



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
- J2 : Mini terminal block
- R : with Remote ON/OFF
- S : with Chassis
- SN : with Chassis & cover
- Y : with Potentiometer

| MODEL                 | LEA150F-3R3-Y | LEA150F-5 | LEA150F-9 | LEA150F-12 | LEA150F-15 | LEA150F-18 | LEA150F-24 | LEA150F-24-H  | LEA150F-30 | LEA150F-48 |
|-----------------------|---------------|-----------|-----------|------------|------------|------------|------------|---------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 99            | 150       | 153       | 150        | 150        | 153        | 151.2      | 151.2         | 150        | 153.6      |
| DC OUTPUT             | *5 3.3V 30A   | 5V 30A    | 9V 17A    | 12V 12.5A  | 15V 10A    | 18V 8.5A   | 24V 6.3A   | 24V 6.3(7.5)A | 30V 5A     | 48V 3.2A   |

## SPECIFICATIONS

|                               | MODEL                                            | LEA150F-3R3-Y                                                                                       | LEA150F-5                                                                  | LEA150F-9   | LEA150F-12  | LEA150F-15  | LEA150F-18  | LEA150F-24  | LEA150F-24-H   | LEA150F-30  | LEA150F-48 |        |
|-------------------------------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|----------------|-------------|------------|--------|
| INPUT                         | VOLTAGE[V]                                       | AC85 - 264 1φ or DC120 - 370                                                                        |                                                                            |             |             |             |             |             |                |             |            |        |
|                               | CURRENT[A]                                       | ACIN 100V                                                                                           | 1.4                                                                        | 2.0typ      |             |             |             |             |                |             |            |        |
|                               |                                                  | ACIN 200V                                                                                           | 0.7                                                                        | 1.0typ      |             |             |             |             |                |             |            |        |
|                               | FREQUENCY[Hz]                                    | 50/60 (47 - 63) or DC                                                                               |                                                                            |             |             |             |             |             |                |             |            |        |
|                               | EFFICIENCY[%]                                    | ACIN 100V                                                                                           | 71typ                                                                      | 76typ       | 79typ       | 78typ       | 80typ       | 81typ       | 81typ          | 81typ       | 84typ      | 84typ  |
|                               |                                                  | ACIN 200V                                                                                           | 74typ                                                                      | 79typ       | 82typ       | 81typ       | 83typ       | 84typ       | 84typ          | 84typ       | 87typ      | 87typ  |
|                               | POWER FACTOR                                     | ACIN 100V                                                                                           | 0.98typ                                                                    | 0.99typ     |             |             |             |             |                |             |            |        |
|                               |                                                  | ACIN 200V                                                                                           | 0.91typ                                                                    | 0.94typ     |             |             |             |             |                |             |            |        |
| INRUSH CURRENT[A]             | ACIN 100V                                        | 15typ (Io=100%) (At cold start) (Ta=25°C)                                                           |                                                                            |             |             |             |             |             |                |             |            |        |
|                               | ACIN 200V                                        | 30typ (Io=100%) (At cold start) (Ta=25°C)                                                           |                                                                            |             |             |             |             |             |                |             |            |        |
| LEAKAGE CURRENT[mA]           | 0.75max (60Hz, According to IEC60950 and DEN-AN) |                                                                                                     |                                                                            |             |             |             |             |             |                |             |            |        |
| OUTPUT                        | VOLTAGE[V]                                       | 3.3                                                                                                 | 5                                                                          | 9           | 12          | 15          | 18          | 24          | 24             | 30          | 48         |        |
|                               | CURRENT[A]                                       | *1 30                                                                                               | 30                                                                         | 17          | 12.5        | 10          | 8.5         | 6.3         | 6.3 (Peak 7.5) | 5           | 3.2        |        |
|                               | 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      | 300max     |        |
|                               | RIPPLE[mVp-p]                                    | 0 to +50°C *2                                                                                       | 80max                                                                      | 80max       | 120max      | 120max      | 120max      | 120max      | 150max         | 150max      | 180max     | 300max |
|                               |                                                  | -10 - 0°C *2                                                                                        | 140max                                                                     | 140max      | 160max      | 160max      | 160max      | 160max      | 160max         | 160max      | 160max     | 200max |
|                               | RIPPLE NOISE[mVp-p]                              | 0 to +50°C *2                                                                                       | 120max                                                                     | 120max      | 150max      | 150max      | 150max      | 150max      | 150max         | 150max      | 150max     | 350max |
