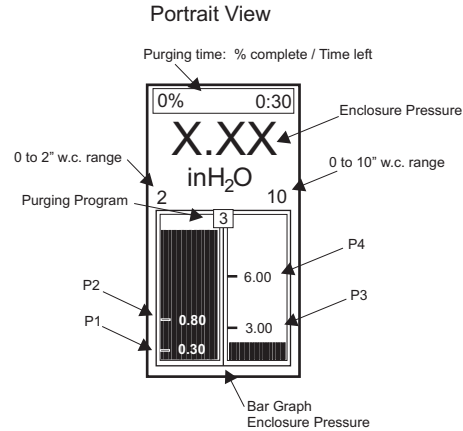
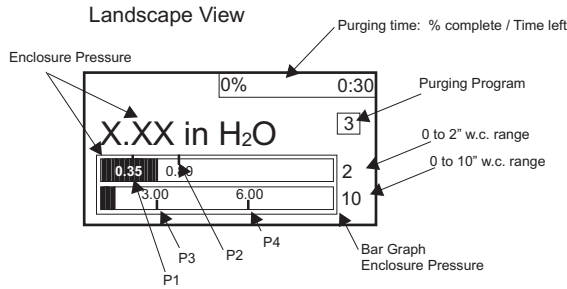


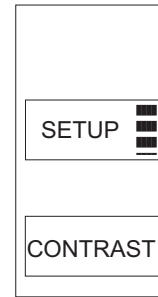
7500 Programming Quick Guide

Operating elements of the controller

The 7500 controller has a touchscreen and 4 LEDs



To enter Purge Setup or Contrast
press and hold finger on the display in position for 5 seconds. To enter Contrast push at location shown



To enter Purge Setup or Contrast
press and hold finger on the display in position for 5 seconds. To enter Contrast push at location shown

DISPLAY	PARAMETER	DEFAULT
PASSWORD / SET	Enter PSW settings	0000
PURGE / PROGRAM	Program modes	3
PURGE / TIME	Purging time	00:30
ENCLOSUR/PRESS P1	Min pressure	Gas: 0.25" (0.63mbar) Dust: 0.63" (1.63mbar)
ENCLOSUR/PRESS P2	Alarm pressure	0.8" (2 mbar)
ENCLOSUR/PRESS P3	Purging pressure	3.0" (7.5 mbar)
ENCLOSUR/PRESS P4	Max pressure	6.0" (15 mbar)
LEAKAGE / HYST	Leakage comp	0.2" (0.5 mbar)
PROGRAM /K2	K2 function	K1
SHUT-OFF / DELAY	Delay shut-off K1	0 sec
BYPASS / N Y	Bypass off/on	Off
UNITS / M I	Metric or Imperial	Imperial
CHANGE / PASSWORD	Change password	
RESTORE DEFAULTS	Factory Restore	
DISPLAY ROTATION	Landscape or Portrait	Portrait
CYCLE POWER	Power OFF then ON	Off

LED Indication

LED	LED Color	Description
K1	Green	Contact K1 is energized (enclosure contacts)
K2	Amber	Contact K2 is energized (alarm contacts)
P/SV1	Blue	Safe pressure P1 (minimum encl. press.)
	Amber	SV1 is energized

The 7500 controller has 5 purging and pressurization programs available. Below are the programs:

Program	Application	Purge	Operation Specifics
Purge 1	Gas	Immediate Purge	<ul style="list-style-type: none"> Purge starts on power up (SV1) After purging Enclosure contacts (K1) energize If max. Press (P4) is reached, SV1 turns off Enclosure power ON during loss of pressure (K1) Alarms can be set for low pressure. (K2) Pressure compensation turns on below (P2)
Purge 2	Gas	Delayed Purge	<ul style="list-style-type: none"> Purge starts above P1 pressure (SV1) After purging Enclosure contacts (K1) energize If max. Press (P4) is reached, SV1 turns off Enclosure power ON during loss of pressure (K1) Alarms can be set for low pressure. (K2) Pressure compensation turns on below (P2)
Purge 3	Gas	Delayed Purge	<ul style="list-style-type: none"> Purge starts above P1 pressure (SV1) After purging Enclosure contacts (K1) energize If max. Press (P4) is reached, SV1 turns off Enclosure power OFF during loss of pressure (K1) Alarms can be set for low pressure. (K2) Pressure compensation turns on below (P2)
Purge 4	Gas	Immediate Purge	<ul style="list-style-type: none"> Purge starts on power up (SV1) After purging Enclosure contacts (K1) energize If max. Press (P4) is reached, SV1 turns off Enclosure power ON during loss of pressure (K1) Alarms can be set for low pressure. (K2) Pressure compensation turns on below (P3)
Purge 5	Dust	Clean Enclosure	<ul style="list-style-type: none"> No purging is required for program 5 Increase enclosure pressure above P1 Menu screen will show 'CLEAN ENCLOSURE' Clean enclosure 'SET' button energizes enclosure.

