





PVC-080C+2

Single Corner Welding Control Unit

### **General Warnings**

Control the supply voltage before mounting the device. Make sure that you have disconnected the supply cables before maintenance.

Protect the device from high humidity and water disposal. Check for condensation at sudden humdity changes.

Pay attention to relay contact currents meant at the technical instructions while connecting a load to the device.

Do not open the device in case of breakdown.

### **General Definitions**

8 NPN transistor valve output.

1 J type thermal sensor analog input.

2 digital input.

Temperature, set temperature, melting and joining time and program no displays.

Valve statuses are displayed with 10 leds.

PID control with SSR. Resistance temperature controling with +/- 1 °C fault.

### **Features**

Easy to use.

Secure front panel and mechanic structure, rubber buttons.

Understandable and legible display.

Compact structure and easy electrical connections.

Five adjustable program buttons.

Simple plug&play structure, does not require any special adjustments.

Led displays, displaying SSR and the movement of the machine.

Adjustable interval times.

Extra specialities for user; standby and clearing feature. Can be closed if wanted.

Durable under hard electrical conditions. Wide input range.

Temperature control with PID at a fault of +/- 1 C between 220 and 250 °C with 1300 and 2000W resistances.

Different color and front panel options.

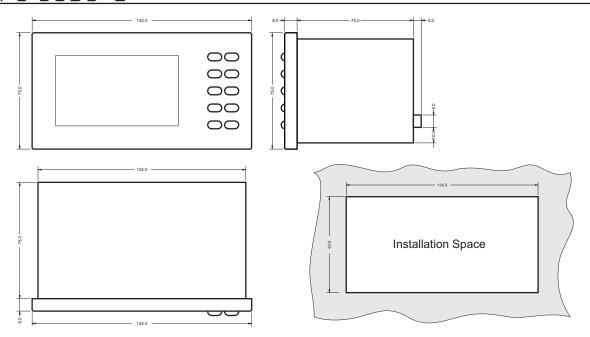
### **Technical Features**

Electrical Features				
Supply voltage	24 VDC			
Supply voltage range	15 - 36VDC			
Power consumption	*0,5A IMax : 2,1A *:(excluding valves)			
Output type / Current / Pieces	NPN transistor / IOut: 0,6A Max. / 5 pieces + SSR (IOutSSR: 50mA)			
Input type / Current / Pieces	Dry contact NPN input / 5 - 20 mA / 1 start + 1 stop (1 clearence input in clearing models).			
Analog input	J Type thermal component			
Measuring range	0 - 500°C			
Control range	0 - 300 °C or 0 - 400 °C adjusted from parameters			
Output control / Control method	PID / time proportional			
Operating temperature	0 - 70 °C			
Ambiance humidity rate	Between %25 and % 85 without condensation			
Physical Features				
Dimensions	W: 75,0 x L: 142,0 x H: 87,0 mm ( whitout klemens connections).			
Weight	300 gr			
Frame size	68,0 x 135,0 mm			
Box size	105 x 160 x 95 mm			
Quantity / Package	10			





