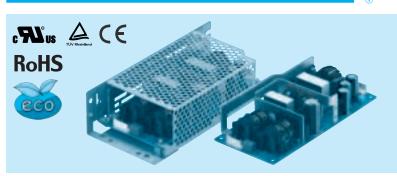
LFA150F

A 150

LFA



Recommended EMI/EMC Filter NAC-04-472

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

*The EMI/EMC Filter is recommended

to connect with several devices

S: with Chassis SN: with Chassis & cover

Y: with Potentiometer Please refer to Instruction manual 5.

1) Series name 2) Single output 3) Output wattage 4) Universal input

⑤Output voltage

© Optional *1
C: with Coating
G: Low leakage current
H: with the function to be acceptable

to output peak current (only 24V)
J1: VH(J.S.T.)connector type
R: with Remote ON/OFF
R2: with Remote ON/OFF

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	LFA150F-3R3-Y	LFA150F-5-Y	LFA150F-12	LFA150F-15	LFA150F-24	LFA150F-24-H	LFA150F-36	LFA150F-48
MAX OUTPUT WATTAGE[W] *5	99	150	150	150	151.2	151.2 (189.6)	151.2	153.6
DC OUTPUT *5	3.3V 30A	5V 30A	12V 12.5A	15V 10A	24V 6.3A	24V 6.3 (7.9)A	36V 4.2A	48V 3.2A

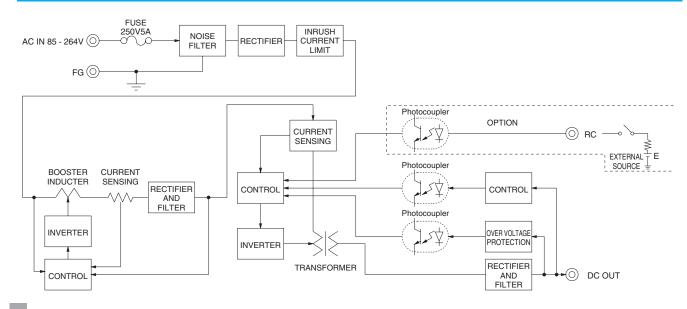
SPECIFICATIONS

	MODEL		LFA150F-3R3-Y	LFA150F-5-Y	LFA150F-12	LFA150F-15	LFA150F-24	LFA150F-24-H	LFA150F-36	LFA150F-48	
	VOLTAGE[V]		AC85 - 264 1 φ (Refer to Instruction Manual 1.1 and 3.2) *4								
	CUDDENTIAL	ACIN 100V	1.4typ (Io=100%) 2.0typ (Io=100%)								
	CURRENT[A]	ACIN 200V	0.7typ (lo=100%) 1.0typ (lo=100%)								
	FREQUENCY[Hz]	50 / 60 (47 - 63)									
		ACIN 100V	80.0typ	82.5typ	82.5typ	84.0typ	85.0typ	85.0typ	85.0typ	85.5typ	
INPUT	EFFICIENCY[%]	ACIN 200V	82.0typ	85.5typ	85.0typ	86.5typ	87.5typ	87.5typ	87.5typ	88.0typ	
		ACIN 100V	0.98typ	0.99typ							
	POWER FACTOR (Io=100%)	ACIN 200V	0.92typ 0.95typ								
	INDUCUI QUIDDENTIAL	ACIN 100V	15typ (Io=100%) (At cold start) (Ta=25 $^{\circ}$ C)								
	INRUSH CURRENT[A]	ACIN 200V	30typ (Io=100%) (At cold start) (Ta=25℃)								
	LEAKAGE CURRENT[mA]		0.40 / 0.75max (ACIN 100V / 240V 60Hz, Io=100%, According to IEC60950-1 and DEN-AN)								
	VOLTAGE[V]		3.3	5	12	15	24	24	36	48	
	CURRENT[A]	*5	30	30	12.5	10	6.3	6.3 (Peak 7.9)	4.2	3.2	
	LINE REGULATION	mV] *7	20max	20max	48max	60max	96max	96max	144max	192max	
	LOAD REGULATION			40max	100max	120max	150max	150max	240max	240max	
	RIPPLE[mVp-p] RIPPLE NOISE[mVp-p]		80max	80max	120max	120max	120max	240max	150max	150max	
		-10-0℃ *2	140max	140max	160max	160max	160max	320max	200max	200max	
		0 to +40℃ *2	120max	120max	150max	150max	150max	300max	250max	250max	
OUTPUT		-10-0℃ *2	160max	160max	180max	180max	180max	360max	300max	300max	
		0 to +40℃	50max	50max	120max	150max	240max	240max	360max	480max	
	TEMPERATURE REGULATION[mV]	-10 to +40°C	60max	60max	150max	180max	290max	290max	450max	600max	
	DRIFT[mV]	*3	20max	20max	48max	60max	96max	96max	144max	192max	
	START-UP TIME[ms]	350typ (ACIN 100V, Io=100%)									
	HOLD-UP TIME[ms] 20		20typ (ACIN 100V, Io=100%)								
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.85 to 3.63	4.50 to 5.50	Fixed ("Y" o	ption is availab	le for adjustin	g output volta	ge)		
	OUTPUT VOLTAGE SETTING[V]		3.30 to 3.40	5.00 to 5.15	11.50 to 12.50	14.40 to 15.60	23.00 to 25.00	23.00 to 25.00	34.50 to 37.50	46.00 to 50.00	
	OVERCURRENT PROTECTION		Works over 105% of rating (works over 101% of peak current at option -H) and recovers automatically								
PROTECTION	OVERVOLTAGE PROTECTION		4.00 to 5.25 5.75 to 7.00 13.80 to 16.80 17.25 to 21.00 27.60 to 33.60 27.60 to 33.60 41.40 to 50.40 55.20 to 67.20								
	OPERATING INDICA	Not provided									
OTHERS	REMOTE SENSING	Not provided									
	REMOTE ON/OFF	Option (Refer to Instruction Manual)									
	INPUT-OUTPUT-RC	AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At Room Temperature)									
ICOL ATION	INPUT-FG	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At Room Temperature)									
ISOLATION	OUTPUT-RC-FG	AC500V 1minute, Cutoff current = 25mA, DC500V 50M Ω min (At Room Temperature)									
	OUTPUT-RC	AC100V 1minute, Cutoff current = 25mA, DC100V 10M Ω min (At Room Temperature)									
				10 to +70°C, 20 - 90%RH (Non condensing) (Refer to Instruction Manual 3.2), 3,000m (10,000feet) max							
ENIVIDONIMENT.	STORAGE TEMP., HUMID. AND	-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max									
ENVIRONMENT	VIBRATION 10 - 55Hz,			- 55Hz, 19.6m/s² (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	CONDUCTED NOISE		Complies with FCC-B, VCCI-B, CISPR-B, EN55011-B, EN55022-B								
REGULATIONS	HARMONIC ATTENU	JATOR	Complies wit	h IEC61000-3	3-2						
	CASE SIZE/WEIGHT		75×37.0×1	60mm [2.95×	1.46×6.30 in	ches] (W×H×	(D) / 390g ma	ax (without ch	assis and cov	er)	
OTHERS	COOLING METHOD	Convection	-		2 \	. •					
*1 Specificati	ion is changeed at option, refer	r to Instructi	on Manual.	at the rated input/o	output.		* To m	neet the specifica	tions. Do not one	erate over-loade	

