



## Versatile, easy-to-operate, micro-computer control unit

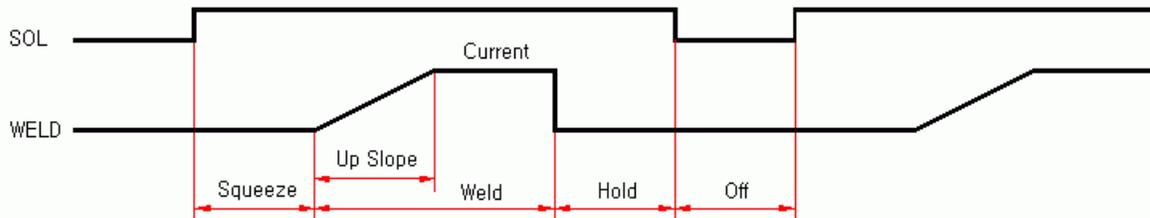


- Applicable for Spot, Seam, Roll-Spot, 2Head Spot, Butt Welders
- 10 Weld Schedules
- Repeat & Non-Repeat
- 2 Pressure Valve Output
- 2 Start Input & 4\_Operations
- The case of controller is ABS plastic, and weighs light and resists external shock and vibration.
- Smallest and Low price



### Programmable parameters

Weld Schedule	Squeeze time	Up slope time	Weld time	Cool time	Off time	Weld Current	Weld Count
0~9	0~99 cycle	0~9 cycle	0~99 cycle	0~99 cycle	0~99 cycle	0.0~99.9 %	0~3999