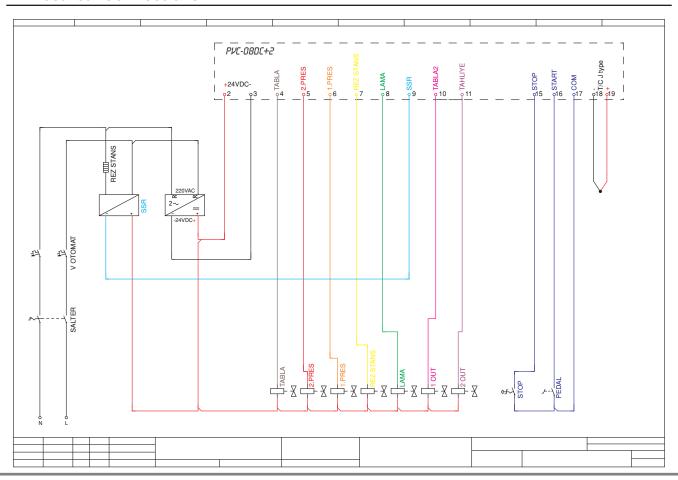
## PV[-[]8][+2 Dimensions



### **Back Sticker**



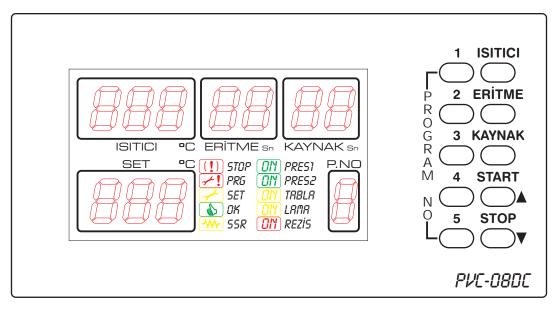
### **Electrical Connections**







## PVC-08004-2 Buttons, Leds and Definitions



(!) STOP	Blinks for warning when the Stop button is pressed.	
<b>≁!</b> PRG	Program mode is active.	
✓ SET	Temperature or time values are being changed.	
<b>♦</b> OK	The machine has warmed up and ready to work.	
₩ SSR	SSR in use.	
ON PRESI	1. Press in use.	
ON PRES2	2. Press in use.	
ON TABLA	Table in use.	
ON LAMA	Axe in use.	
ON REZİS	Resistance in use.	
### ISITICI °C	Displays the temperature of resistance. Displays the set value when 🗹 🖭 led is on.	
### SET ºC	Displays the temperature had been set.	
## ERITME sn	Displays the melting time. Adjusted when 🗹 🕬 led is on. Counts backwards.	
## KAYNAK sn	Displays the welding time. Adjusted when 🗹 🖽 led is on. Counts backwards.	
# P.NO	Program number. Temperature, melting and welding times can be adjusted for each program.	
1 PROGRAM NO	1. Program button: 1. Program's temperature, melting and welding times are displayed when pressed.	
2 PROGRAM NO	2. Program button: 2. Program's temperature, melting and welding times are displayed when pressed.	
<b>3</b> PROGRAM NO	3. Program button: 3. Program's temperature, melting and welding times are displayed when pressed.	
4 PROGRAM NO	4. Program button: 4. Program's temperature, melting and welding times are displayed when pressed.	
<b>5</b> PROGRAM NO	5. Program button: 5. Program's temperature, melting and welding times are displayed when pressed.	
ISITICI	Heater button: Edits resistance temperature. The temperature is adjusted by, ▲ and ▼ buttons.	
ERİTME	Melting button: Edits the melting time. The time is adjusted by, ▲ and ▼ buttons.	
KAYNAK	Welding button: Edits the welding time. The time is adjusted by, ▲ and ▼ buttons.	
START A	Start button: Starts the machine. ▲ button when 🗹 🖅 led is active.	
STOP ▼	Stop button: Stops the machine. ▼ button when 🗹 🖾 led is active.	

### **Changing The SET Values**

**Selecting program number:** Select the program by pressinf the buttons between 1 and 5.The temperature, melting and welding time can be adjusted.

Changing the temperature: Press the [ISITICI] button.

Adjust the value by [▲] and [▼] buttons.

Then press the [ISITICI] button again to confirm.

Changing the melting time: Press the [ERITME] button.

Adjust the value by [▲] and [▼] buttons.

Then press the [ERITME] button again to confirm.

Changing the welding time: Press the [KAYNAK] button.

Adjust the value by [ $\blacktriangle$ ] and [ $\blacktriangledown$ ] buttons. Then press the [KAYNAK] button again to confirm. .

### Operating at Exposition Mode

Press and hold the **[ISITICI]** button then press the **[START]** button to operate the machine in exposition mode

Works until [STOP] button is pressed.

### **Changing The Program Parameters**

Press the [ERITME] button while the [ISITICI] button is presed. Ied will be on. SFr 01 will be displayed.

Enter the password by [  $\blacktriangle$  ] and [  $\blacktriangledown$  ] buttons.

Press the **[ISITICI]** button to confirm the password. SFr 02 xx will be displayed.

Enter the second password by [▲] and [▼] buttons. Press the [ISITICI] button to confirm the password. The parameters will be displayed.

5 Adjust the value by [A] and [V] buttons. Press the **[ISITICI]** button to reach the next parameter.





# PVC-080042 Parameters and Definitions

	Definition	Range	Value
ZR-01	ZR 01 is the axe in time while treadle is pressed.	1 - 9.9 sn	1.2 sn
ZR-02	Table clamping time. The treadle is not active until the time ends.		1.0 sn
ZR-03	1. Press presses while the treadle is pressed. The pedal will not be active until the time ends.	1 - 9.9 sn	1.0 sn
ZR-O4	2. Press presses while the treadle is pressed again. The other operations continue automatically.	1 - 9.9 sn	1.5 sn
ZR-05	Table release time. Waits as the time adjusted.	1 - 9.9 sn	1.0 sn
ZR-06	The axe out time.	1 - 9.9 sn	1.0 sn
ZR-07	Resistance in time.	1 - 9.9 sn	1.0 sn
ZR-08	Table clamping time.	1 - 9.9 sn	1.5 sn
	Melting time begins		
ZR-09	Table release time.	1 - 9.9 sn	1.0 sn
ZR-10	Resistance out time.	1 - 9.9 sn	1.0 sn
ZR-11	Table press time.	1 - 9.9 sn	1.0 sn
	Cooling time begins		
ZR-12	Press release time. Run from after cooling time end.	1 - 9.9 sn	0.7 sn
ZR-13	2. Press release time. Run from after cooling time end.	1 - 9.9 sn	0.8 sn
ZR-14	Drain release time. Run from after cooling time end.	1 - 9.9 sn	0.1 sn
ZR-15	Table open time. Run from after cooling time end.	1 - 9.9 sn	0.4 sn
ZR-16	Table release time.	1 - 9.9 sn	0.5 sn
	Program Parameters		
PR-1	Password 1.	0 - 99	1
PR-2	Password 2.	0 - 99	1
PR-3	Drain valve open time. before cooling time end.	0 - 99	0
	Machine special function parameter		
	0. Will not operate till the set value.		
	1. Always ready to operate.		
	+ 0. Stop NO contact.		
	2. Stop NC contact.		
PR-4	+	0 - 15	12
' ' '	0. Stops when operation ends.		
	Stanby when operation ends. Lama comes out and tray closes and standby.		
	+ 0. Max set value 300 C		
	8. Max set value 400 C		
	= Enter the addition of the functions wanted.		
PR-5	Rolling number. Shows the set point under or above the number. Prevents ripples.	0 - 5	5
PR-6	ADC average number (Adjusting the value can cause problems).	0 - 7	5
PR-7	ADC read frequency (Adjusting the value can cause problems).	0 - 255	28
PR-8	PID KP coefficient (Adjusting the value can cause problems).	0 - 255	110
PR-9	PID KD coefficient (Adjusting the value can cause problems).	0 - 255	250
PR-10	PID KI coefficient (Adjusting the value can cause problems).	0 - 255	8
PR-11	PID cycle time	0 - 255	2

### **Time Diagram**

