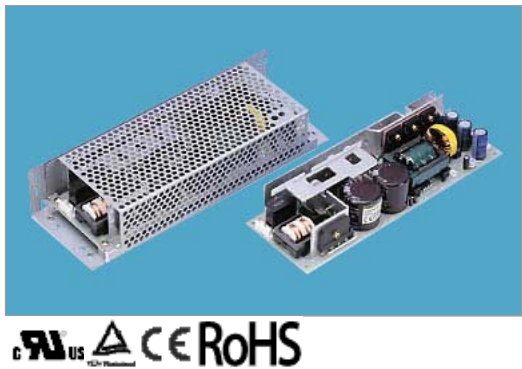


# LDA150W



### Features

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

### Safety Agency Approvals

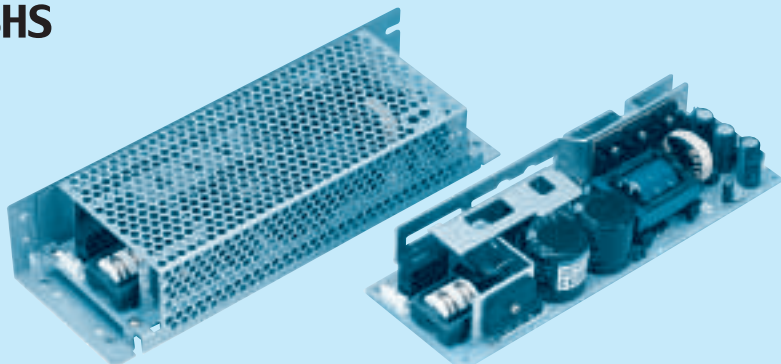
- Complies with DEN-AN
- UL1950, C-UL recognized, TUV approved
- UL recognized, TUV approved, CSA certified (LDA10F - LDA150W)

### 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]           |
|--------------|-------------------|---------------------|---------------------------|
| LDA150W-3    | AC 85 - 264       | 90                  | 3V<br>30A                 |
| LDA150W-5    | AC 85 - 264       | 150                 | 5V<br>30A                 |
| LDA150W-9    | AC 85 - 264       | 153                 | 9V<br>17A                 |
| LDA150W-12   | AC 85 - 264       | 150                 | 12V<br>12.5A              |
| LDA150W-15   | AC 85 - 264       | 150                 | 15V<br>10A                |
| LDA150W-18   | AC 85 - 264       | 153                 | 18V<br>8.5A               |
| LDA150W-24   | AC 85 - 264       | 151.2               | 24V<br>6.3A               |
| LDA150W-24-H | AC 85 - 264       | 151.2<br>(peak 240) | 24V<br>6.3A<br>(peak 10A) |
| LDA150W-30   | AC 85 - 264       | 150                 | 30V<br>5A                 |
| LDA150W-48   | AC 85 - 264       | 144                 | 48V<br>3A                 |



#### 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 Autoranging input  
④ Output voltage  
⑤ Optional  
C : with Coating  
G : Low leakage current  
L : with LED  
R : with Remote ON/OFF  
S : with Chassis  
SN : with Chassis & cover  
Y : with Potentiometer

| MODEL                 | LDA150W-3 | LDA150W-5 | LDA150W-9 | LDA150W-12 | LDA150W-15 | LDA150W-18 | LDA150W-24 | LDA150W-24-H | LDA150W-30 | LDA150W-48 |
|-----------------------|-----------|-----------|-----------|------------|------------|------------|------------|--------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 90        | 150       | 153       | 150        | 150        | 153        | 151.2      | 151.2        | 150        | 144        |
| DC OUTPUT             | *3 3V 30A | 5V 30A    | 9V 17A    | 12V 12.5A  | 15V 10A    | 18V 8.5A   | 24V 6.3A   | 24V 6.3(10)A | 30V 5A     | 48V 3A     |

