

PVD3S2E

Proportional Valve Driver

Two PWM solenoid outputs, epoxy potted



PWM

CONTROLS INC.

BENEFITS AND FEATURES

- Versatile digital design
- Large, easy-to-use adjustments and three-digit seven-segment LED display
- Wide range of supply voltage
- Electronic limiting circuit / short circuit proof
- Load can be connected & disconnected live
- Protected against wrong connection
- Energy-efficient PWM circuit, no heat sink is required
- Current sensing maintains output regardless of changes in supply voltage and coil resistance
- Simple control with two digital inputs per channel
- Can be used either for one dual solenoid valve or two independent single valves
- Environmentally sealed



SPECIFICATIONS

- Operating voltage: 9 - 35VDC
- Maximum output current: 3A
- Ramp time: 0.0 to 99.5s
- Linearity: 0.5%
- PWM / Dither frequency: 50-500Hz
- Operating temperature: -40° to +75° Celsius
- Input signals: four digital (on/off)
- Size: 3.00" x 0.875" x 3.25" (4.00" with flanges)
- Weight: 0.3lbs

This product fulfills
the essential
requirements of
the EMC Directive
2004/108/EC:
EN61000-6-1:2005,
EN61000-6-3:2006

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SETTINGS AND RANGE

AJ9	A jog, output current manual override, 0.00 to 3.00 A
AP 1	Set point A1, 0.00 to 3.00 A
AP2	Set point A2, 0.00 to 3.00 A
AP3	Set point A3, 0.00 to 3.00 A
AP4	Set point A4, 0.00 to 3.00 A
AUP	A ramp up, time required for the output to increase 1A, 00.0 to 99.5 s
Adn	A ramp down, time required for the output to decrease 1A, 00.0 to 99.5 s
bJ9	B jog, output current manual override, 0.00 to 3.00 A
bP 1	Set point B1, 0.00 to 3.00 A
bP2	Set point B2, 0.00 to 3.00 A
bP3	Set point B3, 0.00 to 3.00 A
bP4	Set point B4, 0.00 to 3.00 A
bUP	B ramp up, time required for the output to increase 1A, 00.0 to 99.5 s
bdn	B ramp down, time required for the output to decrease 1A, 00.0 to 99.5 s
dF	Dither frequency, 050 to 500 Hz
di	Display orientation, normal or up-side-down
SA	Save settings

SETUP PROCEDURE

At power up, you may rotate the left side control **#** to read the target set point or the actual solenoid output current directly in Amps: **Ain** (A target), **Aot** (A actual), **bin** (B target) or **bot** (B actual). To enter set-up mode, rotate right side control *****; the display will show the settings sequentially: **AJ9**, **AP 1**, **AP2**, **AP3**, **AP4**, **AUP**, **Adn**, **bJ9**, **bP 1**, **bP2**, **bP3**, **bP4**, **bUP**, **bdn**, **dF**, **di** and **SA**.

When you reach the setting that you want to modify, rotate **#** up or down to the desired value. To modify another setting, rotate ***** and repeat. The Driver is fully functional during the set-up procedure with any adjustments effective immediately (except the input range selection that becomes effective only after saving). In order to write the new settings in the memory and return to normal mode of operation, rotate ***** until the display shows **SA** and then rotate **#** one full turn. If you do not want to keep the new settings, simply power down without saving.

WE RESERVE THE RIGHT TO DISCONTINUE MODELS OR CHANGE SPECIFICATIONS WITHOUT NOTICE OR INCURRING OBLIGATION

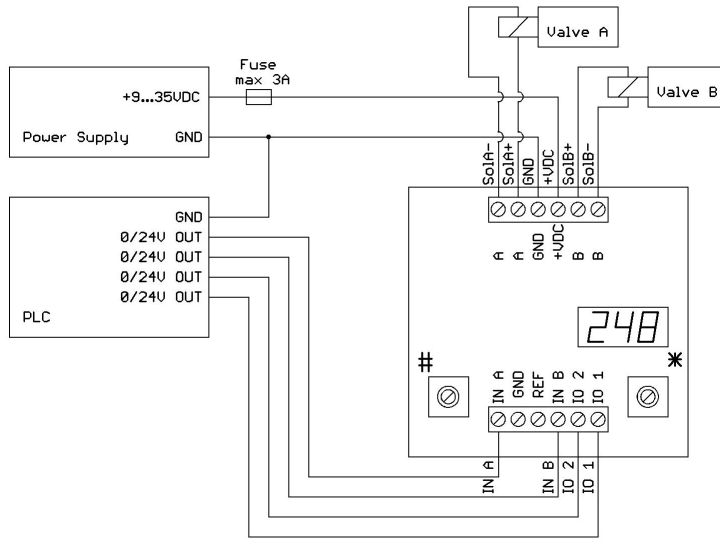
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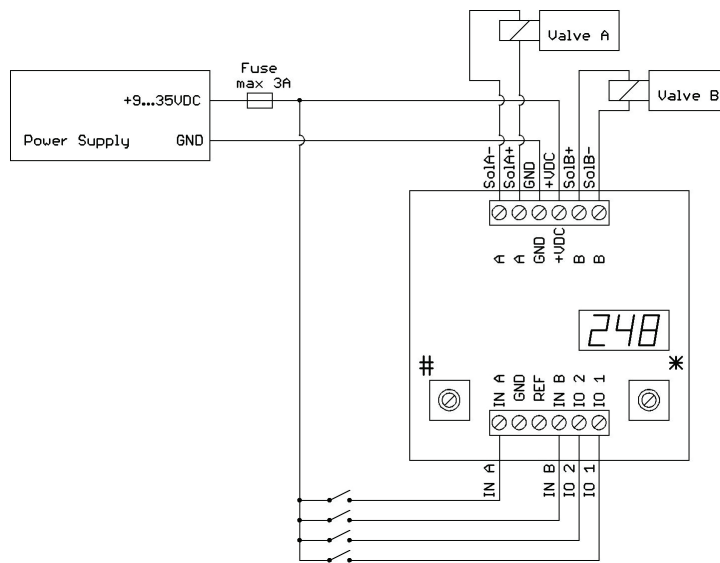


WIRING DIAGRAMS

With signal from PLC:



With four switches for soft shift between four presets per channel:



		IO 1	
		OFF	ON
IN A	OFF	AP 1	AP 3
	ON	AP 2	AP 4

		IO 2	
		OFF	ON
IN B	OFF	bP 1	bP 3
	ON	bP 2	bP 4