

**DESCRIPTION**

Adaptor-P24V is an adaptor board for VXXX-ISO voltage transducers for alternative screw terminal terminations and using single nominal 24Vdc power supply. The nominal 24Vdc range is 18V to 36Vdc. The adaptor board generates internal +/-12Vdc to power up VXXX-ISO voltage transducer. The +/-12Vdc are monitored by an integrated voltage monitor circuitry and the health status is provided for user usage in open collector configuration. The adaptor board has built-in filter and decoupling circuitry to withstand 40V 50ms surge and +/-100V spikes (100KHz-500KHz).

VXXX-ISO voltage transducers include V1000-ISO, V500-ISO, and V50-ISO which are sold separately.



Fig 1. Adaptor-P24V



Fig 2. Adaptor-P24V with V1000-ISO (sold separately)

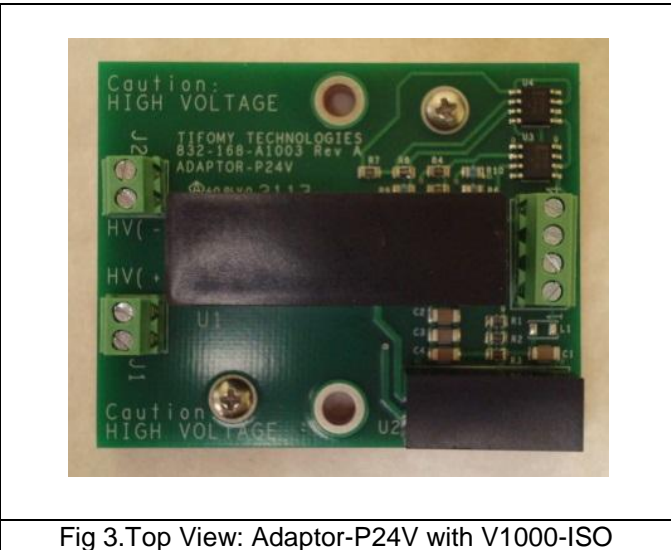
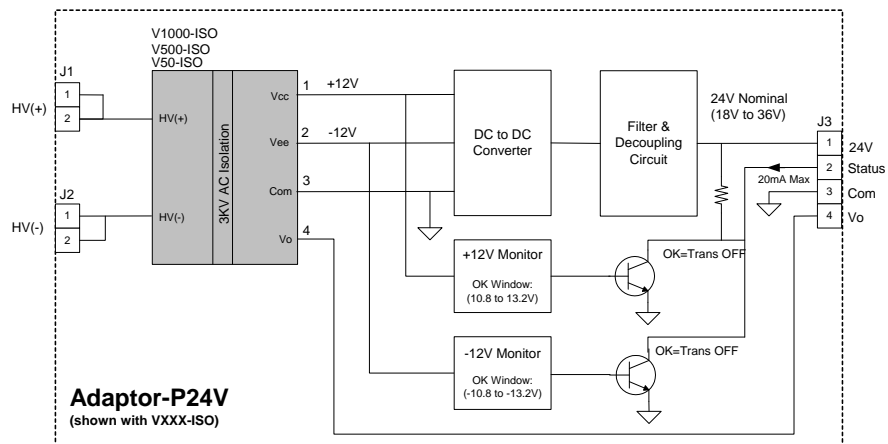
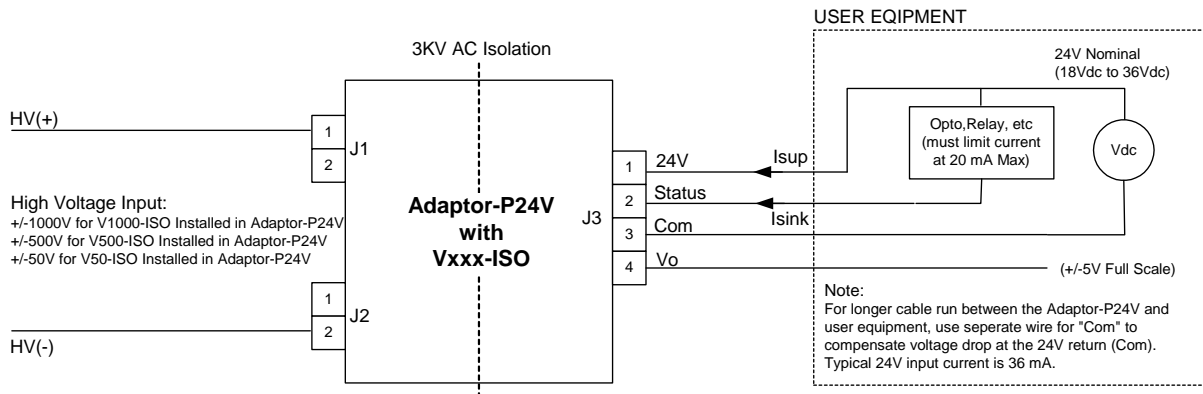


