



UB-4000A Lineare DC-Punktschweißsteuerung mit eingebautem Monitor (ehemals DC29)

Die lineare UB-4000A DC-Widerstandsschweißsteuerung mit 200 bis 4000 Ampere und vier Rückkopplungsmodi wurde zur Anpassung an Teile- und Prozessvariablen ausgelegt. Die Schweißenergie kann in den Einheiten Strom, Spannung, Leistung oder V-A (Spannung-Strom) in Schritten von nur 0,01 Millisekunden programmiert werden.

Daher ist dieses Punktschweißgerät ideal für kleine Anwendungen in den Märkten für elektronische Bauteile und Batteriepacks geeignet.

Spezifikationen UB-4000A Lineare DC-Punktschweißsteuerung mit eingebautem Monitor

- Vier Regelmodi: Strom, Spannung, Leistung und V-A (Spannung-Strom)
- Einphasiger Eingang
- Kompakte Größe
- Doppelimpuls-Zeitpläne
- Präzis gesteuerte wiederholbare Wellenform
- Sehr schnelle Anstiegszeit



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Specifications UB-4000A Lineare DC-Punktschweißsteuerung mit eingebautem Monitor (ehemals DC29) 1/2

Modellnummer	UB-500A	UB-1500A	UB-4000A
Nennnetzspannungen (einphasig)	88-264 VAC 47-63 Hz	88-264 VAC 47-63 Hz	88-264 VAC 47-63 Hz
Repetierrate	500 A @ 3 weld/sec for 10 ms (per weld)	1500 A @ 1 weld/sec for 10 ms (per weld)	4000 A @ 1 weld/sec for 10 ms (per weld)
Einstellbereiche: Strom	5A-500A 1 amp/step	15A-1500A 1 amp/step	200 A - 4000 A 10 amp/step
Einstellbereiche: Spannung	0.01 V - 9.9 V 10 mV/step	0.1 V - 9.9 V 10 mV/step	0.1 V - 9.9 V 10 mV/step
Einstellbereiche: Leistung	0.05 kW - 4.99 kW 10 Watt/step	0.1 kW - 9.9kW 10 Watt/step	0.1 kW - 25.0kW 10 Watt/step
Spitze: Strom	500 A	1500 A	4000 A
Spitze: Spannung	10 V	10 V	10 V
Spitze: Leistung	4.9 kW	9.9 kW	25.0 kW
Leistungsregelung im Vergleich zu Netzspannungsvarianz	2%	2%	2%
Leistungsregelung im Vergleich zu Lastwiderstandsvianz	2%	2%	2%
Schweißzeitbereiche	Ranges (ms)	Resolution (steps)	Ranges (ms)
Erster/Zweiter Impuls, Stromanstieg/Stromabfall und Kühlperioden	0 - 99.9	.1(0-9.9), 1(10-99)	0 - 99.9
Squeeze/hold periods	0-999	1	0-999
Ausgabegenaugigkeit: Strom	±2% or 2.5 A	±2% or 7 A	±2% or 10 A
Ausgabegenaugigkeit: Spannung	±2% or 0.05 V	±2% or 0.05 V	±2% or 0.05 V
Ausgabegenaugigkeit: Leistung	±5% or 12 W	±5% or 40 W	±5% or 50 W
Merkmale	.		
Schweißwärmeprofilsteuerung	UB-500A	UB-1500A	UB-4000A
Schweißimpulssteuerung	Dial pulse with independent control of current, voltage or power on each pulse	Dial pulse with independent control of current, voltage or power on each pulse	Dial pulse with independent control of current, voltage or power on each pulse
Programmierbare Schweißimpulssegmente	Squeeze, upslope 1, weld 1, downslope 1, cool, upslope 2, weld 2, downslope 2, hold	Squeeze, upslope 1, weld 1, downslope 1, cool, upslope 2, weld 2, downslope 2, hold	Squeeze, upslope 1, weld 1, downslope 1, cool, upslope 2, weld 2, downslope 2, hold
Schweißplan-Speicher	Save up to 99 different weld schedules, protected from unauthorized changes	Save up to 99 different weld schedules, protected from unauthorized changes	Save up to 99 different weld schedules, protected from unauthorized changes
Weld schedule chaining	Allows automatic linking of weld schedule sequence	Allows automatic linking of weld schedule sequence	Allows automatic linking of weld schedule sequence
Built-in weld monitor functions			
Messparameter	Current, voltage, power, resistance on each pulse.	Current, voltage, power, resistance on each pulse.	Current, voltage, power, resistance on each pulse.
Grafikdisplay	Back-lit LCD displays programmed and actual weld current, voltage, power, or resistance and upper and lower limits	Back-lit LCD displays programmed and actual weld current, voltage, power, or resistance and upper and lower limits	Back-lit LCD displays programmed and actual weld current, voltage, power, or resistance and upper and lower limits
Measurement selection	Peak or average	Peak or average	Peak or average

