



PRODUCT FEATURES

- · LED Driver with 12way distributor and 1800mm powercord
- · Input: 100~240VAC, 50/60 Hz
- · Output: Max. 3.15A, DC24V, LED Lamp Max. 75W
- · Life time: 40,000hrs (Min.) Half Load @25°C
- · Electronic Safety Isolating LED Driver for DC24V LED
- · Suitable for LED luminaire or appliance such as lighting installation or furniture
- \cdot Class II Protection against electric shock from direct and indirect contact
- · Protections: short circuit / overload / overvoltage / over temperature
- · Built in current sharing function (Max. 8 units)
- · Built in active PFC function
- · Less leakage current
- · Cooling by free air convection

MODEL SELECTION KEY



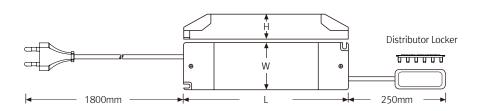




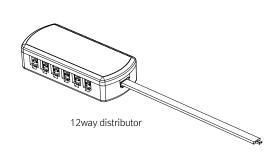


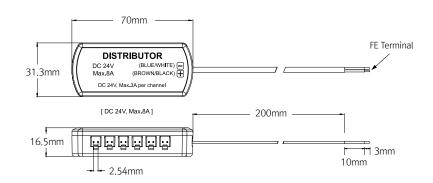


DIMENSION



PARALLEL	Wattage	Lenght	Width	Height
LED DRIVER	(W)	(L)	(W)	(H)
FLC75-24V-P	75W	180mm	60mm	30mm







SPECIFICATION

	MODEL	FLC75-24V-P					
	DC VOLTAGE	24V					
	RATED CURRENT	3.15A					
	MAX POWER	75W					
	TRANSIENT RESPONSE	8 ms, full load to Half load, 230VAC Input					
	DC OUTPUT WIRE	AWG #18, UL1007 2C or eqv					
	RIPPLE & NOISE (max.) Note.2	240mV&300mV					
OUTPUT	VOLTAGE RANGE	DC 22.8~25.2V					
	LOAD REGULATION Note.3	+/- 1% Max					
	LINE REGULATION	+/- 1% Max					
	CONSTANT VOLTAGE (CV) MODE LOAD REGULATION	+/- 5% Max (Voltage Setting Adjustable via on-board pot: +5% / -5%)					
	START-UP TIME	1 sec. Typical @start -up to full load, 230VAC input					
	HOLD UP TIME (Typ.)	10ms @ full load, 230VAC input 47-63 Hz					
	VOLTAGE RANGE Note.4	100~240VAC, 50/60Hz					
	RATED CURRENT	1A max 100VAC / 0.5 Max. 230VAC					
	RATED POWER	85W(100Vac) / 82W(230VAC)					
INPUT	FREQUENCY RANGE	47-63 Hz					
1141 01	POWER FACTOR (Typ.)	Min. 0.9 @ 100-240VAC, Full load					
	THD	⟨ 15% @ full load					
	INRUSH CURRENT (Typ.)	60A@230VAC input, 25℃, cold start-up					
	LEAKAGE CURRENT	0.075mA (100~240VAC)					
	SHORT CIRCUIT	Hiccup-Mode, Auto-Recovery upon removal of short circuit condition.					
	OVER CURRENT PROTECTION	110% Max					
PROTECTION	OVER VOLTAGE	110% Max					
	OVER TEMPERATURE	105℃ Max, Hiccup-Mode, Auto-Recovery					
	OPERATING TEMP.	0 ~ 50°C(Refer to "Derating Curve")					
	STORAGE TEMP.	-40 ~ +90°C, 5~ 95% RH non-condensing					
ENVIRONMENT	EFFICIENCY(Typ)	230VAC input, Full Load, 89% Typ					
	COOLING	Convection					
	VIBRATION	1 ~ 200Hz, 2G 10min./1cycle, period for 30min. each along X, Y, Z axes					
	SAFETY STANDARDS	UL8750, UL1310					
	SAFETY STANDARDS 2	UL8750, UL1910					
SAFETY & EMC	WEATHERABILITY	EN60529 IP 20					
(Note 6)	WITHSTAND VOLTAGE	I/P-O/P, 3KVAC (IEC60950-1)					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25c / 70%RH					
	EMC/RFI	CISPR-22 Class B FCC part 15 Class B EN 55015					
ENVIRONMENT	MTBF	20,000Hr(Min) (Full load @ 25℃ Ambient, Based on MIL-217F)					
	DIMENSION	180*60*30mm (L*W*H)					
	PACKING	0.39kg;30pcs/13.82kg/0.69CUFT					
NOTE	 All parameters Not specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uf &47 uf parallel capacitor. Tolerance includes set up tolerance, line regulation and load regulation. Derating may be needed under low input voltages. Please check the derating curve for more details. The ambient temperature derating of 5/1000m is needed for operating altitude greater than 2000m(6500ft) CISPR-22 Class B FCC part 15 Class B EN 55015 						