Purge time

Purge time is set in Min:Sec (00:00). Using the arrow key to increment the time. Hold either key down for faster advance

ENCLOSUR / PRESS P1

Pressure P1 is the min. Allowed pressure for safe use. Min value is 0.25" for gas and 0.63" for dust. P1 value can not go above P2, P3, P4

ENCLOSUR / PRESS P2

Pressure P2 is used to for low pressure function. Compensation for leakages for certain functions will activate SV1 when below P2

ENCLOSUR / PRESS P3

Pressure P3 is used to activate the time for purging. Pressure above P3 indicates proper flow for purging. In program 4, P3 will start continuous flow compensation.

ENCLOSUR / PRESS P4

Pressure P4 is a maximum over pressure value. In reaching this value the display will read 'MAX'. If P4 is achieved during purging SV1 will shut off until pressure below P4.

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LEAKAGE / HYST

Unexpected leakages from the enclosure or line pressure drops will decrease the pressure within the enclosure. If the pressure drops below P2 or P3 for Program 4, then the valve SV1 can be activated until P2 (P3) + Hyst is reached and will shut off. Compensating for leakages. Set to 0 will disable this function.

PROGRAM / K2

Relay output K2 can be programmed for several functions. These functions are as follows:

K2	Switch with K1
P1+	Switch on above P1
P1-	Switch on below P1
P2+	Switch on above P2
P2-	Switch on below P2
P3+	Switch on above P3
P3-	Switch on below P3
P4+	Switch on above P4
P4-	Switch on below P4
SZ+	Switch on during purging
Bypass	Switch on if bypass is active
ALARMS	Any alarm, -P2, +P4, Bypass,

SHUT-OFF / DELAY

During operation, for program 3. if the pressure drops below P1, the delay of shutting down K1 can be implemented. The delay is selectable and from 0 to 240 seconds.



The use of the delay timer is the sole responsibility of the user

BYPASS / N Y E

Allows K1 to energize when pressure below P1. Only active in program mode. Only valid for program 3.

UNITS / M I

Allows for metric (M) or Imperial (I) values. Temperature will always be in celsius.

CYCLE POWER

Allows the unit to power down then back up again. Does not require a physical disconnect of mains.

RESTORE DEFAULTS

Restores factory default values.

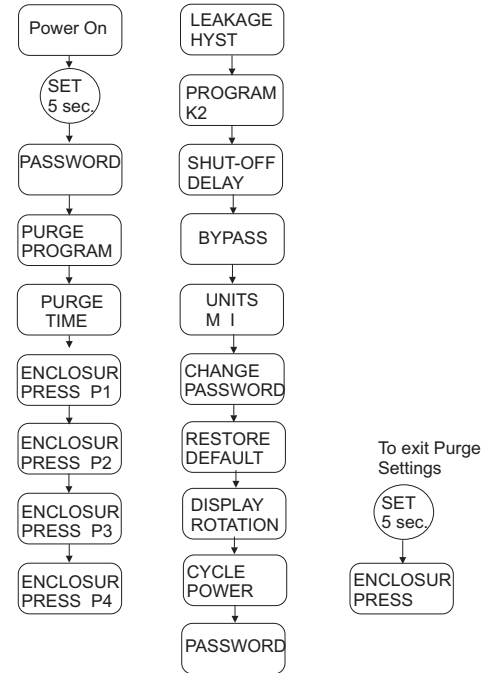
DISPLAY ROTATION

When mounting horizontal, use Landscape mode. When mounting vertical, use Portrait mode

CHANGE / PASSWORD

Enter at least 4 digits. To exit without saving password press RESET. To accept password press SET.

