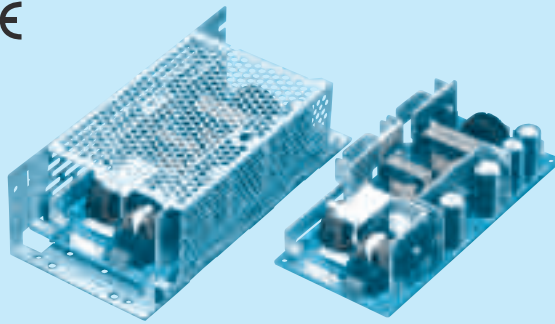


LFP240F

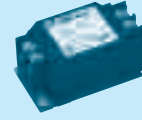
LF P 240 F -□ -□
 ① ② ③ ④ ⑤ ⑥



RoHS



Recommended EMI/EMC Filter
NAC-06-472



High voltage pulse noise type : NAP series
 Low leakage current type : NAM series

- ① Series name
- ② Single output
- ③ Output wattage
- ④ Universal input
- ⑤ Output voltage
- ⑥ Optional *1
- C : with Coating
- G : Low leakage current
- J1 : VH(J.S.T.)connector type
- R : with Remote ON/OFF
- R2 : with Remote ON/OFF
- S : with Chassis
- SN : with Chassis & cover
- T : Vertical terminal block
- U1 : Can be attached the external capacitor unit

Please refer to Instruction manual 6.

This power supply is manufactured by SMD technology. The stress to P.C.B like twisting or bending causes the defect of the unit, so handle the unit with care.

MODEL	LFP240F-24-Y	LFP240F-30-Y	LFP240F-36-Y	LFP240F-48-Y
MAX OUTPUT WATTAGE[W]	300 (480) ^{*2}	300 (480)	302.4 (482.4)	302.4 (480)
DC OUTPUT	Convection	24V 10A (20A)	30V 8A (16A)	36V 6.7A (13.4A)
	Forced air	24V 12.5A (20A)	30V 10A (16A)	36V 8.4A (13.4A)

SPECIFICATIONS

	MODEL	LFP240F-24-Y	LFP240F-30-Y	LFP240F-36-Y	LFP240F-48-Y	
INPUT	VOLTAGE[V]	AC85 - 264 1 φ (Refer to Instruction Manual 1.1 and 3.2) *5				
	CURRENT[A]	ACIN 100V	3.6typ (Io=100%)			
		ACIN 200V	1.8typ (Io=100%)			
	FREQUENCY[Hz]	50 / 60 (47 - 63)				
	EFFICIENCY[%]	ACIN 100V	86.0typ (Io=100%)			
		ACIN 200V	88.5typ (Io=100%)			
	POWER FACTOR	ACIN 100V	0.99typ (Io=100%)			
INRUSH CURRENT[A]	ACIN 100V	15 / 30typ (Io=100%) (Primary inrush current /Secondary inrush current) (More than 3 sec. to re-start)				
	ACIN 200V	30 / 30typ (Io=100%) (Primary inrush current /Secondary inrush current) (More than 3 sec. to re-start)				
LEAKAGE CURRENT[mA]	0.40 / 0.75max (ACIN 100V / 240V 60Hz, Io=100%, According to IEC60950-1 and DEN-AN)					
OUTPUT	VOLTAGE[V]	24	30	36	48	
	CURRENT[A]	Convection *2	10 (Peak 20)	8 (Peak 16)	6.7 (Peak 13.4)	5 (Peak 10)
		Forced air *2	12.5 (Peak 20)	10 (Peak 16)	8.4 (Peak 13.4)	6.3 (Peak 10)
	LINE REGULATION[mV]	96max				
	LOAD REGULATION[mV]	150max				
	RIPPLE[mVp-p] *3	0 to +50°C	120max			
		-10 - 0°C	160max			
	RIPPLE NOISE[mVp-p] *3	0 to +50°C	150max			
		-10 - 0°C	180max			
	TEMPERATURE REGULATION[mV]	0 to +50°C	240max			
		-10 to +50°C	290max			
	DRIFT[mV]	96max				
	START-UP TIME[ms]	350typ (ACIN 100V, Io=100%)				
	HOLD-UP TIME[ms]	20typ (ACIN 100V, Io=100%)				
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	21.60 to 27.50		27.00 to 33.00	32.40 to 39.60	39.60 to 52.80	
OUTPUT VOLTAGE SETTING[V]	24.00 to 24.96		30.00 to 31.20	36.00 to 37.44	48.00 to 49.92	
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 101% of rating and recovers automatically				
	OVERVOLTAGE PROTECTION[V]	27.60 to 33.60	34.50 to 42.00	41.40 to 50.40	55.20 to 67.20	
	OPERATING INDICATION	Not provided				
	REMOTE SENSING	Not provided				
ISOLATION	REMOTE ON/OFF	Option (Refer to Instruction Manual 6)				
	INPUT-OUTPUT-RC	*6 AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)				
	INPUT-FG	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)				
	OUTPUT-RC-FG	*6 AC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)				
	OUTPUT-RC	*6 AC100V 1minute, Cutoff current = 25mA, DC100V 10MΩ min (At Room Temperature)				
ENVIRONMENT	OPERATING TEMP., HUMID. AND ALTITUDE *5	-10 to +70°C, 20 - 90%RH (Non condensing) (Refer to Instruction Manual 3.2), 3,000m (10,000feet) max				
	STORAGE TEMP., HUMID. AND ALTITUDE	-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max				
	VIBRATION	10 - 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axis				
	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis				
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (AT ONIY AC input)	UL60950-1, C-UL (CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN				
	CONDUCTED NOISE	Complies with FCC-B, VCCI-B, CISPR22-B, EN55011-B, EN55022-B				
	HARMONIC ATTENUATOR	Complies with IEC61000-3-2 (Class A) *8				
OTHERS	CASE SIZE/WEIGHT	84 X 46 X 180mm [3.31 X 1.81 X 7.09 inches] (W X H X D) / 540g max (without chassis and cover)				
	COOLING METHOD	Convection / Forced air (Refer to Instruction Manual 3.1 and 3.2) *5				

