



DESCRIPTION

The series of AC-DC switching power supplies in a package of $35.7 \times 25.0 \times 19.0$ mm are capable of delivering 3 watts. They are designed for industry control application, stand by power application.

FEATURES

- · Universal input 90-264Vac
- · Ultra compact low profile AC-DC converter
- No Y-capacitor / low leakage current
- · Built-in fusible resistor
- No load power consumption 0.05W
- · OVP, short circuit protection
- 3750 VAC / 60sec. isolation

WATTAGE

Wattage: 3W

DIMENSION

Dimension: 35.7(L) x 25.0(W) x 19.0(H) mm



SAFETY STANDARD APPROVAL

Meet 60950 / 60335-1

ENVIROMENTAL SPECIFICATION

Operating temperature: -25°C to +85°C Storage temperature: -25°C to +85°C

SELECTION GUIDE					
Part number	Input voltage	Output voltage	Output current @ full load	Efficiency ⁽¹⁾ (typ.)	Capacitive load (2) (max.)
A03-XE1-3.3		3.3 VDC	900 mA	70%	15000 μF
A03-XE1-05	90-264 VAC	5 VDC	600 mA	74%	7500 μF
A03-XE1-06		6 VDC	300 mA	75%	6000 μF
A03-XE1-12		12 VDC	250 mA	78%	3000 μF
A03-XE1-15		15 VDC	200 mA	79%	1000 μF
A03-XE1-24		24 VDC	125 mA	81%	200 μF

- 1. Typical efficiency measured @115Vac/ 230Vac, full load and +25°C after warm-up time.
- 2. Capacitive load measure @115Vac/60Hz with constant resistant mode full load.
- 3. The product information and specifications are subject to change without prior notice.
- 4. All specifications valid at nominal input voltage(115/230VAC), full load and 25°C after warm-up time unless otherwise stated.

PECIFICATION	1					
	Parameter	Conditions	Min.	Тур.	Max.	Unit
Input	Input voltage range		90		264	VAC
	Input frequency		47		63	Hz
	No load power consumption				0.05	W
	Inrush current	115VAC			15	Α
	(cold start@25°C)	230VAC			30	Α
	Start-up time				1	s
	Leakage current	264V/63Hz			0.01	mA
	External fuse (or internal)		Internal wire wound resistor			
	Output voltage tolerance (1)				±6	%
	Ripple & noise (2)	Vo=3.3V / 5V / 24V			200	mVp-p
		Vo=6V / 12V / 15V			120	mVp-p
	Hold up time	115VAC	15			ms
Output		230VAC	80			ms
	Minimum load		2			%
	Line regulation				±1.5	%
	Load regulation	10%-100% load			±2	%
	Operating frequency			60		KHz
	Operating temperature	With derating	-25		85	°C
	Storage temperature		-25		85	°C
Environment	Relative humidity				95	%RH
	Vibration		MIL-STD-202G			
Function	Isolation voltage	1 minute, Pri to Sec Cut-off current: 5mA	3750			VAC
	Isolation resistance	DC 500V	1			GΩ
	MTBF	25°C, 115VAC, 5V output			3.318x10 ⁶	Hours
	Short circuit protection		Continuous, Automatic recovery			
	Over voltage protection		Zener diode clamp			
	Over load protection		Automatic recovery			
	Safety		Meet 60950; 60335-1			
Physical	Dimension	(L x W x H)	35.70x25.00x19.00 mm			
	Case material		UL94V-0 black plastic			
	Potting material		Silicone			
	Weight			27	7.5	g
EMC	EMI	EN55032	Class B			
	ESD	IEC 61000-4-2	Criteria A			

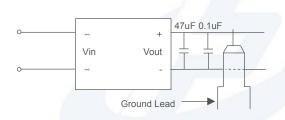


AC-DC Converter A03-XE1 Series

	EFT	IEC 61000-4-4	Criteria A
	Surge	IEC 61000-4-5	Criteria A

- 1. The "Output voltage tolerance" includes initial voltage accuracy, thermal drift, line regulation and load regulation at rated input voltage and load regulation.
- 2. Ripple& noise is test with E-Cap 47uF low ESR and 0.1uF MLCC across outputs at 20MHz bandwidth.
- 3. All specifications valid at nominal input voltage, full load and 25°C after warm-up time unless otherwise stated.

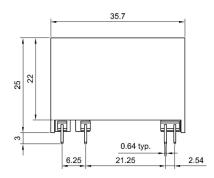
RIPPLE & NOISE

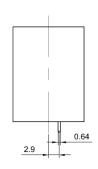


DERATING CURVE

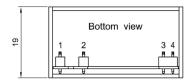


MECHANICAL SPECIFICATION



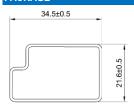


Pin	Single
1	Vin(L)
2	Vin(N)
3	+Vout
4	-Vout



Unit : mm Tolerance : ±0.5mm

PACKAGE



UNIT:mm 1 Tube = 13 pcs Length:520±2mm