PVC2005DC

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

- 6 NPN transistor valve output.
- 1 J type thermal sensor analog input.
- 2 contact 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.

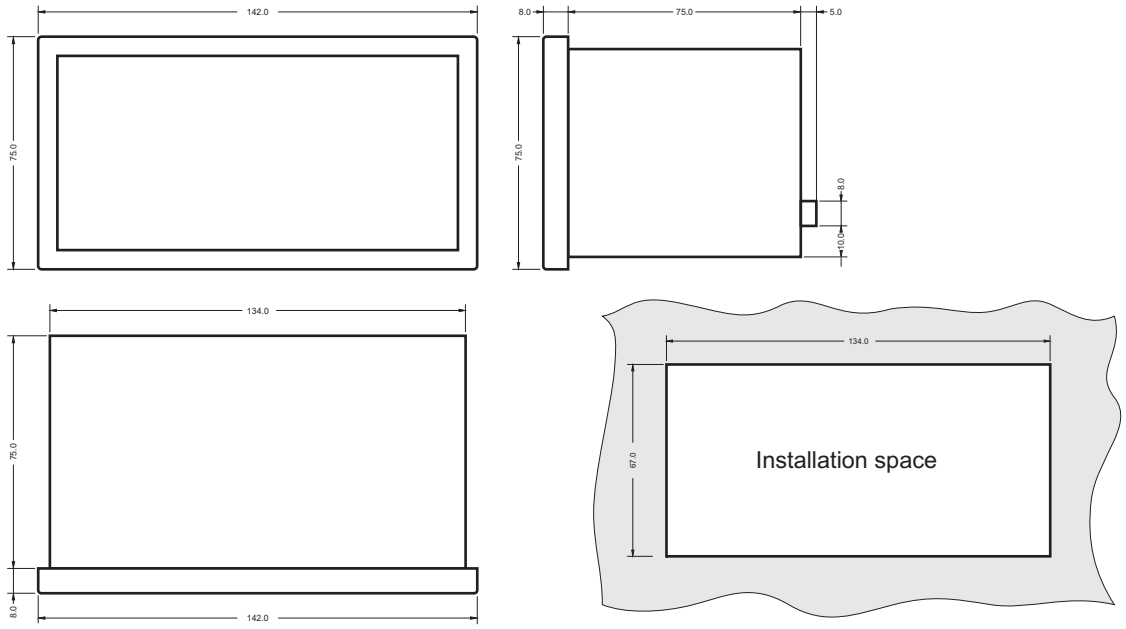
Features

- Easy to use.
- Lexan front panel.
- Understandable and legible display.
- Compact structure and easy electrical connections.
- 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.

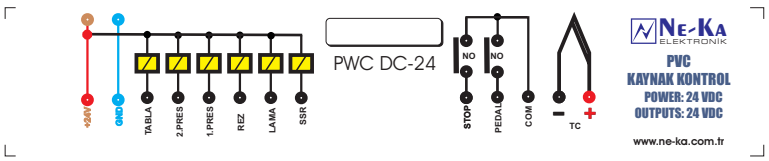
Technical Features

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 % without condensation
Physical Features	
Dimensions	W: 75,0 x L: 142,0 x H: 87,0 mm (without klemens connections).
Weight	300 gr
Frame size	68,0 x 135,0 mm
Package size	105 x 160 x 95 mm
Quantity / Package	10

