



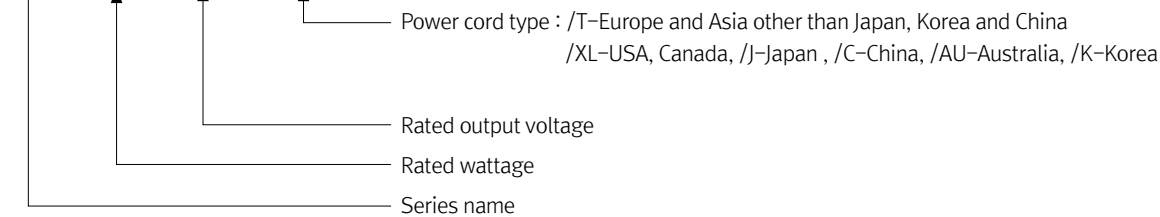
## PRODUCT FEATURES

- LED Driver with 12way distributor and 1800mm powercord
- Input : 100~240VAC, 50/60 Hz
- Output : 1.25A, DC24V, LED Lamp Max. 30W
- 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
- Class II Protection against electric shock from direct and indirect contact
- Protections : short circuit / overload / overvoltage / over temperature
- Built in active PFC function
- Less leakage current
- Cooling by free air convection

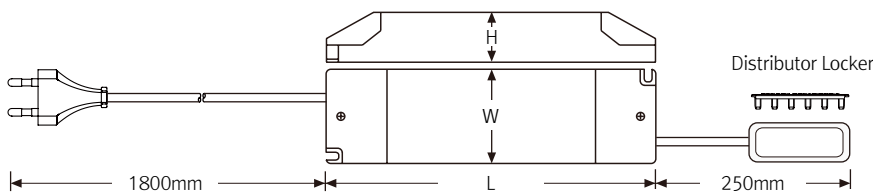
## MODEL SELECTION KEY



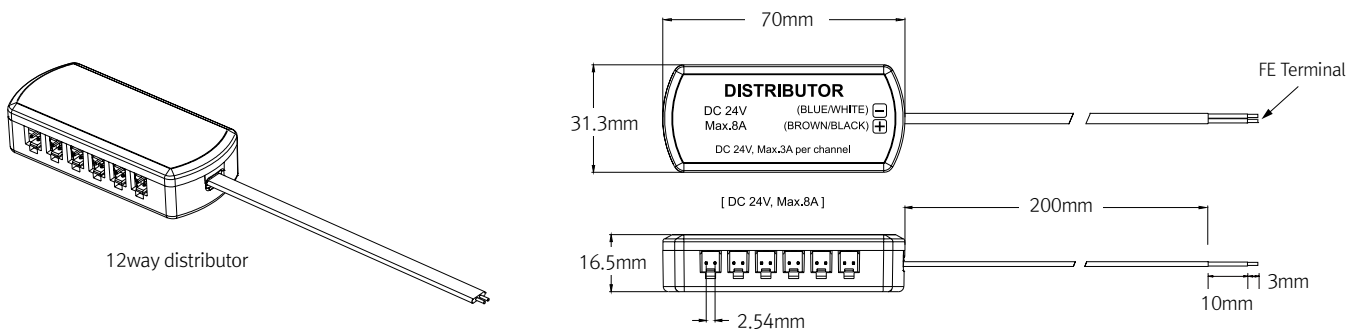
FLC - 30 - 24V - T



## DIMENSION



PARALLEL LED DRIVER	Wattage (W)	Lenght (L)	Width (W)	Height (H)
FLC30-24V	30W	150mm	40mm	30mm