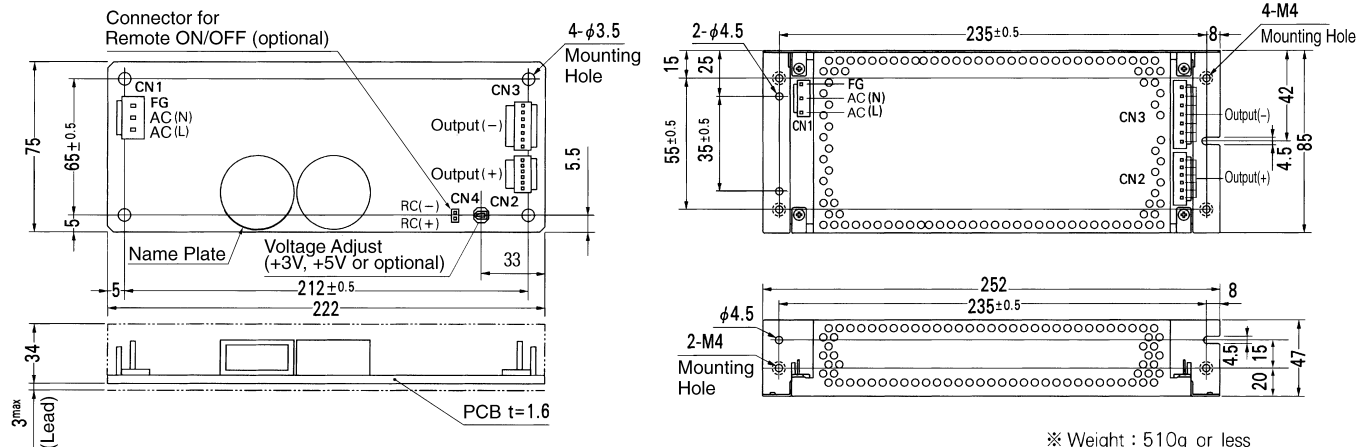
## SPECIFICATIONS

|                                     | MODEL                              |           | LDA150W-3                                                                                  | LDA150W-5                       | LDA150W-9                                                                                           | LDA150W-12  | LDA150W-15  | LDA150W-18  | LDA150W-24  | LDA150W-24-H | LDA150W-30  | LDA150W-48  |
|-------------------------------------|------------------------------------|-----------|--------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|
| INPUT                               | VOLTAGE[V]                         |           | AC 85 - 132 / 170 - 264 1 ϕ                                                                |                                 |                                                                                                     |             |             |             |             |              |             |             |
|                                     | CURRENT[A]                         | ACIN 100V | 3.6typ (Io=100%)                                                                           |                                 |                                                                                                     |             |             |             |             |              |             |             |
|                                     |                                    | ACIN 200V | 2.0typ (Io=100%)                                                                           |                                 |                                                                                                     |             |             |             |             |              |             |             |
|                                     | FREQUENCY[Hz]                      |           | 47 - 440                                                                                   |                                 |                                                                                                     |             |             |             |             |              |             |             |
|                                     | EFFICIENCY[%]                      |           | 75typ                                                                                      | 79typ                           | 79typ                                                                                               | 82typ       | 83typ       | 84typ       | 85typ       | 85typ        | 85typ       | 82typ       |
|                                     | INRUSH CURRENT[A]                  |           | 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           | 30          | 48          |
|                                     | CURRENT[A]                         |           | *1 30                                                                                      | 30                              | 17                                                                                                  | 12.5        | 10          | 8.5         | 6.3         | 6.3(10)      | 5           | 3           |
|                                     | LINE REGULATION[mV]                |           | 20max                                                                                      | 20max                           | 36max                                                                                               | 48max       | 60max       | 72max       | 96max       | 96max        | 120max      | 192max      |
|                                     | LOAD REGULATION[mV]                |           | 40max                                                                                      | 40max                           | 100max                                                                                              | 100max      | 120max      | 120max      | 150max      | 150max       | 180max      | 240max      |
|                                     | RIPPLE[mVp-p]                      | 0 to +50℃ | 80max                                                                                      | 80max                           | 120max                                                                                              | 120max      | 120max      | 120max      | 150max      | 150max       | 180max      | 240max      |
|                                     |                                    | -10 - 0℃  | 140max                                                                                     | 140max                          | 160max                                                                                              | 160max      | 160max      | 160max      | 160max      | 260max       | 160max      | 200max      |
|                                     | RIPPLE NOISE[mVp-p]                | 0 to +50℃ | 120max                                                                                     | 120max                          | 150max                                                                                              | 150max      | 150max      | 150max      | 150max      | 250max       | 150max      | 400max      |
|                                     |                                    | -10 - 0℃  | 160max                                                                                     | 160max                          | 180max                                                                                              | 180max      | 180max      | 180max      | 180max      | 280max       | 180max      | 600max      |
|                                     | TEMPERATURE REGULATION[mV]         |           | 60max                                                                                      | 60max                           | 120max                                                                                              | 150max      | 180max      | 200max      | 290max      | 290max       | 360max      | 560max      |
|                                     | DRIFT[mV]                          |           | *2 20max                                                                                   | 20max                           | 36max                                                                                               | 48max       | 60max       | 72max       | 96max       | 96max        | 120max      | 192max      |
|                                     | 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                                                                                 | 4.5 - 5.5                       | Fixed ("Y"which can be adjusted the output is available as option :9, 12, 15, 18, 24, 30, 48V ±10%) |             |             |             |             |              |             |             |
|                                     | OUTPUT VOLTAGE SETTING[V]          |           | —                                                                                          | —                               | 8.6 - 9.4                                                                                           | 11.5 - 12.5 | 14.4 - 15.6 | 17.3 - 18.7 | 23.0 - 25.0 | 23.0 - 25.0  | 28.5 - 31.5 | 46.0 - 50.0 |
| PROTECTION<br>CIRCUIT AND<br>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℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE) 3,000m (10,000feet) max |                                 |                                                                                                     |             |             |             |             |              |             |             |
|                                     | STORAGE TEMP.,HUMID.AND ALTITUDE   |           | -20 to +75℃, 20 - 90%RH (Non condensing) 9,000m (30,000feet) max                           |                                 |                                                                                                     |             |             |             |             |              |             |             |
|                                     | VIBRATION                          |           | 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis            |                                 |                                                                                                     |             |             |             |             |              |             |             |
|                                     | IMPACT                             |           | 196.1m/s² (20G), 11ms, once each X, Y and Z axis                                           |                                 |                                                                                                     |             |             |             |             |              |             |             |
| SAFETY AND<br>NOISE<br>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                   |           | 75 x 37 x 222mm (W x H x D) /510g 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:151.2W).  
\*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃, 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.