PVC2005DC Dimensions

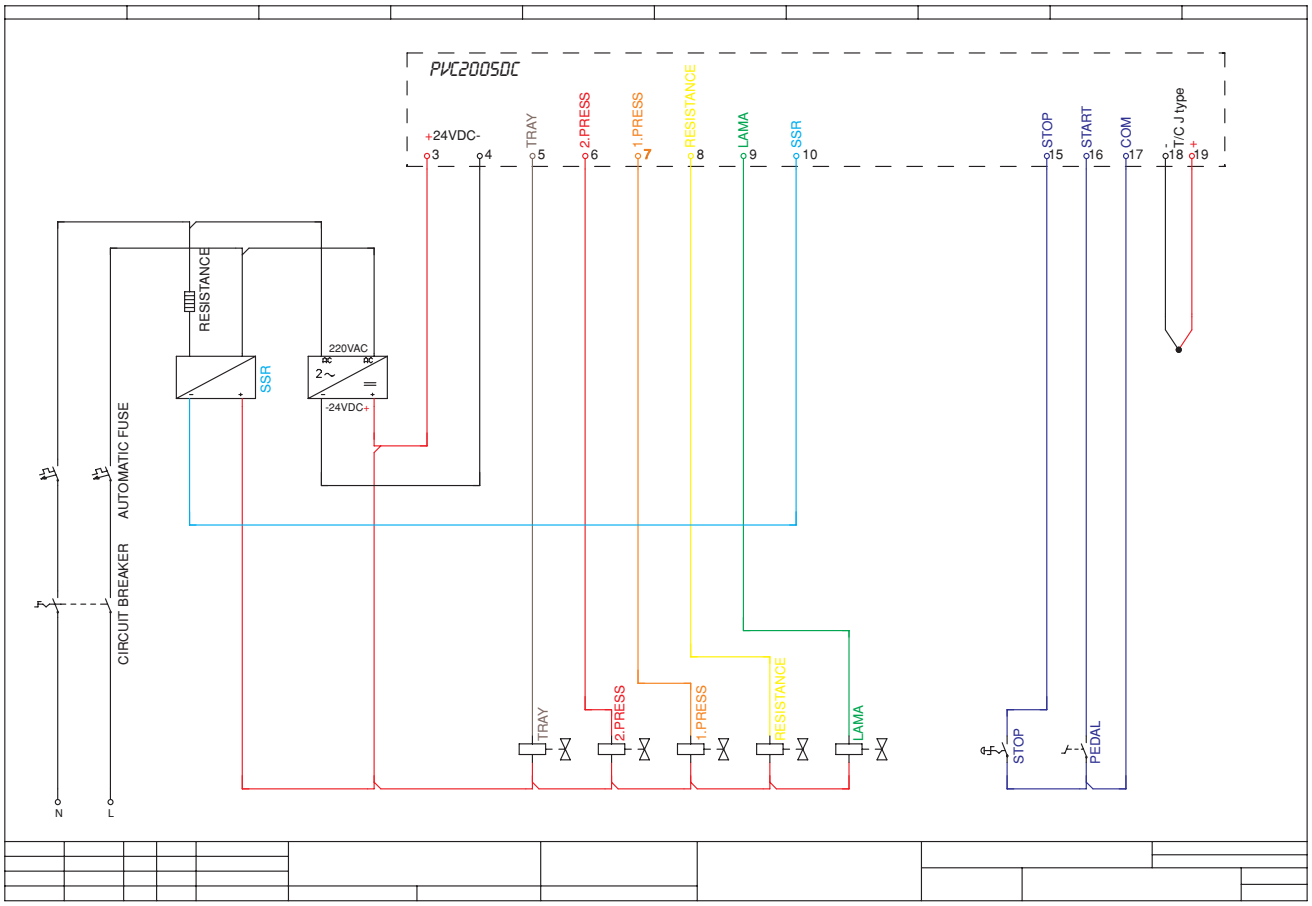


Back Sticker

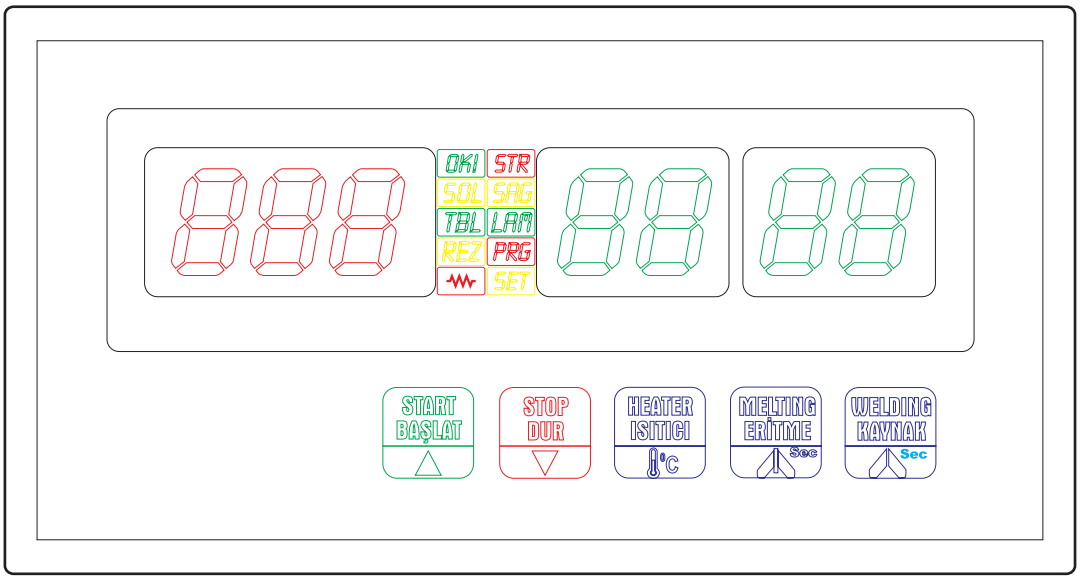


PVC2005DC
Back sticker

Elektrik Bağlantısı



PVC2005DC Buttons, Leds and Definitions



STR START	Makina çalışırken yanar.
PRG PRG	Program mode is active.
SET SET	Temperature or time values are being changed.
OKI OK	The machine has warmed up and ready to work.
SSR	SSR in use.
SOL PRES1	1. Press in use.
SAĞ PRES2	2. Press in use.
TBL TABLA	Tray in use.
LAM LAMA	Lama in use.
REZ REZİS	Resistance in use.
888 ISITICI °C	Displays the temperature of resistance. Displays the set value when SET SET led is on.
88 ERİTME Sn	Displays the melting time. Adjusted when SET SET led is on. Counts backwards
88 KAYNAK Sn	Displays the welding time. Adjusted when SET SET led is on. Counts backwards.
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	Start button: Starts the machine. ▲ button when SET SET led is active.
STOP	Stop button: Stops the machine. ▼ button when SET SET led is active.

Changing The SET Values

- **Changing the temperature:** Press the **[HEATER]** button.
- Adjust the value by [▲] and [▼] buttons.
- Then press the **[HEATER]** button again to confirm.

- **Changing the melting time:** Press the **[MELTING]** button.
- Adjust the value by [▲] and [▼] buttons.
- Then press the **[MELTING]** button again to confirm.

- **Changing the welding time:** Press the **[WELDING]** button.
- Adjust the value by [▲] and [▼] buttons.
- Then press the **[WELDING]** button again to confirm. .

Operating at Exposition Mode

- Press and hold the **[HEATER]** 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 **[MELTING]** button while the **[HEATER]** button is presed. PRG led will be on. SFr 01 will be displayed.
