

5V ADAPTOR BOARD FOR VXXX-ISO VOLTAGE TRANSDUCERS

Adaptor-P5V

DESCRIPTION

Adaptor-P5V is an adaptor board for VXXX-ISO voltage transducers for alternative screw terminal terminations and using single nominal 5Vdc power supply. The nominal 5Vdc range is 4.5V to 9Vdc. 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 13V 50ms surge and +/-25V spikes (100KHz-500KHz).

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

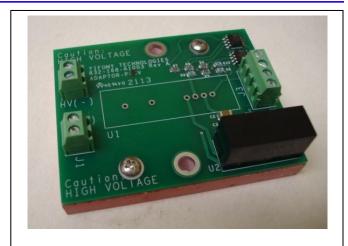


Fig 1. Adaptor-P5V

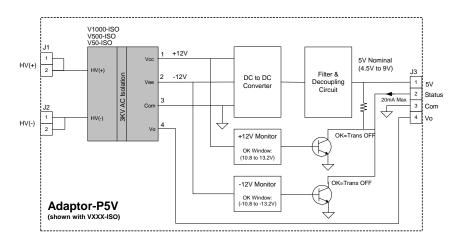






Fig 3.Top View: Adaptor-P5V with V1000-ISO

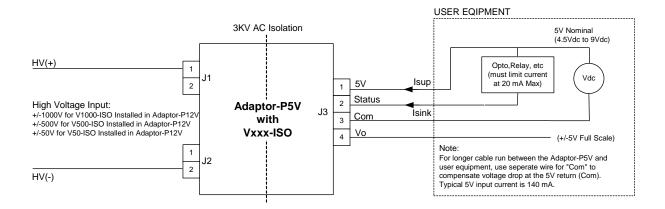
FUNCTIONAL BLOCK DIAGRAM



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TYPICAL APPLICATION WIRING DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Parameter		Symbol	Minimum	Maximum	Units
Storage Temperature		Ts	-45	+ 95	°C
Ambient Operating Temperature		TA	-40	+ 85	°C
Supply Voltage (Steady State)		[J3-1]-[J3-3]	0	9	V
		Isup		180	mA
Supply Voltage (50 ms Surge)		[J3-1]-[J3-3]	0	13	V
Supply Voltage Spikes (100KHz-500KHz) 100ms Burst		[J3-1]-[J3-3]	-25	25	V
	V1000-ISO	HV(+) – HV(-)	-1050	+ 1050	V
Steady State Input Voltage	ge V500-ISO	HV(+) – HV(-)	-525	+ 525	V
	V50-ISO	HV(+) – HV(-)	-55	+ 55	V
	V1000-ISO	HV(+) – HV(-)	-1200	+ 1200	V
Transient Input Voltage (2	2 S) V500-ISO	HV(+) – HV(-)	-600	+ 600	V
	V50-ISO	HV(+) – HV(-)	-65	+ 65	V
Output Voltage (V _o)		[J3-4]- [J3-3]	- 6	+ 6	V
Status Output Pin		Status [12.2]	0	20	V
		Status [J3-2]	0	20	mA
Screw Terminals	Single Wire		#24	#16	AWG
	Max Torque +/-10%			0.19	N-m
	Current			5	Α

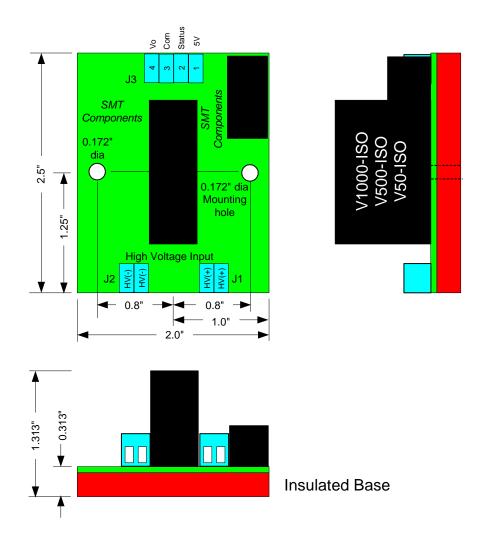
RECOMMENDED OPERATING CONDITIONS

Parameter		Symbol	Minimum	Maximum	Units
Ambient Operating Temperature		TA	- 40	+ 85	°C
Supply Voltage		[J3-1]-[J3-3]	4.5	9	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

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



PACKAGE WEIGHT:

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

WARNING!



The exposed pins of the Adaptor-P5V 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.



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