MENU STRUCTURE



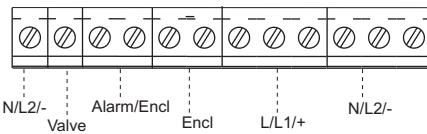
* Note: A Provision shall be made to get into the setup procedures without knowing the password. This can be a series of key strokes that when completed, will get the customer into the settings. This will not be published but offered incase they lose original password

Troubleshooting

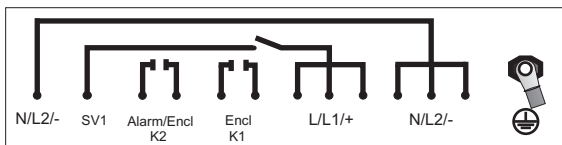
Fault	Possible Reason	Reaction	
7500 doesn't work	No voltage	Check power cables to 7500	
	7500 defect	Return 7500	
7500 switches on without purge	Purging program is wrong	Verify correct purge program	
Purge timer does not count down	No purge gas	Check gas supply	
	Digital valve does not open	Check voltage Check for blockage	
	Not enough flow from digital valve	Line pressure to low	Tubing to valve is to small
		Not enough flow to regulator	Line pressure to low
	To much leakage from enclosure		
Purging does not switch to compensation	Digital valve does not close	Check power to valve Check for blockage Gas supply is not clean	
	Digital valve shuts off before purging complete	To much leakage from enclosure	Seal enclosure
		Set point of P2 too high	Reduce set point of P2
Enclosure pressure above P4		Increase P4 and/or decrease supply pressure	

Electrical Connections

Terminal Block



Terminal Block Connections



7500 Programming Quick Guide

EPV-7500-...-02 Vent Flow vs. Enclosure Pressure

Calculation of the Purging Time

Example:

Vent: EPV-7500-...-02 (From manual graph)
 P3 set to : 2.65"H₂O (6.63mbar)

Enclosure volume: 10 cu.ft. (283 liters) Not a motor
 Flow rate from vent graph: 10 scfm (283 liters/min)
 requirement for purging

NEC: 4 volume exchanges
 IEC: 5 volume exchanges

Results:

NEC: $4 \times 10 \text{ cu.ft.} / 10 \text{ scfm} = 4.0 \text{ min.}$
 ($4 \times 283 \text{ liters} / 283 \text{ l/min} = 4.0 \text{ min.}$)
 IEC: $5 \times 10 \text{ cu.ft.} / 10 \text{ scfm} = 5.0 \text{ min.}$
 ($5 \times 283 \text{ liters} / 283 \text{ l/min} = 5.0 \text{ min.}$)

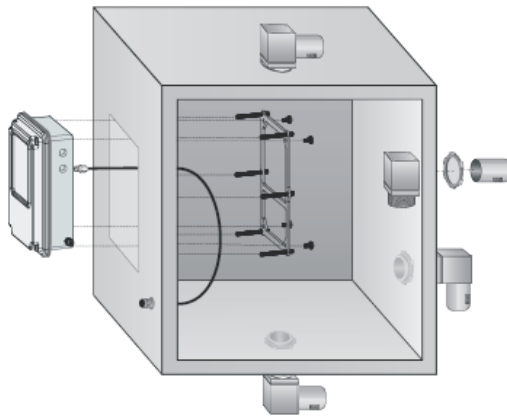
CFM	Inches of water	l/min	mbar
5	2.15	141	5.36
7	2.35	198	5.85
10	2.65	283	6.60
12	2.85	339	7.10
15	3.15	424	7.84
17	3.35	481	8.34
20	3.65	566	9.09
25	4.25	707	10.58
30	4.75	849	11.82
35	5.25	991	13.07

Tables for all vents available in 7500 manual

Typical Mounting

Component Unit

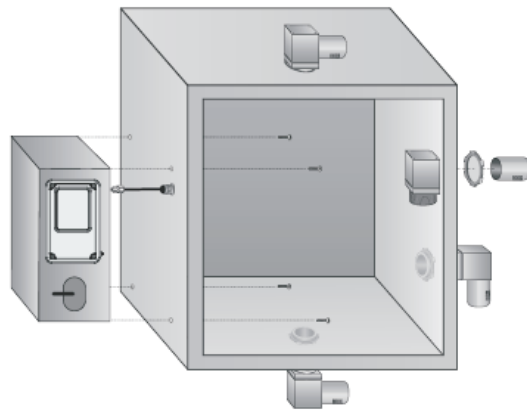
7500-01-AA-... control unit + EPV-7500-... vent



Pressure reference kit included to measure ambient pressure outside the enclosure required for the differential pressure sensor. Connect to the 7500 port marked ' - '

External mount

7500-MTD-BX-... + EPV-7500-... vent



Pressure reference kit included to measure enclosure pressure required for the differential pressure sensor. Connect to the 7500 port marked ' + '