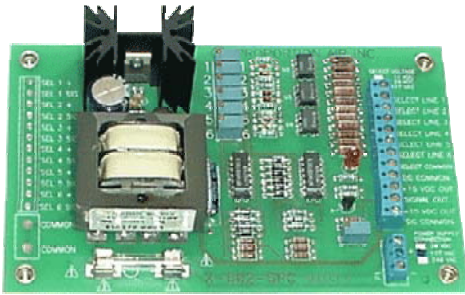


## SPC SELECT SIX SIGNAL GENERATOR & POWER SUPPLY



- ◆ Input power 24VDC, 110 VAC or 220 VAC
- ◆ Combination of power supply & six channel command voltage generator
- ◆ Safety fuse protected

### DESCRIPTION

The SELECT 6 is designed to provide electrical power and six selectable 0-10 VDC command voltages to Proportion Air's electro-pneumatic control valves. This product is very useful where up to six pressure set points are needed and no analog signal is available to command Proportion Air's control valves.

The SELECT 6 is a combination power supply and six channel command voltage generator. The power supply portion will deliver a regulated 15 VDC at 600 mA. The command generator is designed to accept an enable signal from a PLC or other controller and output a preset command voltage. The enable signals are completely isolated from the rest of the signal circuitry and power supply with an opto-coupler, however they share a common return line. There are six selectable 0-10 VDC channels. The output voltage for each channel is user settable by adjusting the corresponding potentiometer.

The SELECT 6 also includes a master gain potentiometer which sets the maximum output voltage for all six of the selectable channels. The master gain potentiometer can be used to limit the maximum command signal that a Proportion Air servo valve receives.

The SELECT 6 can be configured to accept input power of 220 VAC, 110VAC, or 24 VDC. The enable lines can be configured to accept 12VDC, 24VDC, or 110VAC. All the enable lines must accept the same voltage as they share a common return wire.

The Select 6 can be configured with remote potentiometers such that each channel output voltage can be adjusted from a remote location.

### SPECIFICATIONS

PARAMETER	MIN	TYP	MAX	UNITS
Operating Temperature	0 32	- -	50 122	deg. C deg. F
Power Supply:				
Input Voltage				
24 VDC (A)	18	24	26	VDC (1)
110 VDC (B)	100	110	130	VAC
220 VAC (C)	200	220	240	VAC
Output voltage	14.4	15.0	15.6	VDC
Line Regulation	-	4	-	mV
Load Regulation	-	12	150	mV
Output Noise	-	90	150	uV
Output Current	-	-	600	mA
Select Lines:				
Input Voltage				
12 VDC (V)	10.2	12	14	VDC
24 VDC (W)	21.6	24	26	VAC
110 VAC (Y)	-	120	130	VAC
Input Impedance	-	2	-	K-ohm
12 Vdc	-	4	-	K-ohm
24Vdc	-	18	-	K-ohm
110 Vdc	-	6	-	mA
Current Isolation	-	2500	-	VDC
Signal Section:				
Output Voltage	0	-	10	VDC
Output Current	-	-	25	mA (2)

(1) Select when Ordering.

(2) Tested at 2500 Vdc between select line and signal circuitry with less than 1 uA leakage.

#### NOTE:

Controllers utilizing TRIAC outputs to enable the select lines generally have a small amount of leakage current through the TRIAC resulting in the select line being enabled at all times. Controlling elements such as switches and relays work the best.

# SETUP

Wire the Select Six as shown in Figure 1. Connect a voltmeter between signal out and DC common. Enable select line 1. Turn the channel 1 adjustment potentiometer fully clockwise (about 12 turns). Adjust the master gain potentiometer to obtain a 10VDC output as indicated on the voltmeter. The master gain will not have to be further adjusted. Sequentially enable select lines one at a time and adjust each select line potentiometer to obtain desired output voltage.

The Select Six can be configured with remote potentiometers such that each channel output voltage can be adjusted from a remote location. The external remote potentiometer must be 10 K ohm or greater. Each channel which uses a remote potentiometer must have the onboard potentiometer removed. Figure 2 shows external potentiometer wiring.

