

Welding Converter CRW

A family of welding products based on Digital Signal Processor (DSP) control system for CAN welding

The CRW converter has

- ✓ a standard rectification input stage
- DSP based control system board
- ✓ Monophase IGBT-base power converter extremely suitable to conduct the welding transformer.
- ✓ Control system regulates the primary current flow of the transformer.



REDUCE POWER CONSUMPTION
DSP CONTROL TECHNOLOGY
TWO DIFFERENT ALGORITHMS OF WELDING CURRENT
OUTPUT CURRENT MAX 1200 A
WATER COOLING SYSTEM
CUSTOM INTERFACE FOR OEM APPLICATIONS
The Resistance Seam Welding AC Inverters of knoways are designed as a replacement for SCR-systems, in order to increase welding efficiency. The system reduces flickering and shunt-effect, allowing high precision welds and repeated heat flows.

Technical Data	HF ACS 600A	HF ACS 800A	HF ACS 1200A				
Ordering Code	PK0111	PK0112	PK0113				
Cooling System	Water - flowrate 4 I/min, T from 20°C to 40°C						
Input Voltage	Triphase 400 Vac ± 15% 50/60 Hz						
Output Voltage	trapezoidal or sine wave						
Power	300 kVA	400 kVA	600 kVA				
Max Primary Output Current	600 A 800 A		1200 A				
Output Frequency	from 50 to 1000 Hz (PWM @ 20 kHz)						
Control Modes	Current, Voltage						
Measures	Primary Current, Secondary Current, Electrocodes Voltage, Pulse Width						
Operating Temperature	from 0°C to 50°C						
Operating Humidity	up to 90%, non-condensing						
Dimensions (W \times H \times D)	$580 \times 640 \times 300 \text{ mm} \qquad 580 \times 600 \times 600 \text{ m} \qquad 580 \times 600 \times 600 \times 600 \text{ m} \qquad 580 \times 600 \times 600 \times 600 \text{ m} \qquad 580 \times 600 \times 60$		$580\times640\times300~\text{mm}$				
Mass	85 kg	90 kg	95 kg				

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RESISTANCE WELDING INVERTER CONTROL UNIT

The Inverter Control Processing Unit is based on DSP technology. It implements detailed welding parameters settings and state of the art algorithms in order to perform high precision direct current source, independent from load and power supply variation.

All configurations can be accessed and easily modified utilizing the movable control unit.

Easy programming system

It is equipped with a three positions safety key and a graphic display along with rugged selection buttons to provide the easiest and quickest way to enter all programming procedures.

The innovative navigation menu helps the user to best address all kind of welding situations and configurations.

The contactless **<u>T-Key[®] - electronic key</u>** enables special control programming procedures and/or store different welding tasks and welding results into each key.

- 64 welding programmes with ms setting mode
- fast welding parameters access
- complete control of 4 valves and 1 proportional valve
- high accuracy Rogowski coil input
- smart input diagnostic and self check
- steppers and programme sequence

Parameters		Min	Max	Parameters		Min	Max
First Squeeze Time	ms	20	10000	Welding Time	ms	1	2000
Squeeze Time	ms	0	10000	Pulses Number	n	1	9
Forge Delay	ms	0	10000	Pulses Cold Time	ms	20	2000
Pressure P1 and P2	bar	0.5	10.0	Down-Slope Time	ms	0	2000
Cold Time	ms	0	10000	Cold Time 4	ms	0	10000
Up-Slope Time	ms	0	2000	Hold Time	ms	20	10000
Welding Current	%	5	100	Pause Time	ms	0	20000