## SPECIFICATION

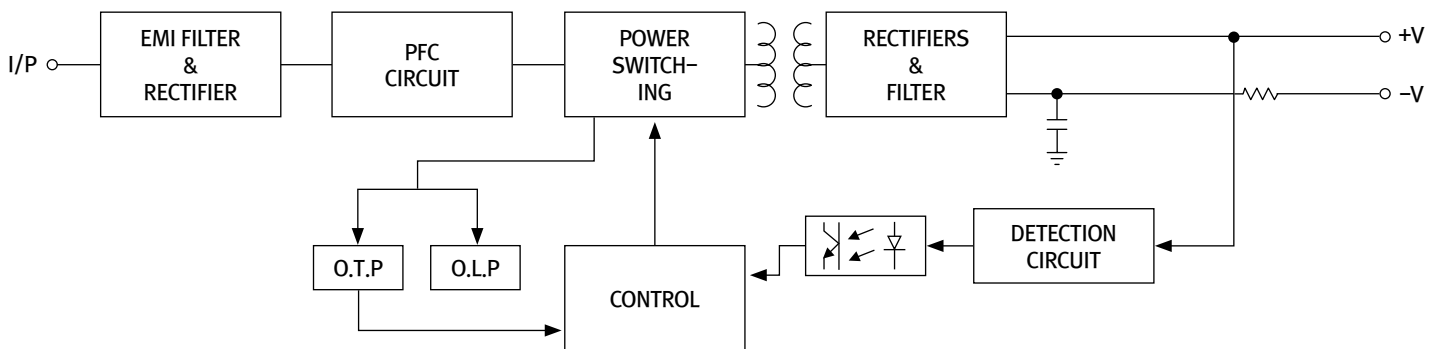
MODEL		FLC30-24V
OUTPUT	DC VOLTAGE	24V
	RATED CURRENT	1.25A
	MAX POWER	30W
	TRANSIENT RESPONSE	8 ms, full load to Half load, 230VAC Input
	DC OUTPUT WIRE	AWG #1005 2C or eqv
	RIPPLE & NOISE (max.) Note.2	200mVp-p
	VOLTAGE RANGE	DC 22.8~25.2V
	LOAD REGULATION Note.3	+/- 1% Max
	LINE REGULATION	+/- 1% 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
INPUT	VOLTAGE RANGE Note.4	100~240VAC, 50/60Hz
	RATED CURRENT	0.45A max 90Vac
	RATED POWER	34~36W
	FREQUENCY RANGE	47-63 Hz
	POWER FACTOR (Typ.)	Min 0.9 @ 100-240VAC, Full load
	THD	< 20% @ Full Load
	INRUSH CURRENT (Typ.)	60A@230VAC input, 25°C, cold start-up
	LEAKAGE CURRENT	1mA (100~240VAC)
PROTECTION	SHORT CIRCUIT	Hiccup-Mode, Auto-Recovery upon removal of short circuit condition.
	OVER CURRENT PROTECTION	110% Max
	OVER VOLTAGE	110% Max
	OVER TEMPERATURE	105°C Max, Hiccup-Mode, Auto-Recovery
ENVIRONMENT	OPERATING TEMP.	-20 ~ +50 °C (Refer to "Derating Curve" )
	STORAGE TEMP.	-30 ~ +80 °C, 5~95% RH non-condensing
	EFFICIENCY(Typ)	Min 82% (90Vac, 47Hz)
	COOLING	Convection
	VIBRATION	1 ~ 200Hz, 2G 10min./1cycle, period for 30min. each along X, Y, Z axes
SAFETY & EMC (Note 6)	SAFETY STANDARDS	UL8750, UL1310
	SAFETY STANDARDS 2	UL8750, UL1910
	WEATHERABILITY	EN60529 IP 20
	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°C Ambient, Based on MIL-217F)
	DIMENSION	150*40*30mm (L*W*H)
	PACKING	0.323kg;25pcs/8.54kg/0.9CUFT
NOTE	<p>1. All parameters Not specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature.                  2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 10uf &amp; 100uf parallel capacitor.                  3. Tolerance includes set up tolerance, line regulation and load regulation.                  4. Derating may be needed under low input voltages. Please check the derating curve for more details.                  5. The ambient temperature derating of 5/1000m is needed for operating altitude greater than 2000m(6500ft)                  6. CISPR-22 Class B FCC part 15 Class B EN 55015</p>	