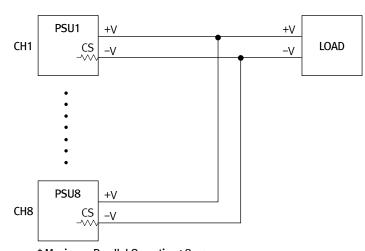
MAXLMUM LOADING OF AUTOMATLC CLRCULT BREAKERS

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20	B20	
Installation Φ	1.5mm²	1.5mm²	2.5mm²	2.5mm²	1.5mm²	1.5mm²	2.5mm²	2.5mm²	1max	time
FLC75-24V	12	16	20	24	6	8	10	12	60A	100us

Typical values for MCB from ABB series S200 as reference.

Actual values can differ due to used MCB types and installation environment.

FUNCTION MANUAL



Parallel Operation Caution

In the figure left, the output voltage PSU1~PSU8 must be different. In case of overcurrent, the protection circuit (CC Mode) operates.

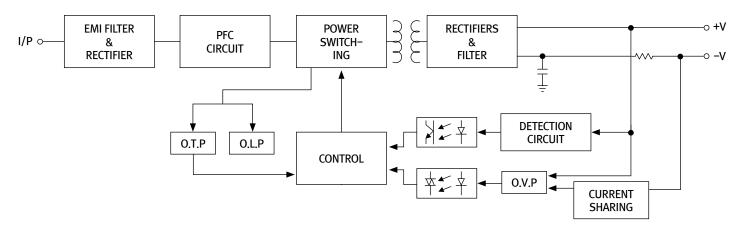
When the voltage drops, current flows from the higher PSU.

Therefore, when one power source reaches the maximum current (75Watt), it is operated in CC Mode, which sets the over-current setting to the rated current, to limit the current.

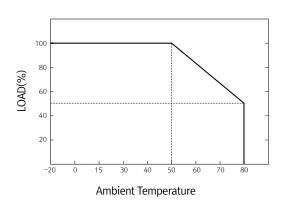
The output wiring must be of the same length and the same thickness to fit the current BALANCE of the parallel operation

* Maximum Parallel Operation: 8pcs

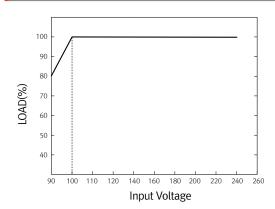
BLOCK DIAGRAM



DERATING CURVE



STATIC CHARACTERISITC





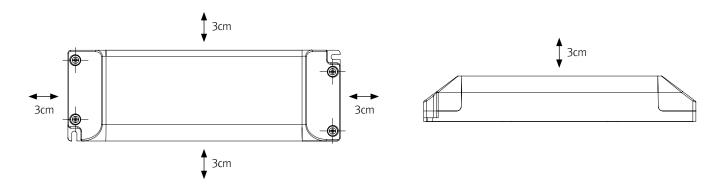
INSTALLATION

Installation Method of Natural Air Cooling

It radiates heat into radiation and convection when power is turned on in the installation space. Mostly it radiates heat into convection. Please hold the cracks enough where the air is flowing. The air doesn't flow when it contacts with heating elements since air has viscous characteristic. The air heats atmosphere nearby itself by its own thermal conduction, which makes air convection a few millimeters away from the heating element. Make an air inlet and outlet on the outside of power supply so that heated air inside does not accumulate. Depending on the direction of the installation of the power supply, the temperature of the internal power element changes and the usable temperature changes. Bind the wires on the input and output side separately to prevent the SURGE voltage or NOISE, coming from the input, from being mixed into the output. Also, bind the wires on the input and output side separately to prevent the NOISE, generated from the load and power, is not to be transmitted to input. Make sure that the output wiring is thick and short.

1. Heat dissipation

- * At least 3cm installation distance around the PSU should be kept as below:
- * Operation Temperature: 0~50°C (Refer to 'Derating Curve')



2. Mounting arrangement



3. Operation

