HARMS & WENDE WELDING INVERTER

Primus

PERFORMANCE

The Primus welding system offer the highest level of functionality. Result-oriented process management and extensive monitoring functions ensure safety during the joining process

CHARACTERISTICS

- Innovative process regulation
- Integrated inverter; external transformer
- Logical process control (IF/THEN link)
- analysis of current, voltage, power, displacement, temperature and time
- Integration of up to four weld heads or guns
- Modular program design
- Event controlled process (i. e. displacement and force)
- Comprehensive monitoring with warning and intervention limits
- Primary data storage
- User rights management

… and much more

APPLICATION

- Spot welding
- Projection welding
- Cross wire welding
- Seam welding
- Gap welding
- Contact welding
- Compacting
- Hot Staking
- Resistance soldering
- Bar soldering

BENEFITS

- Best joining quality
- Effective joining processes
- Extensive visualization and trend analysis
- Higher productivity
- Powerful quality assurance
- Increasing competitive advantage
- Efficient data administration and backup

Primus – The universal resistance weld and soldering system consisting of: Weld timer with integrated inverter, transformer, connection cable and PC based user interface.

TECHNICAL DATA

Features	5 kA	10 kA
Inverter frequency	10kHz	
Max output power @ 20% DC*	31 kVA	56 kVA
Mains voltage; Mains frequency	3 x 400 V; 50/60 Hz	
Dimensions W/H/D	305 x 120 x 410 mm	
Timer / Regulation mode	Primary, Secondary, Voltage and Power regulation, no regulation; Temp. regulation for soldering all regulation modes adjustable by impulsation	
Number of schedules	200 internal, 63 external selectable; PC backup	
Number of weldimpulses	ca. 100; each individual fully configurable	
Weld cycle	Upslope, current time, downslope, adjustable set value, displacement cut-off: way or remaining thickness, Displacement cut-off with security cut-off	
Monitoring functions	Relative limits +-% to set value and absolute values for all regulation modes, max current freely selectable, automatic cut off when reaching U, Displacement cut-off with time limit	
Force measurement	2 channels parallel: 0...10V; 0...20mA and/or incremental; max 4 channels (when operation different heads)	
Displacement measurement	2 channels parallel: 0...10V; 0...20mA and/or incremental; max 4+2 channels (when operation different heads)	
Temperature regulation	up to 450 deg C (for soft soldering); 900 deg C for hard soldering	
User interface	PC Software	
Outputs for weld head	4 outputs; 3 inputs for displacement for auxiliary functions 2 proportional valves; control of twin head	
Weld transformer	external, water cooled, 12 V secondary voltage	
Analog in- and outputs	Voltage plug; 2 incemental displ. Inputs, 4 free measurement inputs, 2 proportional valves (incl. analog actual value input)	
Internal memory	100.000 data set	
Interfaces	Ethernet TCP7IP, digital EA	
Digital inputs	20 Inputs, 4 of which are freely configurable + 24 V supply	
Digital outputs	17 outputs, 6 of which are freely configurable + 24 V supply	