MEAN WELL

90W AC-DC Single Output Desktop

FM90C series



Features :

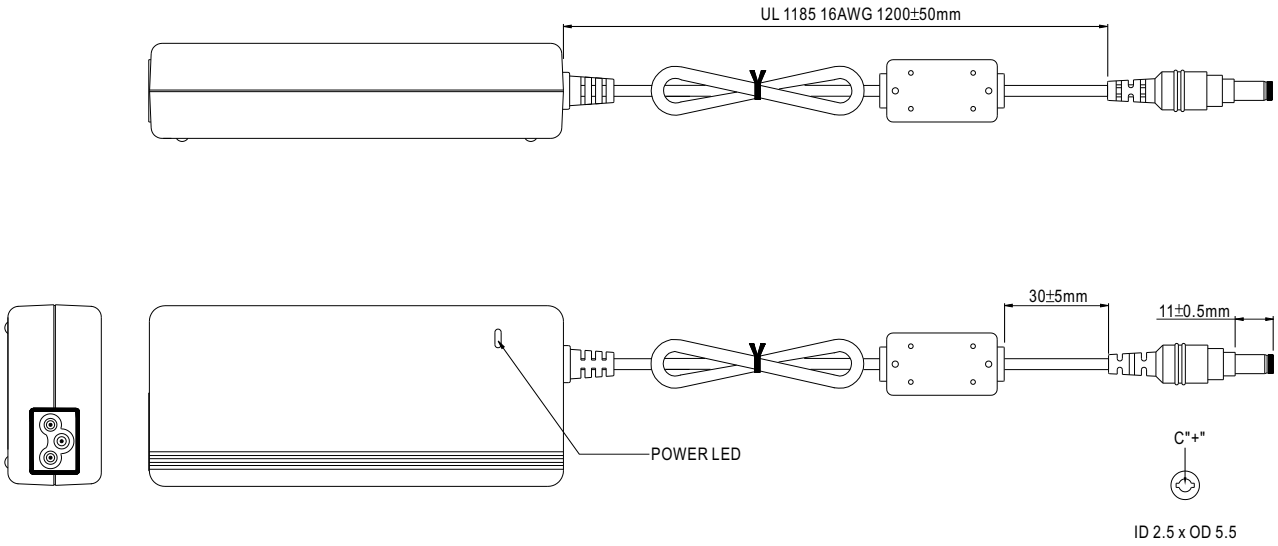
- Universal AC input / Full range
- No load power consumption<0.75W@240VAC
- 3 pole AC inlet IEC320-C6
- Class I power (with earth pin)
- Built-in active PFC function, PF>0.90
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- LED indicator for power on
- Approvals: UL / CUL / TUV / CB / FCC / CE
- 1 year warranty

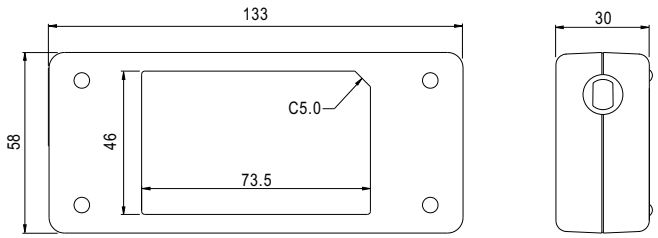
SPECIFICATION

ORDER NO.		FM90C12-P1M	FM90C19-P1M	FM90C24-P1M
OUTPUT	SAFETY MODEL NO.	FDF0903-C	FDF0903-A	FDF0903-D
	DC VOLTAGE Note.2	12V	19V	24V
	RATED CURRENT	6.60A	4.75A	3.75A
	CURRENT RANGE	0~ 6.60A	0 ~ 4.75A	0 ~ 3.75A
	RATED POWER	80W	90W	90W
	RIPPLE & NOISE (max.) Note.3	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE TOLERANCE Note.4	±5.0%	±3.0%	±3.0%
	LINE REGULATION Note.5	±1.0%	±1.0%	±1.0%
	LOAD REGULATION Note.6	±4.0%	±2.0%	±2.0%
	SETUP, RISE , HOLD UP TIME	300ms, 50ms , 10ms at full load		
INPUT	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR	PF≧0.90/230VAC		
	EFFICIENCY (Typ.)	80%	80%	82%
	AC CURRENT	1.3A/100VAC		
	INRUSH CURRENT (max.)	100A/240VAC		
	LEAKAGE CURRENT (max.)	0.75mA / 240VAC		
PROTECTION	OVERLOAD	110 ~ 150% rated output voltage		
		Protection type : Hiccup mode, recovers automatically after fault condition is removed		
	OVER VOLTAGE	110 ~ 150% rated output voltage		
		Protection type : Clamp by zener diode		
ENVIRONMENT	WORKING TEMP.	0 ~ + 50℃ (Refer to output load derating curve)		
	WORKING HUMIDITY	20% ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03% / ℃ (0 ~ 50℃)		
	VIBRATION	10 ~ 500Hz, 2G 3AXES 10min./1cycle, period for 60min. each along X, Y, Z axes		
SAFETY & EMC (Note. 7)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved		
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC; I/P-FG: 1.5KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG: 100M ohms/500VDC/25℃/70% RH		
	EMI CONDUCTION & RADIATION	Compliance to EN55022(CISPR22) class B, FCC part 15 class B		
	HARMONIC CURRENT	Compliance to EN61000-3-2,3		
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A		
OTHERS	MTBF	30K hrs min. MIL-HDBK-217F (25℃)		
	DIMENSION	133*58*30mm (L*W*H)		
	PACKING	406g; 32pcs/14.5Kg/CARTON		
CONNECTOR	PLUG	Standard type P1M: 2.5ϕ * 5.5ϕ * 11mm, tuning folk type center positive for stock ; Other type available by customer requested		
	CABLE	Standard type UL1185, 16awg*4fts for stock ; Other type available by customer requested		
NOTE	1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient. 2.DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 4.Tolerence: includes set up tolerance, line regulation, load regulation. 5.Line regulation is measured from low line to high line at rated load. 6.Load regulation is measured from 0% to 100% rated load. 7.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.			

■ Mechanical Specification

Unit:mm



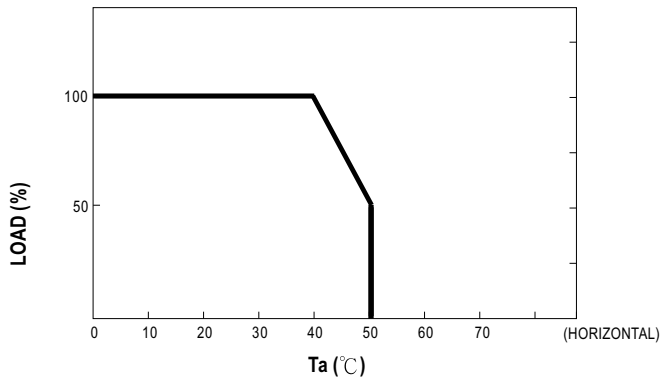


■ Plug Assignment

Standard plug: P1M (option)

P1M	
P/N	OUTPUT
CENTER	+

■ Derating Curve



■ Static Characteristics

