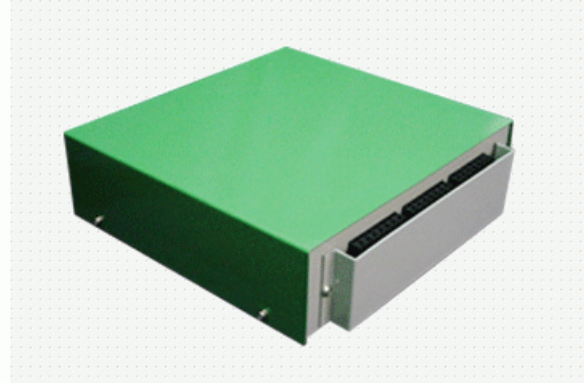


Welboy 30

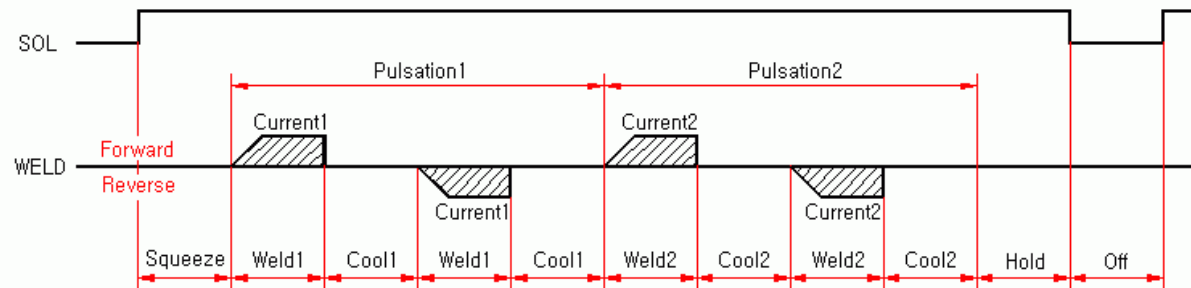
Versatile, easy-to-operate, micro-computer control unit

Model : WELBOY-30H



Programmable parameters

Weld Schedule	Squeeze time	Weld1 time	Cool1 time	Pulse1	Weld2 time	Cool2 time	Pulse2	Hold time	Off time	Weld Current1	Weld Current2	Weld Count
0~9	0~99 cycle	0~5 cycle	0~9 cycle	0~9 time	0~5 cycle	0~9 cycle	0~9 time	0~99 cycle	0~99 cycle	0.0~99.9 %	0.0~99.9 %	0~99999



Feature

- ▶ The 3-phase low frequency welding transformer has three sets of primary windings surrounding a common magnetic core. It is similar in a way to the simple single phase AC transformer however it has been designed to output secondary currents in the range of 30,000 to 200,000 amperes. This is done by eliminating the effects of inductive impedance associated with large loop welding circuits. Each weld is performed by a single pulse of current in a given polarity. That pulse may be more than one cycle period.
- ▶ The 3-phase low frequency welding control must only be configured in an open delta configuration since the rectification of the current is done on the primary side of the welding transformer.
- ▶ This is multi-functional 3-phase low frequency welding controller which is applicable for all resistance welders, such as Spot welder, Projection welder, Seam welder, Brazing welder and Flash butt welder.
- ▶ This is easy and simple to handle as it chose Full Digital Set-up Parameter(F.D.S.P) control system by micro-computer.

Specification

MODEL		WELBOY-30H
Weld power	VAC	3-Phase 220/380/440VAC $\pm 25\%$ and 240/380/480VAC $\pm 25\%$
Control and solenoid power	VAC	Single phase 220VAC $+10\%$, -25% and 110VAC $+10\%$, -25%
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), Mode switch3(MS3), 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 switch1(RTH), Thyristor thermo switch2(STH), Thyristor thermo switch3(TTH), 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 (1a), One short(0.3sec)
Weld current	-	Control methode : Phase control by thyristor Control angle : 20~160 Maximum analyze : 0.1% (0.0~99.9%)
Weld counter	Count	0~99999
Setting range	-	Weld Schedule : 0~9 schedules Squeeze time : 0~99 cycle Weld1 time : 0~5 cycle Cool1 time : 0~9 cycle Pulsation1 : 0~9 time Weld2 time : 0~5 cycle Cool2 time : 0~9 cycle Pulsation2 : 0~9 time Hold time : 0~99 cycle Off time : 0~99 cycle Weld Current1 : 0.0~99.9% Weld Current2 : 0.0~99.9%
Ambient temperature	°C	-10 to 55 $^{\circ}$ (at non-freezing status)
Storage temperature	°C	-25 to 65 $^{\circ}$ (at non-freezing status)
Ambient humidity	%	35 to 85%RH
Insulation resistance	-	Min. 100M Ω (at500VDC)
Dielectric strength	-	2000VAC 50/60Hz for 1 minute
Noise strength	-	± 2 kV the square wave noise(pulse width:1 μ s 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	275(W) x 78(H) x 280(D)
Weight	Kg	5.0Kg Max.

Operation mode /

Operation mode	External mode switch			Operation switch	Operation solenoid	Operation schedule	Remarks
	MS1	MS2	MS3				
Spot mode	OFF	OFF	OFF	FS1	SOL1, SOL2	0 ~ 9	
2Head Spot mode	ON	OFF	OFF	FS1	SOL1	1	
				FS2	SOL2	2	
Seam mode	OFF	ON	OFF	FS1	SOL1, SOL2	0 ~ 9	
Flash butt mode	OFF	OFF	ON	FS1	SOL1, SOL2	0 ~ 9	

Connections