|                               |                                                  | -10 - 0°C *2                                                                                        | 160max                                                                     | 160max      | 180max      | 180max      | 180max      | 180max      | 180max         | 180max      | 180max     | 400max |
|                               | TEMPERATURE REGULATION[mV]                       | 0 to +50°C                                                                                          | 50max                                                                      | 50max       | 90max       | 120max      | 150max      | 180max      | 240max         | 240max      | 300max     | 480max |
|                               |                                                  | -10 to +50°C                                                                                        | 60max                                                                      | 60max       | 120max      | 150max      | 180max      | 200max      | 290max         | 290max      | 360max     | 600max |
|                               | DRIFT[mV]                                        | *3 20max                                                                                            | 20max                                                                      | 36max       | 48max       | 60max       | 72max       | 96max       | 96max          | 120max      | 192max     |        |
|                               | START-UP TIME[ms]                                | 500max (ACIN 100V, Io=100%)                                                                         |                                                                            |             |             |             |             |             |                |             |            |        |
|                               | HOLD-UP TIME[ms]                                 | 20typ (Io=100%)                                                                                     |                                                                            |             |             |             |             |             |                |             |            |        |
|                               | OUTPUT VOLTAGE ADJUSTMENT RANGE[V]               | 2.85 - 3.6                                                                                          | Fixed (*Y which can be adjusted the output is available as optional: ±10%) |             |             |             |             |             |                |             |            |        |
| OUTPUT VOLTAGE SETTING[V]     | 3.25 - 3.35                                      | 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 | 28.5 - 31.5    | 46.0 - 50.0 |            |        |
| PROTECTION CIRCUIT AND OTHERS | OVERCURRENT PROTECTION                           | Works over 105% of rating (works over 105% of peak current at option -H) 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 · RC                                | *4 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                                   | *4 AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)                    |                                                                            |             |             |             |             |             |                |             |            |        |
|                               | OUTPUT-RC                                        | *4 AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ 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 <sup>2</sup> (2G), 3minutes period, 60minutes each along X, Y and Z axis         |                                                                            |             |             |             |             |             |                |             |            |        |
|                               | IMPACT                                           | 196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis                                        |                                                                            |             |             |             |             |             |                |             |            |        |
| SAFETY AND NOISE REGULATIONS  | AGENCY APPROVALS                                 | UL60950-1, C-UL, EN60950-1, EN50178 Complies with DEN-AN and IEC60950-1 (At only AC input)          |                                                                            |             |             |             |             |             |                |             |            |        |
|                               | CONDUCTED NOISE                                  | Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B                                                   |                                                                            |             |             |             |             |             |                |             |            |        |
|                               | HARMONIC ATTENUATOR                              | Complies with IEC61000-3-2                                                                          |                                                                            |             |             |             |             |             |                |             |            |        |
| OTHERS                        | CASE SIZE/WEIGHT                                 | 75 x 40 x 222mm (W x H x D) /500g max (without chassis and cover)                                   |                                                                            |             |             |             |             |             |                |             |            |        |
|                               | COOLING METHOD                                   | Convection                                                                                          |                                                                            |             |             |             |             |             |                |             |            |        |

\*1 Peak load for 10 sec. or less is acceptable if the total wattage is less than the rated wattage.  
 \*2 This is the value that measured on measuring board with capacitor of 22 μF within 150mm from output terminal.  
 Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM101).  
 \*3 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.  
 \*4 Applicable when remote control (optional) is added.  
 \*5 ( ): peak current.  
 \* 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   |
| CN2             | B6P-VH           | VHR-6N   |
| CN3             | B7P-VH           | VHR-7N   |
| CN4             | B2B-XH-A         | XHP-2    |

### (PIN CONNECTION)

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

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

### (Optional)

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

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

- ※Weight: 500g 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: 1.5N · m(16kgf · cm)max

LEA

## Performance data

### RISE TIME & FALL TIME (LEA150F-5)



### EFFICIENCY (LEA150F-5)



### INPUT HARMONIC CURRENT (LEA150F-5)



### INPUT HARMONIC CURRENT (LEA150F-5)



### Distribution:

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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