

Features

- Universal input 90-264VAC, 47-63Hz
- -25°C to +85°C operating temperature
- Encapsulated, compact case
- High efficiency up to 80%
- Fixed output voltage
- Continuous short circuit protection
- Isolated output 3750VAC
- Short circuit protection

Application:

1. Industry control application
2. AC motor control application

Selection Guide

Part number	Input voltage	Output voltage	Output current @full load	Efficiency* typ.	Capacitive Load* max.
L4A10-3.3	90-264VAC	3.3 VDC	2500 mA	70%	18000uF
L4A10-05		5 VDC	2000 mA	76%	4800uF
L4A10-12		12 VDC	840 mA	78%	2000uF
L4A10-24		24 VDC	420 mA	80%	360uF

* The efficiency measured at full load at 115VAC/230VAC after warm-up.

* The capacitive load measured at full load at 115VAC, Ta=25°C with constant resistant mode.

* The product information and specifications are subject to change without prior notice.

* All specifications valid at nominal input voltage 115 and 230VAC, full load and 25°C after warm-up time unless otherwise stated.

L 4 A 1 0 - 05

Output voltage

Specifications

Parameter	Conditions	Min.	Typ.	Max.	Unit
Input					
Input voltage range	See derating curve	90		264	VAC
Input frequency	For AC input	47		63	Hz
Input current	115VAC			250	mA
	230VAC			150	
Inrush current (cold start @25°C)	115VAC			20	A
	230VAC			40	
Start-up time	115VAC			2	S
No load power consumption				0.1	W
Leakage current				0.25	mA
External fuse (or internal)				External	

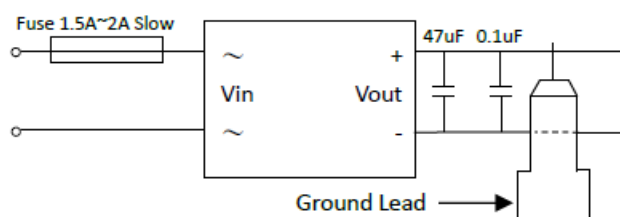
Parameter	Conditions	Min.	Typ.	Max.	Unit
Output					
Output voltage tolerance			±6		%
Ripple & noise*	Vo=5V / 12V Vo=3.3V / 24V			150 180	mVp-p
Minimum load		0			%
Line regulation				±1.5	%
Load regulation	10%-100% load			±2	%
Hold-up time	115V / 60Hz	8			ms
Operating frequency			75		KHz
Environment					
Operating temperature	With derating	-25		85	°C
Storage temperature		-25		85	°C
Relative humidity				95	%RH
Vibration			MIL-STD-202G		
Function					
Isolation voltage	1 minute, Pri to Sec cut-off current: 5mA	3750			VAC
Isolation capacitance			1100		pF
Isolation resistance	DC 500V	1			GΩ
MTBF (MIL-HDBK-217F)	115VAC @25°C	TBD			KHours
Short circuit protection		Continuous, Automatic recovery			
Over load protection		Automatic recovery			
Safety		Meet 60950/60335-1			
Physical					
Dimension	(L x W x H)	40.0 x 33.5 x 22.0 mm			
Case material		UL94V-0 black plastic			
Potting material		Silicone			
Weight		42.0			g
EMC					
EMI	EN55032	Class B			
ESD	IEC 61000-4-2	Criteria A			
EFT	IEC 61000-4-4	Criteria A			
Surge	IEC 61000-4-5	Criteria A			

*The "output voltage tolerance" includes initial voltage accuracy, thermal drift, line regulation and load regulation at rated input voltage and load conditions.

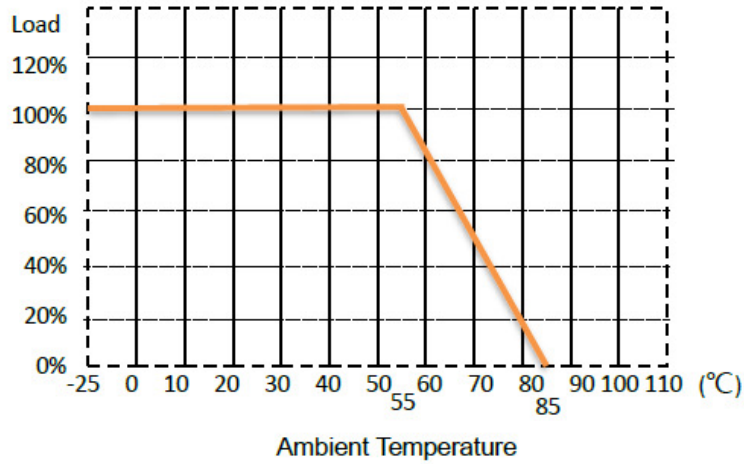
**Ripple and Noise" is test with E-Cap 47uF low ESR and 0.1uF MLCC across outputs at 20MHz bandwidth.

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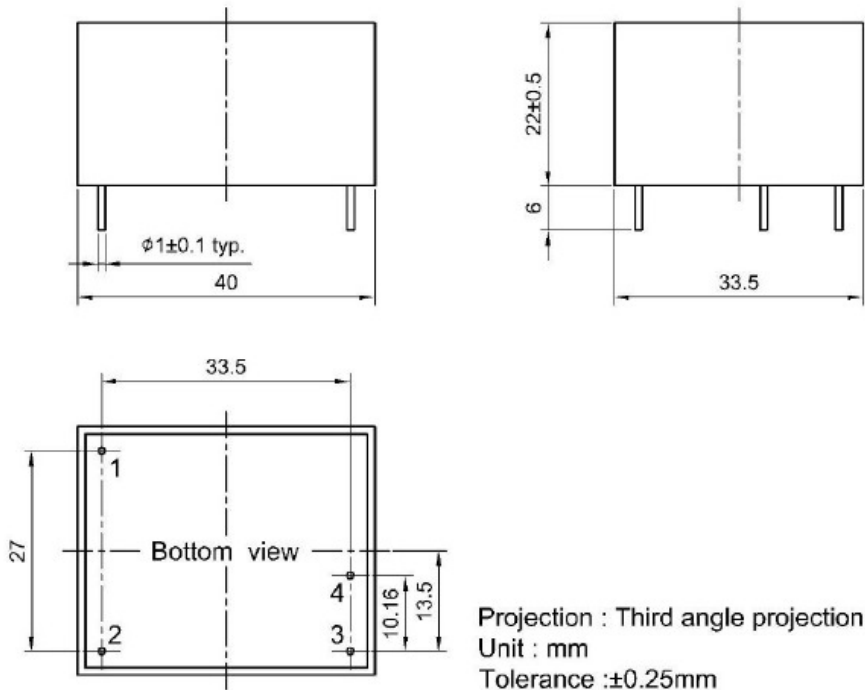
■ Ripple & Noise measure method



Derating Curve



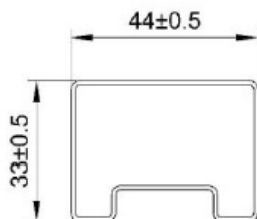
Mechanical Dimension & Pinning



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

Projection : Third angle projection
Unit : mm
Tolerance :±0.25mm

Package



UNIT:mm
1 Tube = 14 pcs
Length:520±2mm