

LDA50F



Features

- Input range LDA10 - 75F (AC85 - 264V)
- Input range LDA100 - 300W (AC85 - 132V/AC170 - 264V)
- Autoranging input
- Rugged PCB type
- Built-in Inrush Current Protection
- RoHS Compliant

Safety Agency Approvals

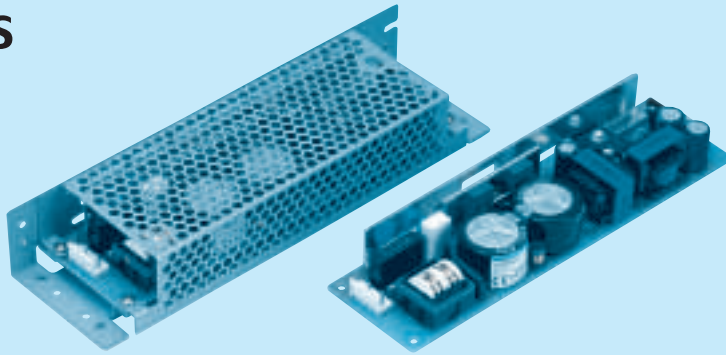
- Complies with DEN-AN
- UL1950, C-UL recognized, TUV approved
- UL recognized, TUV approved, CSA certified (LDA10F - LDA150W)

EMI Compliance

- FCC-B
- CISPR22-B
- EN55022-B
- VCCI-B

2 year warranty(refer to Instruction Manual)

Model	Input Voltage [V]	Output Wattage [W]	DC Output [V/A]
LDA50F-3	DC 110 - 370 AC 85 - 264	30	3V 10A
LDA50F-5	DC 110 - 370 AC 85 - 264	50	5V 10A
LDA50F-9	DC 110 - 370 AC 85 - 264	50.4	9V 5.6A
LDA50F-12	DC 110 - 370 AC 85 - 264	51.6	12V 4.3A
LDA50F-15	DC 110 - 370 AC 85 - 264	52.5	15V 3.5A
LDA50F-18	DC 110 - 370 AC 85 - 264	50.4	18V 2.8A
LDA50F-24	DC 110 - 370 AC 85 - 264	50.4	24V 2.1A
LDA50F-24-H	DC 110 - 370 AC 85 - 264	50.4	24V (peak 72V) 2.1A (peak 3A)
LDA50F-24-HR	DC 110 - 370 AC 85 - 264	50.4	24V (peak 72V) 2.1A (peak 3A)
LDA50F-30	DC 110 - 370 AC 85 - 264	51	30V 1.7A


**Recommended Noise Filter
NAC-06-472**


High voltage pulse noise type : NAP series
Low leakage current type : NAM series
* The Noise Filter is recommended
to connect with several devices.

- ① Series name
② Output wattage
③ Universal input
④ Output voltage
⑤ Optional
C : with Coating
G : Low leakage current
R : with Remote ON/OFF
S : with Chassis
SN : with Chassis & cover
Y : with Potentiometer

MODEL	LDA50F-3	LDA50F-5	LDA50F-9	LDA50F-12	LDA50F-15	LDA50F-18	LDA50F-24	LDA50F-24-H	LDA50F-24-HR	LDA50F-30
MAX OUTPUT WATTAGE[W]	30	50	50.4	51.6	52.5	50.4	50.4	50.4	50.4	51
DC OUTPUT	*3 3V 10A	5V 10A	9V 5.6A	12V 4.3A	15V 3.5A	18V 2.8A	24V 2.1A	24V 2.1(3)A	24V 2.1(3)A	30V 1.7A