- Specification is changeed at option, refer to Instruction Manual. This is the value that measured on measuring board with
- capacitor of 22 $\mu\,F$ at 150mm from output terminal. Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM103).
- 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
- Derating is required. () means peak current. There is a possibility that an internal device is damaged when the specification is exceeded. Please contact us about the detail.
- Applicable when remote control (optional) is added.
- Please contact us about dynamic load and input response.
- To meet the specifications. Do not operate over-loaded
- 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.

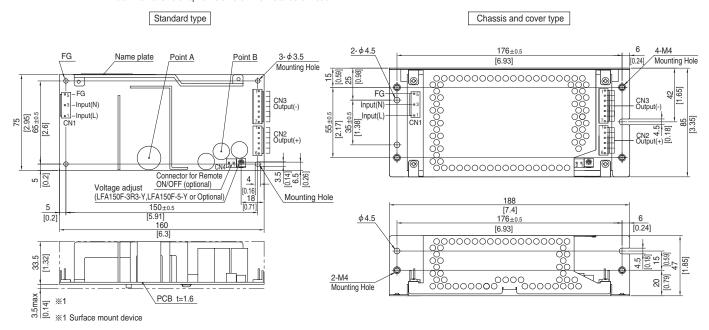


Block diagram



External view

* External size of option is different from standard model.



- % 4 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 are thermometry points. Please refer to Instruction Manual 3.

	I/O Connector		Mating connector	Т	erminal
	CNIA	1-1123724-3	1-1123722-5	Chain	1123721-1
l	CIVI	1-1123724-3	1-1123722-5	Loose	1318912-1
	0110	4 4400700 0	1-1123722-6	Chain	1123721-1
l	CNZ	1-1123723-6	1-1123/22-6	Loose	1318912-1
	0110	1-1123723-7	1-1123722-7	Chain	1123721-1
Į	CN3	1-1123723-7	1-1123/22-/	Loose	1318912-1

(Mfr:Tyco Electronics)

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

- PIN CONNECTIONS

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

- ※ Keep drawing current per pin below 5A for CN2,CN3.
- % Tolerance : ±1 [±0.04]
- Weight: 390g max (without chassis and cover)
- ※ PCB material : CEM3
- ※ Optional chassis and cover material : Electric galvanizing steel board.
- ※ Dimensions in mm, []=inches
- $\ensuremath{\textrm{\%}}$ Mounting torque (Mounting hole of chassis) :1.5N $^{\bullet}$ m (16kgf $^{\bullet}$ 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