

# OFS30

MAX. Power 30W Isolated Open Frame Type AC-DC Converter

## OFS30 Series Isolated Open Frame Type AC-DC Converter

### Features

- 대기전력절감 모드 동작(Power Saving Mode Operation)
- 고효율(High Efficiency)
- 입출력 절연(Isolated Input - Output)
- 67kHz 고정 스위칭주파수  
(67kHz fixed frequency and Current mode Control)
- 낮은 리플 노이즈(Low output Ripple & Noise)
- 과전류 보호회로 내장(Built-in over current protection circuit)
- 출력 단락 보호회로 내장(Built-in Short Circuit Protection)
- 출력 과전압 보호회로 내장(Built-in over voltage protection circuit)
- 넓은 입력 범위(Universal Input Voltage(Free Voltage))
- EMI 필터 내장(Built in EMI Filter)
- 안전규격(Safety standard) : CE approved
- RoHS 적합(RoHS compatible design)
- 제품보증기간 : 2년(2 years warranty)

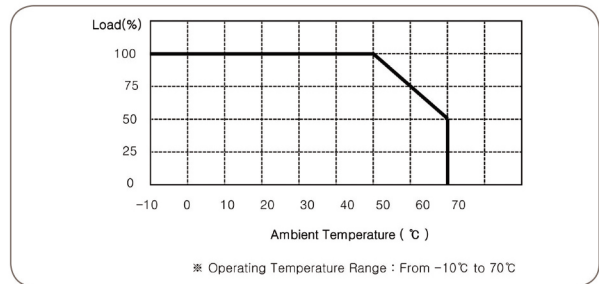
### General Specifications

- INPUT
  - Power Saving ..... less than 0.5W  
(@Input : 230Vac, Output : No Load)
  - Voltage Range..... AC90V ~ 264V OR DC120V ~ 370V
  - Frequency ..... 44 ~ 440Hz(50Hz, 60Hz Typ.)
  - Current ..... 0.89Amax
  - Efficiency..... 84%
  - Inrush Current ..... 30Amax.(110Vac),  
60Amax.(220Vac) @ Cold start
  - Leakage Current ..... 0.2mAmax.(110Vac), 0.35mAmax.(220Vac)
- OUTPUT
  - Output Voltage ..... 12V
  - Line Regulation .....  $\pm 1.0\%$
  - Load Regulation .....  $\pm 1.0\%$
  - Output Voltage adj. Range .....  $\pm 10\%$
  - Ripple & Noise ..... 1%(Peak to Peak) Max.
- PROTECTION CIRCUIT
  - Over Current Protection ..... Works at over 105% of rating and recovers automatically
  - Over Voltage Protection ..... None
- ELECTRICALLY ISOLATED
  - Input - Output ..... AC3kV, 1minute / DC500V, 100M $\Omega$  min
  - Input - FRG ..... AC2kV, 1minute / DC500V, 100M $\Omega$  min
  - Output - FRG..... AC0.5kV, 1minute / DC500V, 70M $\Omega$  min

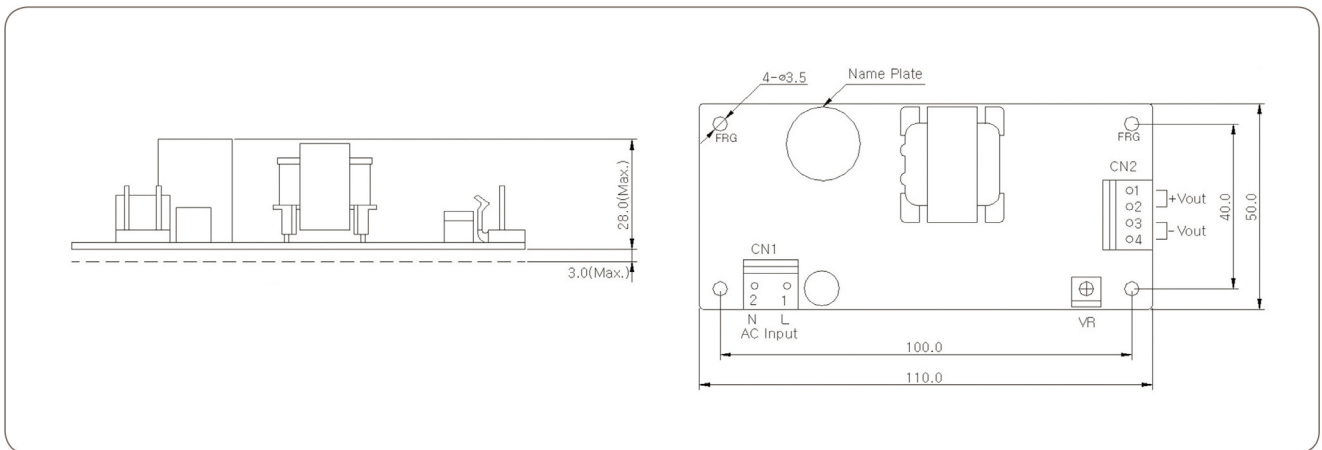
### Environment

- Operating Temperature :  $-10^{\circ}\text{C} \sim 70^{\circ}\text{C}$
- Operating Humidity : 20% ~ 90% RH (Non condensing)
- Storage Temperature :  $-20^{\circ}\text{C} \sim 75^{\circ}\text{C}$
- Cooling : Free-Air Convection
- MTBF :  $2.0 \times 10^5$  hrs

### Derating Curve



### Outline Dimensions : (Unit : [mm])



### Matching Crimp Housing & Terminals

	Crimp Housings	Terminals
CN1	Molex 09 - 52 - 4034 or equivalent	Molex 08 - 70 - 0012 or equivalent
CN2	Molex 09 - 52 - 4044 or equivalent	

### Pin assignments

	Pin No.	Function
CN1	1	AC Input L
	2	AC input N
CN2	1, 2	DC Output +V
	3, 4	DC Output -V(GND)

### Ordering Information (Single Output)

MODEL	OFS30 - 12	
Input Voltage (V)	AC90V ~ 264V, 44Hz ~ 440Hz or DC120V ~ 370V	
Power Saving	less than 0.5W (@Input : 230Vac, Output : No Load)	
Output	Vout (V)	12
	Iout (A)	2.5
Maximum Power (W)	30	
Ripple & Noise (mVp-p)	120	
Efficiency Typ. (%)	84	
Output Voltage adj. Range [%]	$\pm 10$	