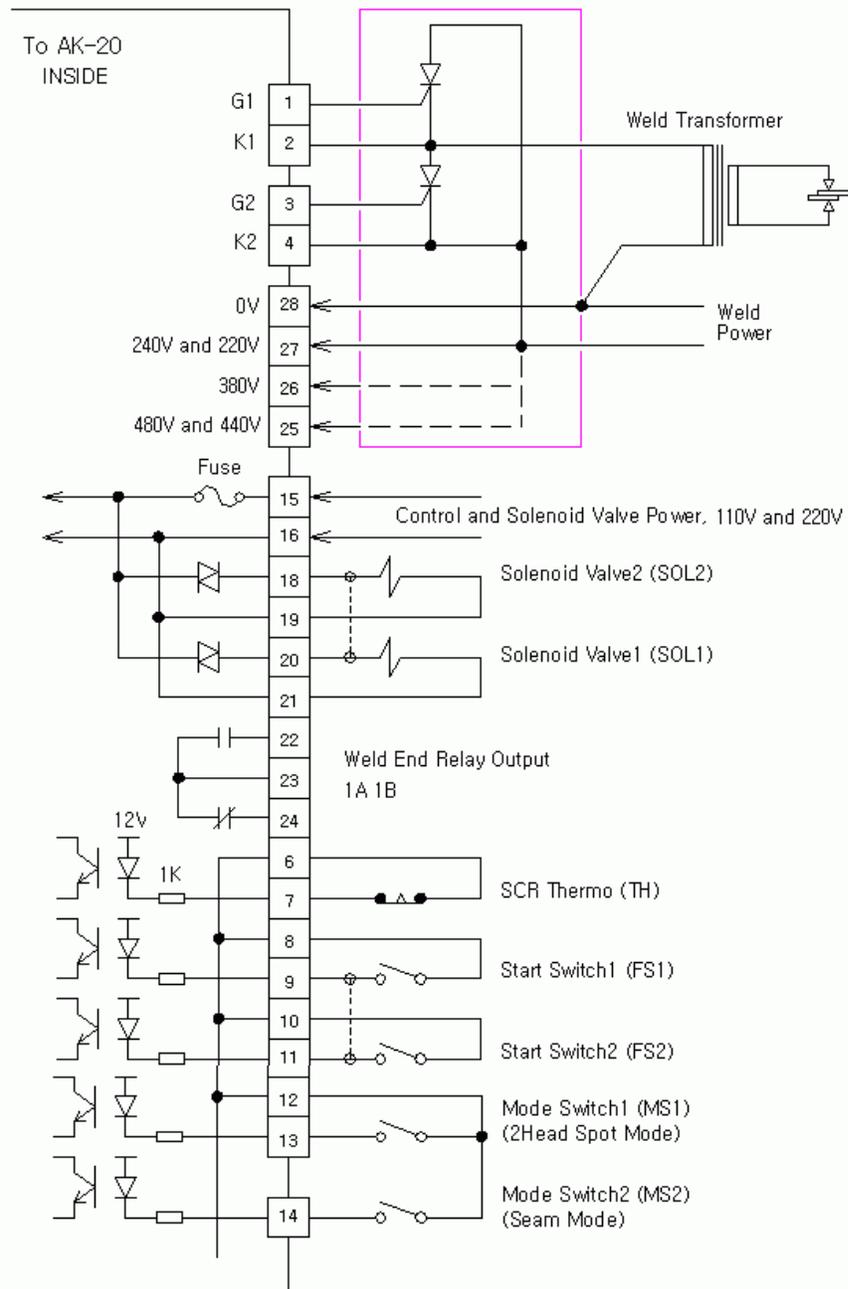


## Specification

MODEL		AK-20V, AK-20H	WELBOY-22V, WELBOY-22H
Weld power	VAC	220/380/440VAC +10%, -25%	
Control and solenoid power	VAC	110VAC ±15% or 220VAC ±15% [not changeover]	
Frequency	Hz	50/60	
Memory backup	-	10 years and over after power failure	
Indication	-	7-segment LED, 6.5(W) x 10.0(H)mm	
Number of mode input	In	Mode switch1(MS1), Mode switch2(MS2), Dry contact or open collector	
Number of start input	In	Start1(FS1), Start2(FS2), Dry contact or open collector	
Thermo switch input	In	Thyristor thermo switch, Dry contact or open collector	
Number of solenoid valve	Out	Solenoid valve1(SOL1), Solenoid valve2(SOL2), 110VAC and 220VAC	
Weld end signal	Out	Relay contact output (1a1b), One short(0.3sec)	
Weld current	-	Control method: Phase control by thyristor	
		Control angle: 20~160	
		Maximum analyze: 0.1% (0.0~99.9%)	
Weld counter	Count	0~3999	0~9999
Setting range	-	Weld Schedule :0~9 schedules	Weld Schedule :0~9 schedules
		Squeeze time :0~99 cycles Up slope time :0~9 cycles Weld time :0~99 cycles Cool time :0~99 cycles Off time :0~99 cycles Weld Current :0.0~99.9%	Squeeze time :0~99 cycles Up slope time :0~9 cycles Weld1 time :0~99 cycles Cool1 time :0~9 cycles Weld2 time :0~99 cycles Down slope time :0~9 cycles Cool2 time :0~99 cycles Off time :0~99 cycles Weld Current1 :0.0~99.9% Weld Current2 :0.0~99.9%
Ambient temperature	°C	-10 to 55°C (at non-freezing status)	
Storage temperature	°C	-25 to 65°C (at non-freezing status)	
Ambient humidity	%	35 to 85%RH	
Insulation resistance	-	Min. 100MΩ (at500VDC)	
Dielectric strength	-	2000VAC 50/60Hz for 1 minute	
Noise strength	-	±2kV the square wave noise(pulse width:1μs by the noise simulator)	
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 1 hours	
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 10 minutes	
Size	mm	194(W) × 76(H) × 190(D)	318(W) × 93(H) × 240(D)
Weight	Kg	2.0Kg Max.	4.0Kg Max.

## Operation mode /

Operation mode	External mode switch		Schedule	Remarks
	MS1	MS2		
Spot /Projection mode	OFF	OFF	0 ~ 9	
2Head Spot /Portable mode	ON	OFF	1	Start switch1 (FS1)
			2	Start switch2 (FS2)
Seam mode	OFF	ON	0 ~ 9	
Flash butt mode	ON	ON	0 ~ 9	



Dimension and Panel Cutout Size (Unit : mm)

