

COSEL

www.cosel.co.jp/en

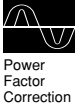
Rugged PCB Type AC-DC converter

LFA series

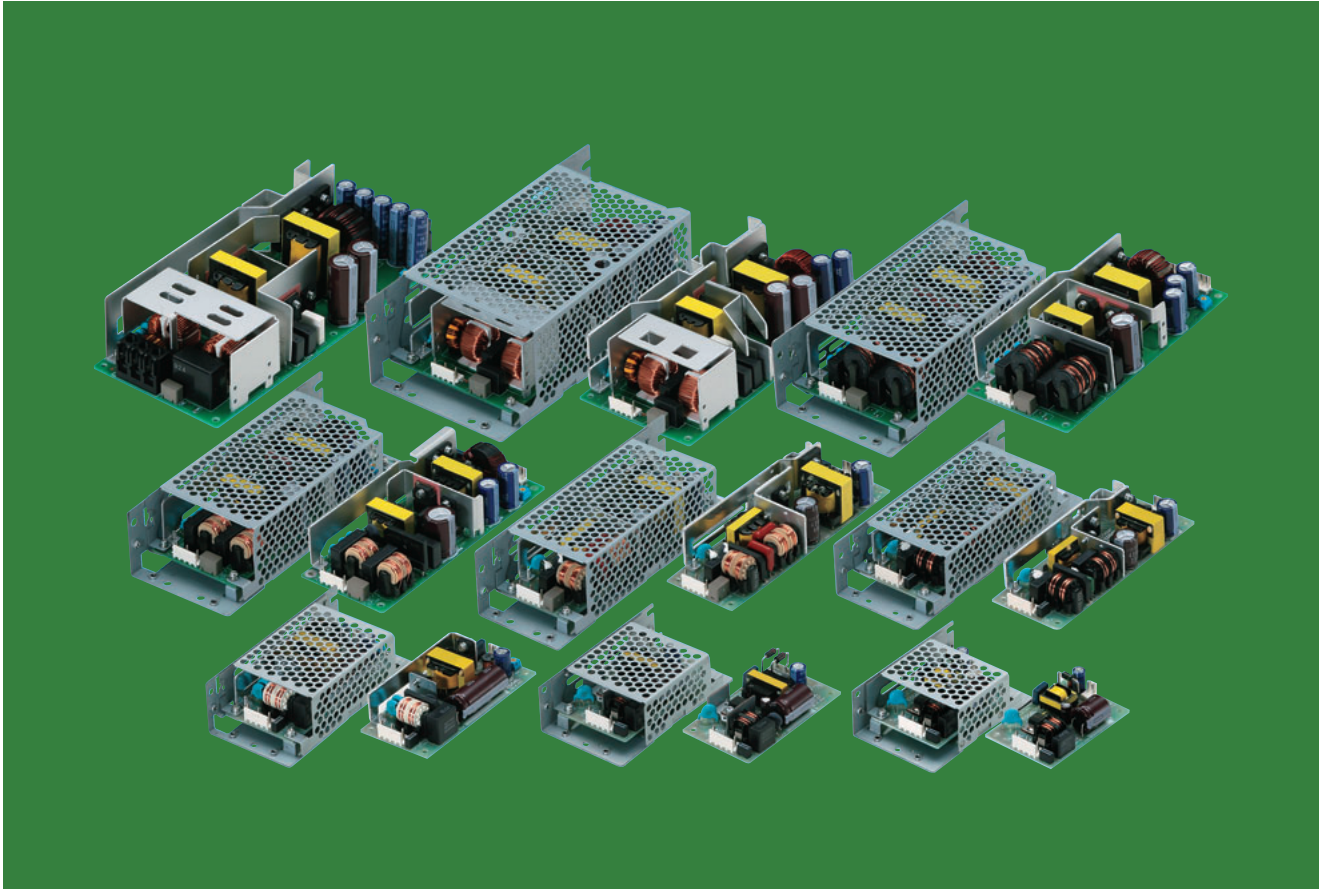
Rugged PCB type AC-DC converter

5 years warranty





LFA-series



■ Feature

- Small and compact PCB construction
- Built-in inrush current, overcurrent and overvoltage protection circuits
- Harmonic attenuator (Complies with IEC61000-3-2)
- Universal input (AC85-264V)
- Power factor correction (LFA50F-300F)
- Built-in reducing standby power circuit (LFA10F, 15F)