*1 Specification is changed at option, refer to Instruction Manual.

*2 Peak loading for 10sec. And Duty 40% max, refer to Instruction Manual 5. In detail.
 () means peak current. There is a possibility that an internal device is damaged when the specification is exceeded.

*3 This is the value that measured on measuring board with capacitor of 22 μF at 150mm from output terminal.

Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM103).

*4 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

*5 Derating is required.

*6 Applicable when remote control (optional) is added.

*7 Please contact us about dynamic load and input response.

*8 Please contact us about another class.

*9 By attaching an external capacitor unit, it is possible to extend the hold-up time.

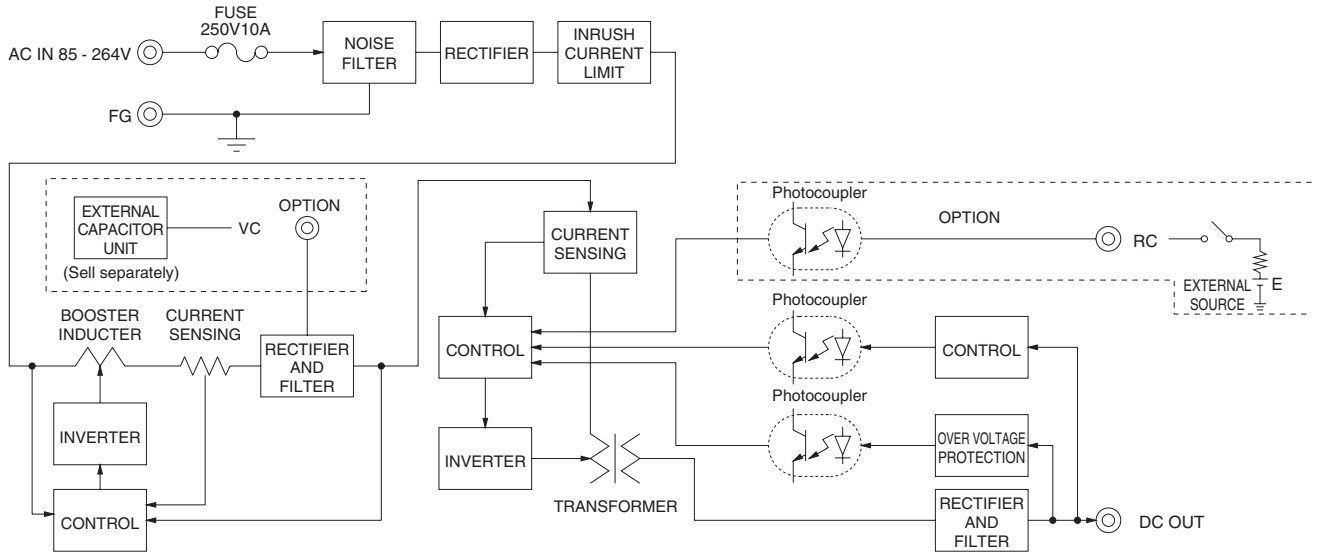
* To meet the specifications. Do not operate over-loaded condition.

* Parallel operation is not possible.

* Derating is required when operated with chassis and cover.