SPECIFICATIONS

	MODEL	LDA50F-3	LDA50F-5	LDA50F-9	LDA50F-12	LDA50F-15	LDA50F-18	LDA50F-24	LDA50F-24-H	*LDA50F-24-HR	LDA50F-30	
INPUT	VOLTAGE[V]	AC85 - 264 1 φ or DC110 - 370										
	CURRENT[A]	ACIN 100V	1.3typ (Io=100%)									
		ACIN 200V	0.7typ (Io=100%)									
	FREQUENCY[Hz]	47 - 440 or DC										
	EFFICIENCY[%]	73typ	77typ	78typ	80typ	81typ	81typ	82typ	82typ	82typ	82typ	
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%) (At cold start)									
		ACIN 200V	30typ (Io=100%) (At cold start)									
LEAKAGE CURRENT[mA]	0.75max (60Hz, According to UL, CSA, VDE and DEN-AN)											
OUTPUT	VOLTAGE[V]	3	5	9	12	15	18	24	24	24	30	
	CURRENT[A]	*1 10	10	5.6	4.3	3.5	2.8	2.1	2.1 (3)	2.1 (3)	1.7	
	LINE REGULATION[mV]	20max	20max	36max	48max	60max	72max	96max	96max	96max	120max	
	LOAD REGULATION[mV]	40max	40max	100max	100max	120max	120max	150max	150max	150max	180max	
	RIPPLE[mVp-p]	0 to +50°C	80max	80max	120max	120max	120max	120max	120max	120max	120max	120max
		-10 - 0°C	140max	140max	160max	160max	160max	160max	160max	160max	160max	160max
	RIPPLE NOISE[mVp-p]	0 to +50°C	120max	120max	150max	150max	150max	150max	150max	250max	250max	150max
		-10 - 0°C	160max	160max	180max	180max	180max	180max	180max	280max	280max	180max
	TEMPERATURE REGULATION[mV]	60max	60max	120max	150max	180max	200max	290max	290max	290max	360max	
	DRIFT[mV]	*2 20max	20max	36max	48max	60max	72max	96max	96max	96max	120max	
	START-UP TIME[ms]	200max (ACIN 100V, Io=100%)										
	HOLD-UP TIME[ms]	10typ (ACIN 85V, Io=100%) 20typ (ACIN 100V, Io=100%)										
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	2.85 - 3.6 Fixed ("Y"which can be adjusted the output is available as option :5, 9, 12, 15, 18, 24, 30V ±10%)										
OUTPUT VOLTAGE SETTING[V]	—	4.9 - 5.3	8.6 - 9.4	11.5 - 12.5	14.4 - 15.6	17.3 - 18.7	23.0 - 25.0	23.0 - 25.0	23.0 - 25.0	28.5 - 31.5		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating (-H : peak) and recovers automatically										
	OVERVOLTAGE PROTECTION	4.00 - 5.25V	Works at 115 - 140% of rating									
	OPERATING INDICATION	Not provided										
	REMOTE SENSING	Not provided										
	REMOTE ON/OFF	Option (Refer to Instruction Manual)										
ISOLATION	INPUT-OUTPUT	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-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)										
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-10 to +60°C, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE) 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	UL60950-1, EN60950-1, EN50178, CSA C22.2 No.234 Complies with DEN-AN and IEC60950-1										
	CONDUCTED NOISE	Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B										
OTHERS	CASE SIZE/WEIGHT	55 X 26 X 195mm (W X H X D) /250g max (without chassis and cover)										
	COOLING METHOD	Convection										

*1 Peak load for 10sec. or less is acceptable if the total wattage is less than the rated wattage(24V:50.4W).

*2 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.

*3 () : peak current

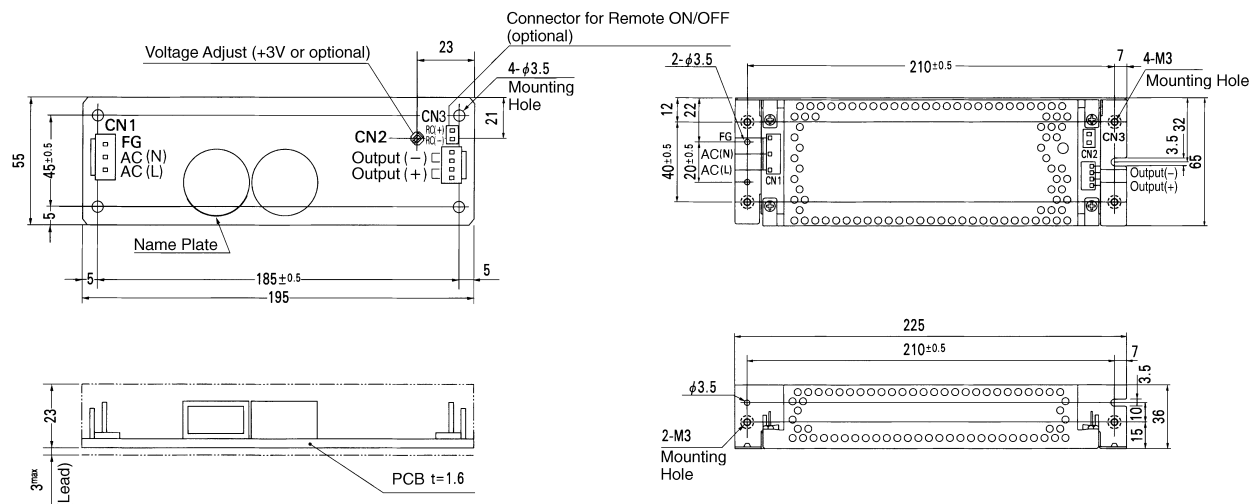
* Avoid prolonged use under over-load.

