

# Applicable for **AK-54** Spot, Twin head spot, Seam welders **Resistance Welding Control**

- Secondary feed-back constant current control
- Self-adjustment for maximum current
- 15 Weld schedules
- External schedule select
- Spot, Twin head spot and seam welder compatibility
- 3 Impulse weld schedules(Weld2 is half cycle control)
- 9 Steppers / Linear stepper
- Up and Down slope
- 2 Pressure valve output and 7 operations
- Current 1, 2, 3 monitor with high/low monitor
- 3 easy-to-operate counters to aid in systematic quality control and tip dressing schedules
- PC and RS485 network interface



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**FORWEL**



## SPECIFICATIONS

		AK-54V	AK-54H
<b>Power source</b>	Welding power source	220VAC and 440VAC +10% -25%	
	Control power source	110VAC or 220VAC +10% -20%	
<b>Frequency</b>		50 /60Hz Auto selection	
<b>Control method</b>		Secondary feed-back constant current control by phase control with thyristor or source voltage fluctuation compensation control method.	
<b>Control speed</b>	Secondary constant current control	1/2 cycle	
	Source voltage fluctuation compensation control	1 cycle	
<b>Current accuracy</b>	Welding power source voltage fluctuation	±2% for +10% /-15%	
	Resistance load fluctuation	±2% for ±15%	
	Inductive load fluctuation	±2% for ±15%	
<b>Indication</b>		7-Segment LED	
<b>Program parameters</b>	Schedule	15 schedules	
	Squeeze time	0~99 cycles	
	Weld1 time	0~9 cycles	
	Cool1 time	0~9 cycles	
	Up slope time	0~99 half cycles	
	Weld2 time	0~99 cycles	
	Cool2 time	0~9 cycles	
	Weld3 time	0~99 cycles	
	Down slope time	0~99 cycles	
	Hold time	0~99 cycles / 0~9 times	
	Off time / Pulsation	1~7 operations	
<b>Maximum current setting range</b>		3.0~80.0KA	
<b>Current setting range</b>		15 Schedules 1) Constant current control mode(0.3KA~80.0KA) Current1,2,3 : 10%~100% of maximum current setting 2) Source voltage fluctuation compensation control mode, Current1,2,3 : 00.0~99.9%	
<b>Current monitor</b>	Setting of upper limit	15 Schedules, ±0~49%	
	Setting of lower limit		
<b>Valve output</b>	System	Valve No.1 or 2 can be selected for 15 schedules and 7 operations	
	Output voltage	Relay contact output(1A), 24VDC(Optional)	
<b>Stepper up of current</b>	Step No.	0~9	
	Step count	0~9999	
	Step up rate	50~200%	
<b>Counter</b>	Weld count	0~99	
	Work count	0~9999	
	Total count	0~9999	
<b>External input</b> (Dry contact or open collector)		Program lock switch	
		Start 1,2,4,8 switch	
		Weld ON/OFF switch	
		Weld transformer or SCR temperature limit switch	
		Step reset switch	
		Error reset switch	
		Interlock / Weld No. Switch	
		Hold end output	
<b>External contact output</b> (250V 0.5A Max.)		Error output	
		Step end output	
		Interlock / Weld No. error output	
<b>Serial output</b> (Optional)		RS232 / RS485 interface	
<b>Memory retention</b>		10 years (EEPROM)	
<b>Dimensions</b>		85mm(W)x260mm(H)x207mm(D) 3.3"(W)x10.2"(H)x8.1"(D)	260mm(W)x850mm(H)x207mm(D) 10.2"(W)x3.3"(H)x8.1"(D)
<b>Weight</b>		2.6Kg (5.7lb)	
<b>Toroidal coil</b>		TC-450L, TC-600L(Optional)	