## External view



| I/O Connector | Mating Connector | Terminal             |
|---------------|------------------|----------------------|
| CN1           | B3P5-VH          | VHR-5N               |
|               |                  | Chain: SVH-21T-P1.1  |
|               |                  | Loose: BVH-21T-P1.1  |
| CN2           | B6P-VH           | VHR-6N               |
|               |                  | Chain: SVH-21T-P1.1  |
|               |                  | Loose: BVH-21T-P1.1  |
| CN3           | B7P-VH           | VHR-7N               |
|               |                  | Chain: SVH-21T-P1.1  |
|               |                  | Loose: BVH-21T-P1.1  |
| CN4           | B2B-XH-A         | XHP-2                |
|               |                  | Chain: SXH-001T-P0.6 |
|               |                  | Loose: BXH-001T-P0.6 |

(Mfr : J.S.T.)

## &lt;PIN CONNECTION&gt;

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

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

| Pin No. | Output |
|---------|--------|
| 1~6     | +V     |
| 1~7     | -V     |

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

※ Weight : 510g or less

(Without chassis and cover)

※ Tolerance : ± 1

※ Dimensions in mm.

※ PCB Material : Glass composite (CEM3)

※ Chassis and cover is optional.

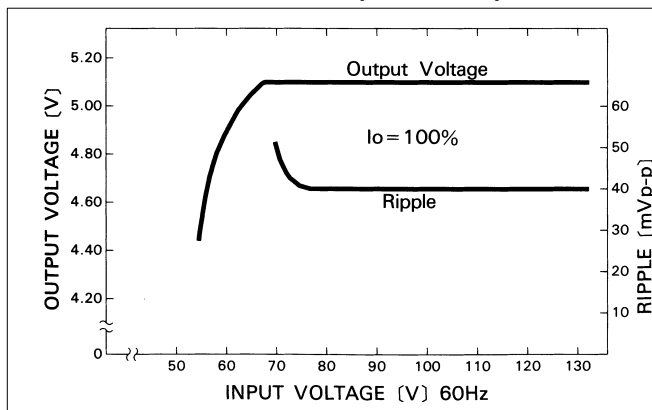
※ Chassis and cover is not available to remote ON/OFF unit.

※ Mounting torque : 1.5 N·m (16 kgf·cm) max

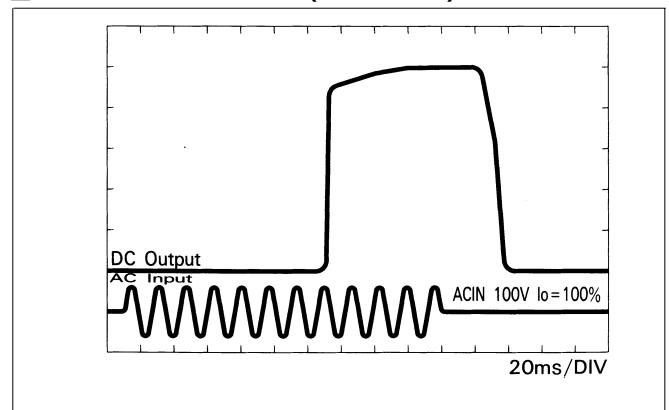
LDA

## Performance data

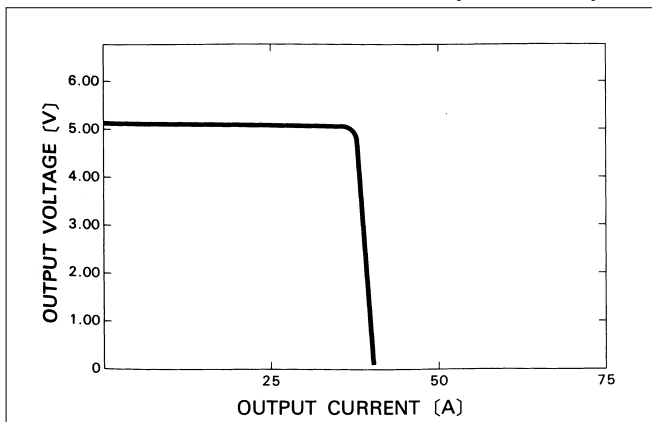
## ■ STATIC CHARACTERISTICS (LDA150W-5)



## ■ RISE TIME &amp; FALL TIME (LDA150W-5)



## ■ OVERCURRENT CHARACTERISTICS (LDA150W-5)



## ■ DERATING CURVE

