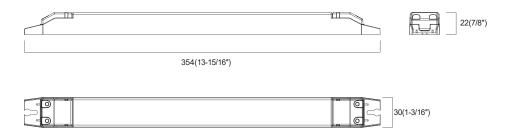


# Specifications:

Model		SLD75-24VFD-EU	SLD75-48VFD-EU	SLD100-24VFD-EU	SLD100-48VFD-EU		
	turn on time(S)	comply with DALI2.0	comply with DALI2.0	comply with DALI2.0	comply with DALI2.0		
Output	output power(W)	75	75	100	100		
	output votage(V)	24	48	24	48		
	output voltage tolerance	≤±3%	≤±3%	≤±3%	≤±3%		
	ripple voltage(mV)	400	600	400	600		
	working current range(A)	0-3.13	0-1.57	0-4.16	0-2.08		
	dimming interface	supplementary insulation DALI interface	supplementary insulation DALI interface	supplementary insulation DALI interface	supplementary insulation		
	dimming range	0.1-100% linear & exponential	0.1%-100% linear & exponent	0.1%-100% linear & exponent	0.1%-100% linear & exponent		
Input	rated DC supply voltage(Vdc)	220-280VDC	220-280VDC	220-280VDC	220-280VDC		
	rated supply voltage(Vac)	220-240	220-240	220-240	220-240		
	voltage range(Vac)	198-264	198-264	198-264	198-264		
	line frequency(Hz)	0/50/60	0/50/60	0/50/60	0/50/60		
	input current(A)	0.38	0.38	0.5	0.5		
	efficiency <sup>2</sup>	≥92.5%@full load	≥93.5%@full load	≥92.5%@full load	≥93.5%@full load		
	average efficiency <sup>3</sup>	≥91%@full load	≥91.5%@full load	≥91%@full load	≥91.5%@full load		
	standby power consumption(W)	≤0.5W	≤0.5W	≤0.5W	≤0.5W		
	power factor	0.95@full load	0.95@full load	0.95@full load	0.95@full load		
	inrush current(lpk) 2	50A/50uS	50A/50uS	50A/50uS	50A/50uS		
Protection	short circuit protection	hiccup mode, restart automatically after fault correction.	hiccup mode, restart automatically after fault correction.	hiccup mode, restart automatically after fault correction.	hiccup mode, restart automatically after fault correction		
	over load protection	exceed maximum rated load times 1.1	exceed maximum rated load times 1.1	exceed maximum rated load times 1.1	exceed maximum rated load times 1.1		
	automatic restart	hiccup mode,r estart automatically after fault correction.	hiccup mode,r estart automatically after fault correction.	hiccup mode,r estart automatically after fault correction.	hiccup mode,r estart automatically after fault correction		
	surge capacity	L-N: 1KV	L-N: 1KV	L-N: 1KV	L-N: 1KV		
	Ta(℃)	-2045	-2045	-2045	-2045		
	Tc max.(℃)	max.90	max.90	max.90	max.90		
Ambient	Storage Temperature(C)	-3080	-3080	-3080	-3080		
and Life	ambient humidity range	5%85%RH, Not condensing	5%85%RH, Not condensing	5%85%RH, Not condensing	5%85%RH, Not condensing		
	nominal life-time(hrs)	50'000@Tc	50'000@Tc	50'000@Tc	50'000@Tc		
	weight(g)	310	310	310	310		
Other	dimensions (L×W×H)(mm)	354X30X22	354X30X22	354X30X22	354X30X22		
	casing material	Plastic	Plastic	Plastic	Plastic		
	housing colour	White	White	White	White		
	type of protection	IP20	IP20	IP20	IP20		
	protection class	class II	class II	class II	class II		
Note	1. Tolerance:includes set up tolerance, line regulation and load regulation. 2. Tested at full load,230Vac.Refer to "Power Factor" and "EFFICIENT" curve graphs. 3. Calculate the model's 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. 4. All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25 of ambient temperature. 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.						



# Dimensions(mm):

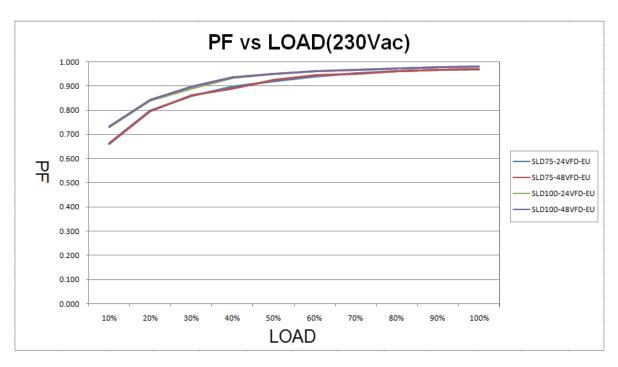


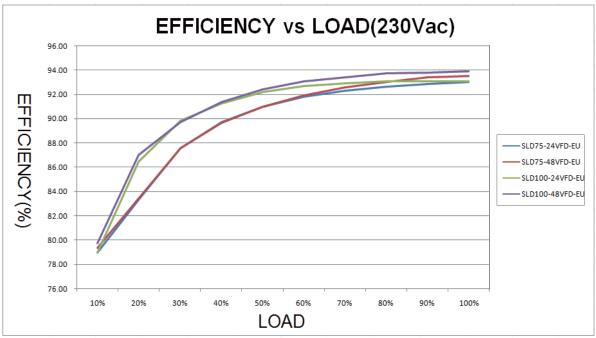
# Wiring Diagram





## **Electrical curves:**





note
For constant current power supply,"LOAD" means the percentage of the maximum rated output voltage.
For constant voltage power supply,"LOAD" means the percentage of the maximum rated output current.



## MCBS information:

Miniature circuit breaker Model Model	B10	B13	B16	B20	C10	C13	C16	C20
SLD75-24/48VFD-EU	17	22	27	34	19	25	31	39
SLD100-24/48VFD-EU	13	16	20	26	15	19	24	30

## Order information:

Order.No.	Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
1001-610228-0130	SLD75-24VFD-EU	30	430x270x215	7.4
1001-610230-0130	SLD75-48VFD-EU	30	430x270x215	7.4
1001-610223-0130	SLD100-24VFD-EU	30	430x270x215	7.4
1001-610229-0130	SLD100-24VFD-EU	30	430x270x215	7.4

# Sales & Technical Support:

#### SELF Electronics Co.,Ltd.(Headquarters)

Add: No. 1345 JuXian Road, Ningbo Hi Tech Park, Ningbo, China 315103 Phone: +86-574-2880-5765, +86-574-2880-5658 (for English assistance) +86-574-2880-5678 (for Chinese assistance)

Fax: +86-574-28805656

E-mail: sales@self-electronics.com http://www.self-electronics.com

#### SELF Electronics Co.,Ltd.,Shenzhen Office

 $\label{eq:Add:Room2007} Add: Room2007, Xinglang Xuan, Xinghemingju, Fuming Rd., Futian District, Shenzhen$ 

Tel: +86-755-8355-8850 Fax: +86-755-8355-8840

E-mail: szsales@self-electronics.com

#### **SELF Electronics Germany GmbH**

August-Horch-Str. 7,51149 Cologne Phone: +492203-18501-0 Fax: 492203-18501-199

E-mail: saleseu@self-electronics.com