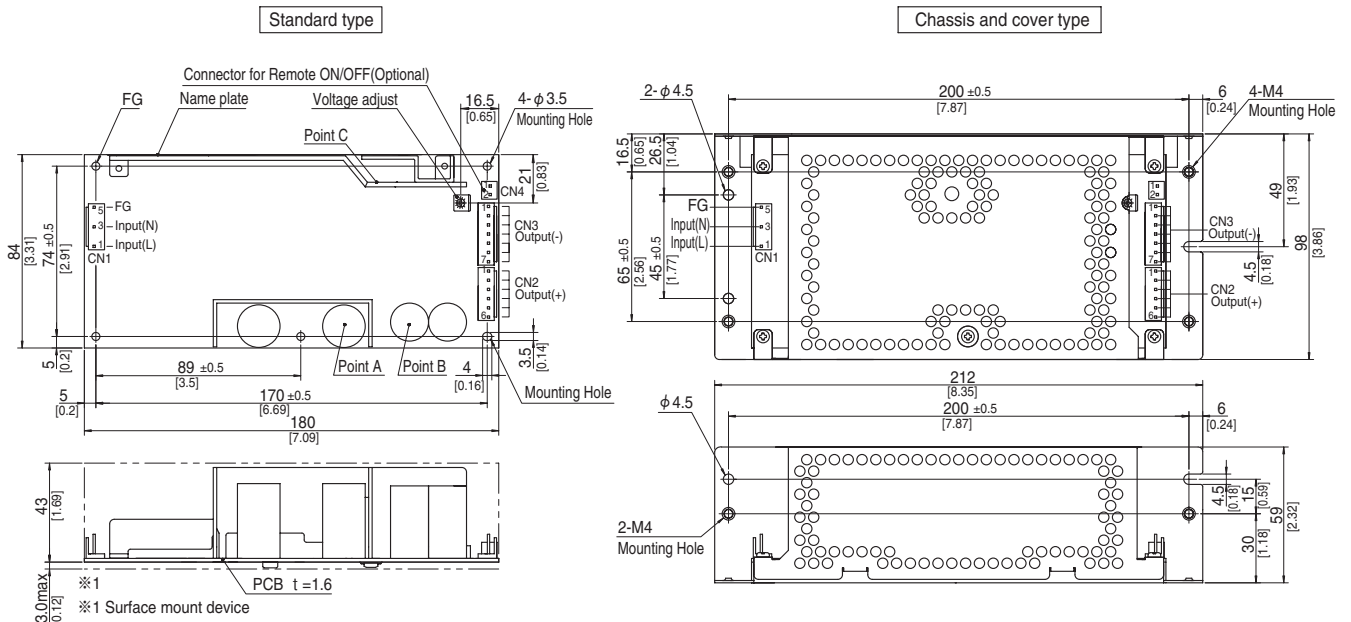
* Sound noise may be generated by power supply in case of pulse load.

Block diagram



External view

※ External size of option is different from standard model.



- ※ 5 Mounting holes are existing.
- ※ The back side of P.C.B. of the power supply is assembled some SMDs.
Be attention not to bump against the attached area by vibration.
- ※ Use the spacer of 8mm length or more regarding insulation.
And do not use press-fitting bush.
- ※ Point A, Point B, Point C are thermometry points. Please refer to Instruction Manual 3.

I/O Connector	Mating connector	Terminal
CN1	1-1123724-3	1123721-1
		1318912-1
CN2	1-1123723-6	1123721-1
		1318912-1
CN3	1-1123722-7	1123721-1
		1318912-1

(Mfr:Tyco Electronics)

- ※ I/O Connector is Mfr. Tyco Electronics
- ※ Option:-J1:VH(J.S.T) connector type.

<PIN CONNECTION>

CN1		CN2		CN3	
Pin No.	Input	Pin No.	Output	Pin No.	Output
1	AC(L)	1 to 6	+V	1 to 7	-V
2					
3	AC(N)				
4					
5	FG				

※ Keep drawing current per pin below 5A for CN2,CN3.

- ※ Tolerance : ± 1 [± 0.04]
- ※ Weight : 540g max (without chassis and cover)
- ※ PCB material : CEM3
- ※ Optional chassis and cover material : Electric galvanizing steel board.
- ※ Dimensions in mm, []=inches
- ※ Mounting torque (Mounting hole of chassis) :1.5N · m (16kgf · cm) max

Connector type

CN4 Option (Mfr:J.S.T)

PIN No.	Contents
1	RC(+)
2	RC(-)

Barrier strip type

Model B2B-XH-A
Mating Connector (Terminal)
XHP-2
(BXH-001T-P0.6
or SXH-001T-P0.6)