Fig 3. Top View: Adaptor-P24V with V1000-ISO

**FUNCTIONAL BLOCK DIAGRAM**



**TYPICAL APPLICATION WIRING DIAGRAM**



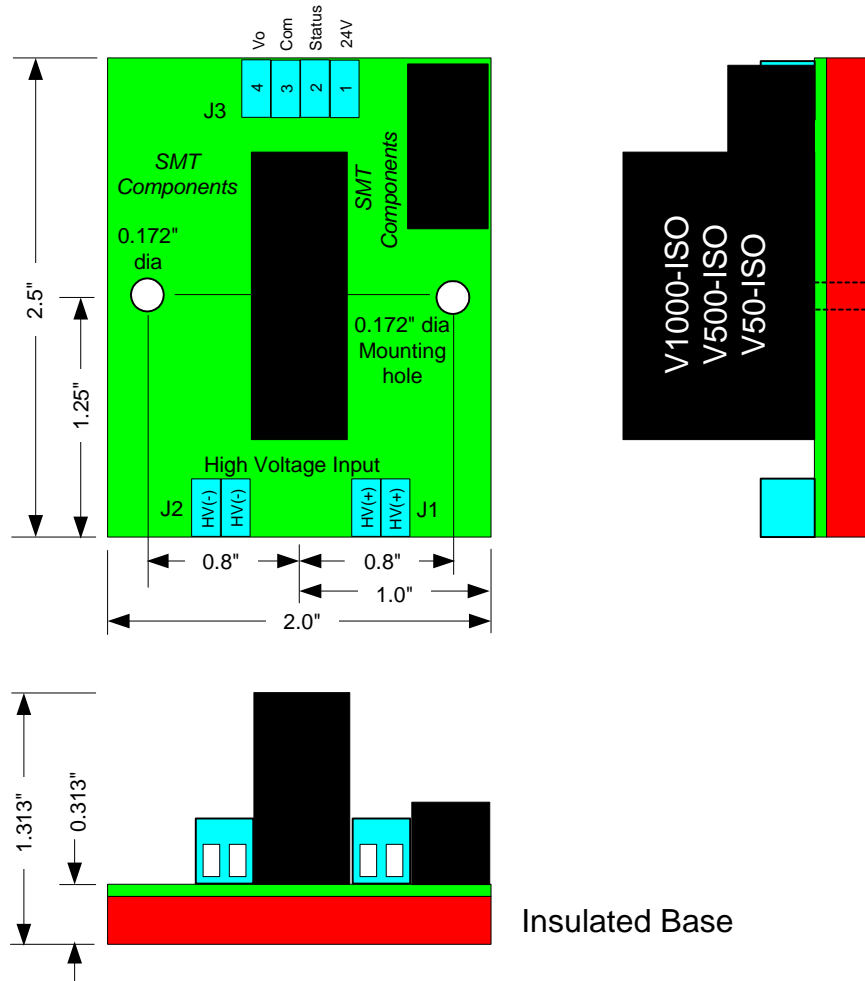
**ABSOLUTE MAXIMUM RATINGS**

Parameter	Symbol	Minimum	Maximum	Units	
Storage Temperature	T <sub>s</sub>	-45	+ 95	°C	
Ambient Operating Temperature	T <sub>A</sub>	-40	+ 85	°C	
Supply Voltage (Steady State)	[J3-1]-[J3-3]	0	40	V	
	I <sub>sup</sub>		40	mA	
Supply Voltage (50 ms Surge)	[J3-1]-[J3-3]	0	40	V	
Supply Voltage Spikes (100KHz-500KHz) 100ms Burst	[J3-1]-[J3-3]	-100	100	V	
Steady State Input Voltage	V1000-ISO	HV(+) – HV(-)	-1050	+ 1050	V
	V500-ISO	HV(+) – HV(-)	-525	+ 525	V
	V50-ISO	HV(+) – HV(-)	-55	+ 55	V
Transient Input Voltage (2 S)	V1000-ISO	HV(+) – HV(-)	-1200	+ 1200	V
	V500-ISO	HV(+) – HV(-)	-600	+ 600	V
	V50-ISO	HV(+) – HV(-)	-65	+ 65	V
Output Voltage (V <sub>o</sub> )	[J3-4]- [J3-3]	- 6	+ 6	V	
Status Output Pin	Status [J3-2]	0	40	V	
		0	20	mA	
Screw Terminals	Single Wire	#24	#16	AWG	
	Max Torque +/-10%		0.19	N-m	
	Current		5	A	

**RECOMMENDED OPERATING CONDITIONS**

Parameter	Symbol	Minimum	Maximum	Units	
Ambient Operating Temperature	T <sub>A</sub>	- 40	+ 85	°C	
Supply Voltage	[J3-1]-[J3-3]	18	36	V	
Input Voltage Range	V1000-ISO	HV(+) – HV(-)	-1000	+ 1000	V
	V500-ISO	HV(+) – HV(-)	-500	+ 500	V
	V50-ISO	HV(+) – HV(-)	-50	+ 50	V


**PACKAGE OUTLINE** (SHOWN WITH VXXX-ISO WHICH IS SOLD SEPARATELY):



**PACKAGE WEIGHT:**

2.01 oz (57 g), VXXX-ISO excluded.

**WARNING!**

 <p>Danger! Electrical Shock Risk</p>	<p>The exposed pins of the Adaptor-P24V can carry hazardous voltage. The device must be used in a protective housing and the conducting parts must be inaccessible after installation. Ignoring this warning can lead to injury and/or serious damage.</p>
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