■ Safety agency approvals

- UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178
- Complies with DEN-AN

■ EMI

- Complies with FCC-B, CISPR22-B, EN55011-B, EN55022-B, VCCI-B

■ 5-year warranty (refer to Instruction Manual)

■ CE marking

- Low Voltage Directive

■ EMC Compliance : EN61204-3, EN61000-6-2

- EN61000-4-2
- EN61000-4-3
- EN61000-4-4
- EN61000-4-5
- EN61000-4-6
- EN61000-4-8
- EN61000-4-11

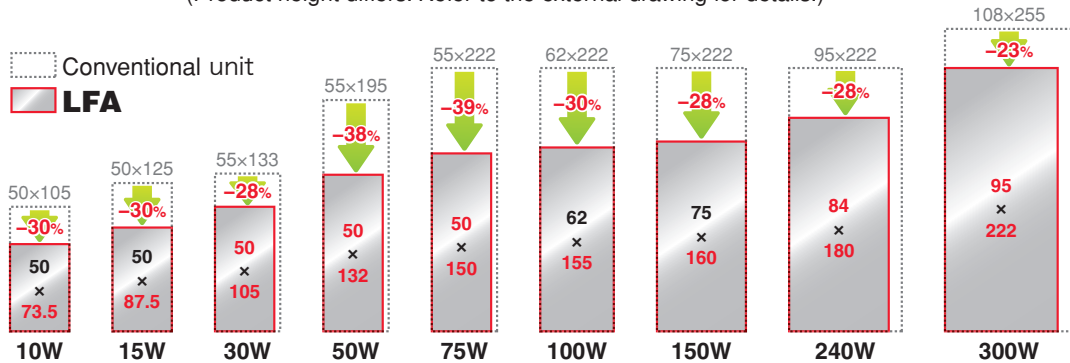
LFA series 10-300W

Compact, light weighted, and wide input Rugged PCB type AC-DC converter

Wide input New compact rugged PCB type power supply is provided.

Compact

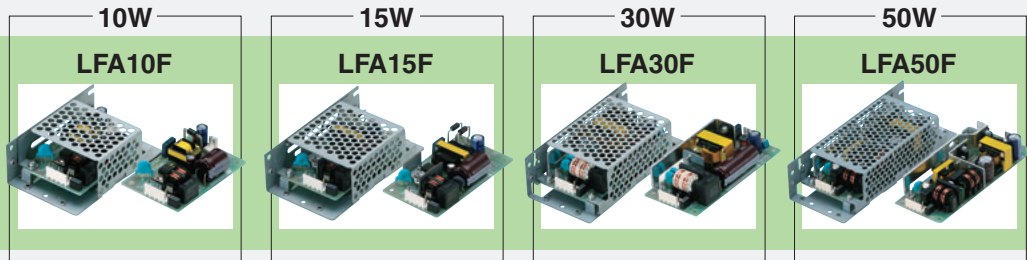
- Downsize for 23 - 38% of conventional unit (our conventional unit: LDA/LEA/LEP series board area ratio)
- Size dimensions compatible with LGA series, AC100V Rugged PCB type power supply.
Changing the mechanical design for input voltage is unnecessary and design standardizing is contributed.
(Product height differs. Refer to the external drawing for details.)



Features

Standby power: 50% lower than conventional unit	-38% downsized compact
Efficiency at middle load is improved.	

AC85-264V
Wide input



AC85-132V
AC100V input



LFA recommended noise filter

LGA recommended noise filter

Cosel's various
noise filter

NAP series
for external impulse



High attenuation
NBC series



Compatible to worldwide safety standard

Compatible to UL*1, C-UL, TUV standard *2, CE mark *3.