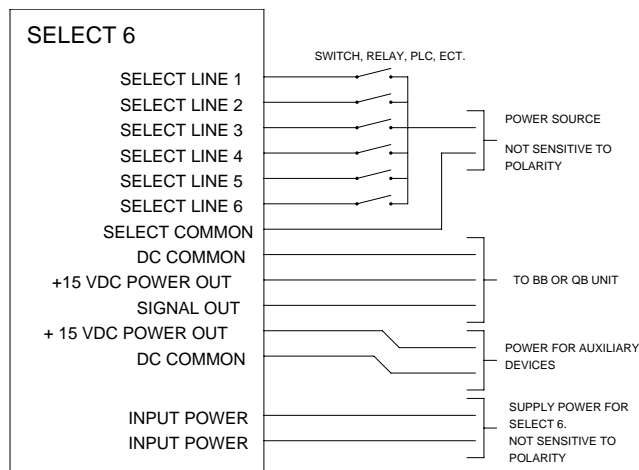
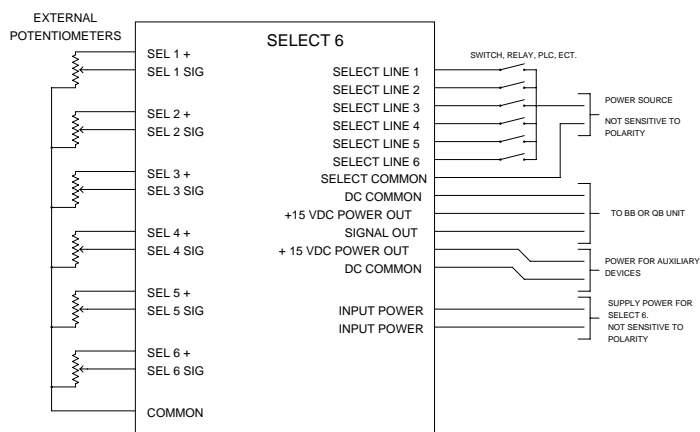


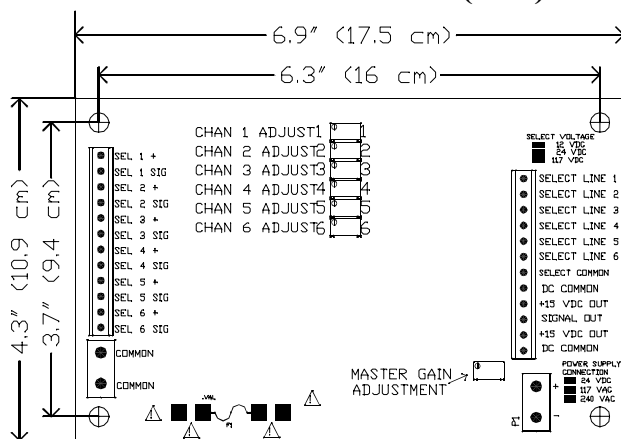
Figure 1



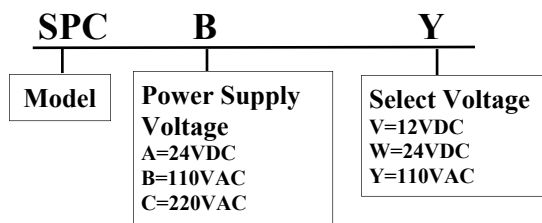
NOTE: CONNECT THE SELECT CHANNEL SIGNAL LINE TO COMMON ON ALL CHANNELS WITHOUT A POTENTIOMETER.

Figure 2

## DIMENSIONS inches (mm)



## ORDERING INFORMATION



### Special options

- S390 Set up for remote potentiometers
- S475 Set up for one potentiometer
- S500 Configure for TRIAC output

When ordering a SELECT-SIX series, two items must be considered: POWER SUPPLY available and SELECTING VOLTAGE. Power supply simply refers to the power available to operate the Select-Six. The select voltage is determined by the supply available to activate the select lines.

Proportion-Air products are warranted to the original purchaser only against defects in material or workmanship for one (1) year from the date of manufacture. The extent of Proportion-Air's liability under this warranty is limited to repair or replacement of the defective unit at Proportion-Air's option. Proportion-Air shall have no liability under this warranty where improper installation or filtration occurred.

All specifications are subject to change without notice. **THIS WARRANTY IS GIVEN IN LIEU OF, AND BUYER HEREBY EXPRESSLY WAIVES, WARRANTIES OR LIABILITIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY OBLIGATION OF PROPORTION-AIR WITH REGARD TO CONSEQUENTIAL DAMAGES, WARRANTIES OF MERCHANTABILITY, DESCRIPTION, AND FITNESS FOR A PARTICULAR PURG0003OSE.**

**WARNING:** Installation and use of this product should be under the supervision and control of properly qualified personnel in order to avoid the risk of injury or death.

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