- Enter the password by [▲] and [▼] buttons.
- Press the **[HEATER]** button to confirm the password.
- SFr 02 xx will be displayed.
- Enter the second password by [▲] and [▼] buttons.
- Press the **[HEATER]** button to confirm the password.

The parameters will be displayed.

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

PVC2005DC Parameters and Definitions

	Definition	Range	Value
ZR-01	ZR 01 is the lama in time while pedal is pressed.	1 - 9.9 sn	1.0 sn
ZR-02	Tray press time. The pedal is not active until the time ends.	1 - 9.9 sn	1.0 sn
ZR-03	1. Press presses while the pedal is pressed. The pedal will not be active until the time ends.	1 - 9.9 sn	1.0 sn
ZR-04	2. Press presses while the pedal is pressed again. The other operations continue automatically.	1 - 9.9 sn	1.0 sn
ZR-05	Tray release time. Waits as the time adjusted.	1 - 9.9 sn	1.0 sn
ZR-06	The lama out time.	1 - 9.9 sn	1.0 sn
ZR-07	Resistance in time.	1 - 9.9 sn	1.0 sn
ZR-08	Tray press time.	1 - 9.9 sn	1.5 sn
	Melting time begins		
ZR-09	Tray release time.	1 - 9.9 sn	1.0 sn
ZR-10	Resistance out time.	1 - 9.9 sn	1.0 sn
ZR-11	Tray press time.	1 - 9.9 sn	1.0 sn
	Cooling time begins		
ZR-12	1. Press release time.	1 - 9.9 sn	0 sn
ZR-13	2. Press release time.	1 - 9.9 sn	0 sn
ZR-14	Tray release time.	1 - 9.9 sn	0 sn
ZR-15	The interval times when stop is pressed.	1 - 9.9 sn	1.5 sn
	Program Parameters		
PR-1	Password 1.	0 - 99	1
PR-2	Password 2.	0 - 99	1
PR-3	Empty (Reserved area)	0 - 99	0
PR-4	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. + 0. Stops when operation ends. 4. 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.	0 - 15	12
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 Diagramı