With compatibility to various safety standards of major countries, investigation time and cost for safety standard accreditation can be reduced.

*1: UL60950-1 2nd Edition

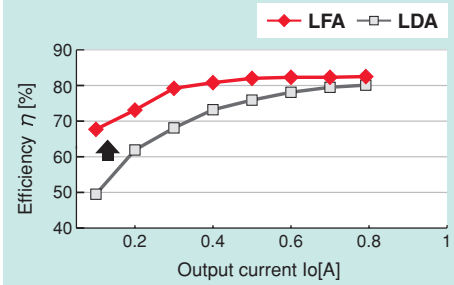
*2: UL: UL60950-1, C-UL: CSA60950-1 based on UL evaluation, TUV: EN60950-1, EN50178 pending

*3: low voltage directive

Lowering environmental load

- All models: harmonic attenuator (IEC61000-3-2)
(No power factor improvement circuit in 10/15/30W)
- 10-30W: lowering the standby power and improve efficiency in middle load.
- 50-300W: Power factor improvement circuit is built-in and input power capacity is lowered.
- 100-300W 3.3/5V: synchronous rectification technology is applied. High efficiency is achieved.
- 100-300W: 24V peak output unit is provided to semi-standard lineup.

LDA/LFA15F-24 η comparison



10-300W all 9 models Variation of 59 models

- Fulfilling model variations in standard power supply. Reassuring in sudden power/voltage change.
- Convectional cooled 300W (24V: peaked at 450W)-24/36/48V newly available.
(3.3/5/12/15V Air-forced cooling)
- Most suitable to mechatronics: 240W-24/36/48V

Wattage [W]	Output voltage[V]							
	3.3	5	12	15	24	24peak	36	48
10	○	○	○	○	○			
15	○	○	○	○	○			
30	○	○	○	○	○			
50	○	○	○	○	○		○	○
75	○	○	○	○	○		○	○
100	○	○	○	○	○	○	○	○
150	○	○	○	○	○	○	○	○
240					○	○	○	○
300	○	○	○	○	○	○	○	○

Convectional cooling 300W
Peak 450W (24V only)

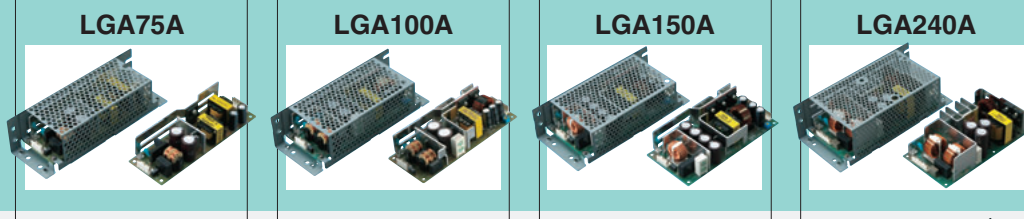
red to conventional unit

3.3/5V: efficiency improved with synchronous rectification applied/24V: preparing peak output option as sub-standard/Both side through hole PCB applied.

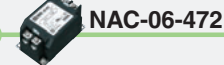
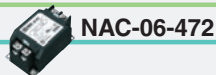
By built-in power factor improvement circuit, input capacity is lowered.



5/100/150/240W: LFA/LGA attachment compatible newly available.



NAC-04-472



Output noise lowering
SNR series



Low leak current
NAM series



TAC series
for 3 phases



Various options

- C: Conformal coating
- G: Low leak current
- J1: VH (J.S.T) Connector (300W excluded)
- H: Peak current (100/150/240/300W only)
- R: Remote control function (100/150/240/300W only)

- S: With chassis (300W excluded)
- SN: With chassis and cover (300W excluded)
- SNF: With fan (300W only)
- T: Terminal block vertical type (240W only)
- T1: Terminal block horizontal type (300W only)
- Y: With output voltage adjusting potentiometer (Standardized depending on models. Refer to the specification for details.)