## MAXIMUM LOADING OF AUTOMATIC CIRCUIT BREAKERS

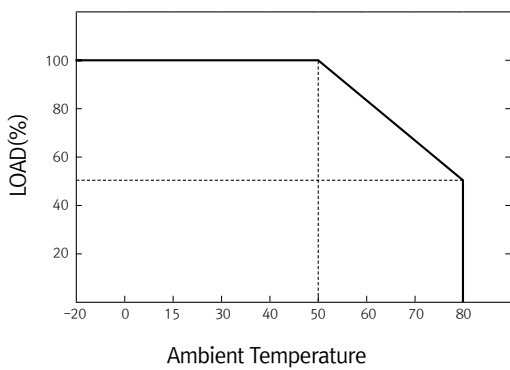
Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20	B20	
Installation $\phi$	1.5mm <sup>2</sup>	1.5mm <sup>2</sup>	2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	1.5mm <sup>2</sup>	1.5mm <sup>2</sup>	2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	1 max	time
FLC30-24V	12	16	20	24	6	8	10	12	60A	95ns

Typical values for MCB from ABB series S200 as reference.  
Actual values can differ due to used MCB types and installation environment.

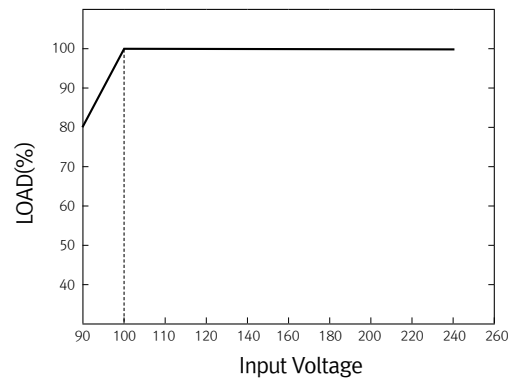
## BLOCK DIAGRAM



## DERATING CURVE



## STATIC CHARACTERISITC



## INSTALLATION

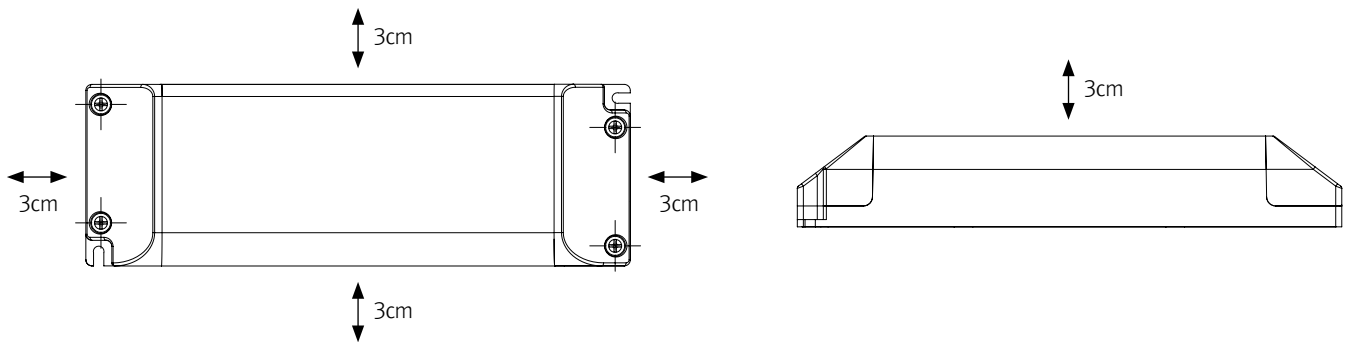
### Installation Method of Natural Air Cooling

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