* Parallel operation with other model is not possible.

* Derating is required when operated with chassis and cover.

* marked models are pending for safety approvals. Consult with us for delivery.

External view



I/O Connector	Mating Connector	Terminal
CN1	B3P5-VH	VHR-5N
		Chain: SVH-21T-P1.1
		Loose: BVH-21T-P1.1
CN2	B4P-VH	VHR-4N
		Chain: SVH-21T-P1.1
		Loose: BVH-21T-P1.1
CN3	B2B-XH-A	XHP-2
		Chain: SXH-001T-P0.6
		Loose: BXH-001T-P0.6

<PIN CONNECTION>

Pin No.	Input
1	AC(L)
2	
3	AC(N)
4	
5	FG

Pin No.	Output
1	-V
2	-V
3	+V
4	+V

Pin No.	Remote ON/OFF
1	RC(+)
2	RC(-)

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

※ Weight : 250g or less
(Without chassis and cover)

※ Tolerance : ± 1

※ Dimensions in mm.

※ PCB Material : Glass composite (CEM3)

※ Chassis and cover is optional.

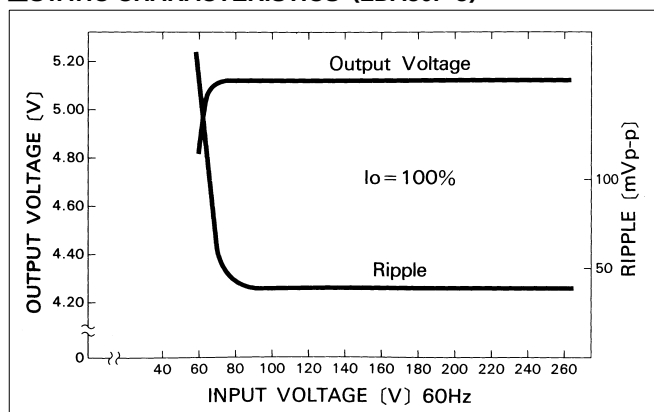
※ Mounting torque : 0.6N·m (6.3kgf·cm) max

(Mfr : J.S.T.)

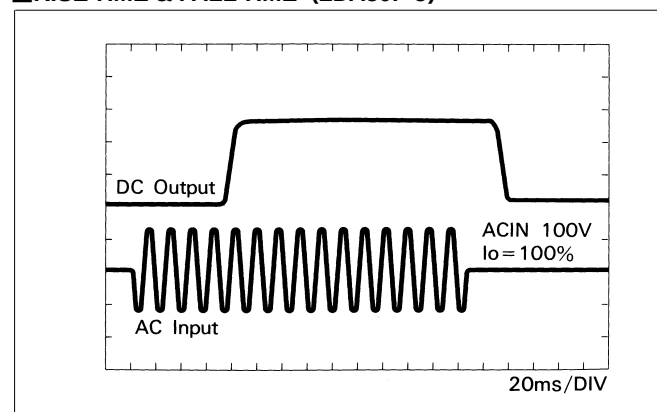
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Performance data

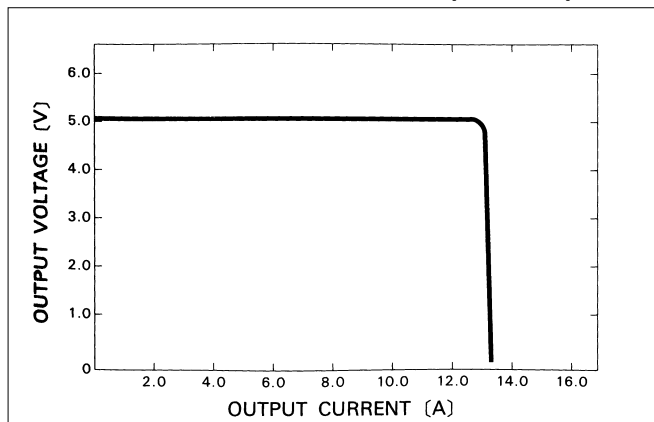
■ STATIC CHARACTERISTICS (LDA50F-5)



■ RISE TIME & FALL TIME (LDA50F-5)



■ OVERCURRENT CHARACTERISTICS (LDA50F-5)



■ DERATING CURVE

