



## 60ACPO\_S Series

60W - Single Output AC-DC Converter - Universal Input - Isolated & Regulated

### AC-DC Converter

60 Watt

- ⊕ High efficiency up to 87%
- ⊕ Universal AC input range (90~264VAC)
- ⊕ Over power protection (OPP)
- ⊕ Over voltage protection (OVP)
- ⊕ Over load protection (OLP)
- ⊕ Short circuit protection (SCP)
- ⊕ Wide operating ambient temperature (-25°C~70°C)
- ⊕ All using 105°C long life electrolytic capacitors
- ⊕ 100% full load burn-in test

The 60ACPO\_S series features standard rail mounting, energy efficiency and is highly cost-effective. The series offers stability and high noise immunity especially for industrial control equipment, machinery and other demanding environments for industrial equipment. This converter offers a compact and light weight design with standard rail installation (35mm). Furthermore this series offers Easy Fuse Tripping due to a built-in DC OK relay contact. The converter can be installed on TS-35/7.5 or TS-35/15.



Common specifications	
Short circuit protection:	Long-term mode, automatic recovery
Temperature rise at full load:	50°C MAX
Cooling:	Free air convection
Operation temperature range:	-25°C~+70°C
Storage temperature range:	-0°C ~+85°C
Storage humidity range:	< 95%
Temperature coefficient:	0.053%/°C MAX
MTBF (using MIL-HDBK-217F):	+25°C >200,000 hours MIL-217 Method 2 Components Stress Method
Safety standards:	UL60950-1 2nd Ed; IEC 60950-1:2005 (2nd Ed); EN60950-1:2006
Case material:	Heat-resistant Plastic (UL94-V0) and metal
Dimensions (L*W*H):	101.6×50.8×30mm
Weight:	200g

Isolation specifications					
Item	Test condition	Min	Typ	Max	Units
Withstand voltage	• Primary-secondary: 10mA	3000			VAC
	• Secondary PG: 10mA	500			
Isolation resistance		100			MΩ

Protection specifications		
Over-load protection	105%~180% of rated output current	Protection type: Hiccup mode, auto recovery
Over-voltage protection	105%~180% of rated output voltage	Protection type: Constant voltage, auto recovery
Over-power protection	105%~180% of rated output power	Protection type: Hiccup mode, auto recovery

Input specifications			
Input voltage range	90~264VAC		
Input frequency	47~63Hz		
AC current	<1.5A (max)		
Inrush current	Cold start	@120VAC <30A (typ)	@230VAC <60A (typ)
Leakage current	<0.25mA		

Output specifications						
Item	Test conditions	Min	Typ	Max	Units	
Output voltage accuracy	Full load		±3		%	
Voltage adjustment range	-5% ~ +10% of rated voltage					
Line regulation	Vin= min. to max. at full load			±0.5	%	
Load regulation	0% to 100% load			±2	%	
Set-up time	@230VAC input, full load			1	s	
Hold-up time	@230VAC input, full load	20			ms	
Overshoot and undershoot				5	%	
Switching frequency			65		KHz	

\* Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 10uF parallel capacitor.

#### Example: 60ACPO\_24S

60 = 60Watt  
AC = AC-DC  
PO = series  
24 = 24 Vout  
S = single output

#### Note:

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.

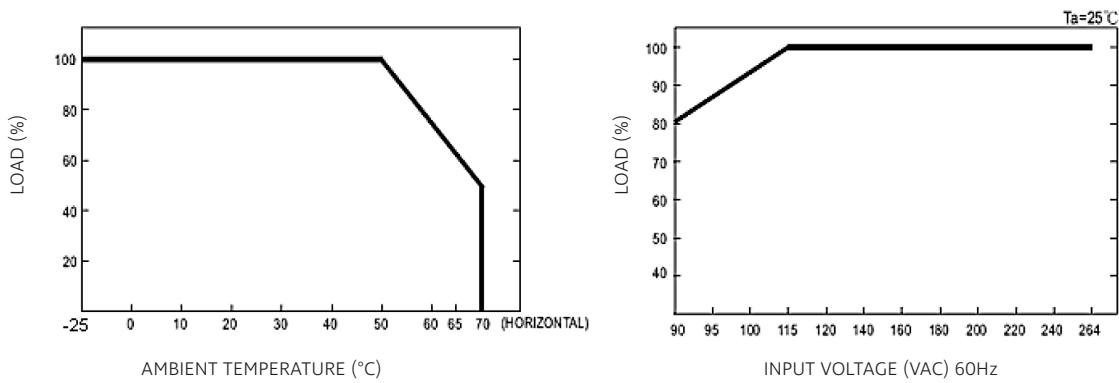


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## Typical characteristics

Derating Curves



## Functional block diagram

Block diagram