Strommessbereich/-genauigkeit	0 – 500 A, ±2% of setting ±5 A	0 – 1500 A, ±2% of setting ±10 A	0 – 4000kA, ±2% of setting ±20 A
Spannungsmessbereich/-genauigkeit	0.1 – 9.9 V, ±2% of setting ±0.05 V	0.01 – 9.9 V, ±2% of setting ±0.05 V	0.01 – 9.9 V, ±2% of setting ±0.05 V
Leistungsmessbereich/-genauigkeit	0 – 4.9 kW, ±5% of setting ±10 W	0 - 9.99 kW, ±2% of setting ±40 W	0 – 25.0 kW, ±5% of setting ±50 W
Alarne	Display alert, five user programmable AC/DC relays; audio alarm	Display alert, five user programmable AC/DC relays; audio alarm	Display alert, five user programmable AC/DC relays; audio alarm
Programmierbare Schweißenergiegrenze	Terminates weld energy when exceeding user defined current, voltage, or power limits	Terminates weld energy when exceeding user defined current, voltage, or power limits	Terminates weld energy when exceeding user defined current, voltage, or power limits
Schweißvorprüfung	Inhibits second weld pulse when first test pulse exceeds user programmed limits	Inhibits second weld pulse when first test pulse exceeds user programmed limits	Inhibits second weld pulse when first test pulse exceeds user programmed limits
Aktiver Teilekonditionierer	First pulse current limit in constant power	First pulse current limit in constant power	First pulse current limit in constant power
E/A- und Datenkommunikation			
Input: Input Isolation	All inputs and outputs are fully isolated	All inputs and outputs are fully isolated	All inputs and outputs are fully isolated
Input: Control voltages	+24V, sourcing or sinking inputs	+24V, sourcing or sinking inputs	+24V, sourcing or sinking inputs
Input: Foot switch initiation	1-level foot switch, 2-level foot switch	1-level foot switch, 2-level foot switch	1-level foot switch, 2-level foot switch
Input: Firing switch initiation	Mechanical or opto firing switch	Mechanical or opto firing switch	Mechanical or opto firing switch
Input: Remote control	Remote weld schedule select, process inhibit, emergency stop, alarm reset	Remote weld schedule select, process inhibit, emergency stop, alarm reset	Remote weld schedule select, process inhibit, emergency stop, alarm reset
Input: RS232	Change weld schedules and individual parameters	Change weld schedules and individual parameters	Change weld schedules and individual parameters
Input: Electrode voltage	Weld voltage signal for voltage feedback operation (0 to 10V peak)	Weld voltage signal for voltage feedback operation (0 to 10V peak)	Weld voltage signal for voltage feedback operation (0 to 10V peak)
Output: Monitor	RS232 weld data out	RS232 weld data out	RS232 weld data out
Output: Weld head air valve driver	24 VAC, 0.5 A; timing controlled by UB Series Power Supply	24 VAC, 0.5 A; timing controlled by UB Series Power Supply	24 VAC, 0.5 A; timing controlled by UB Series Power Supply
Output: Alarm relays	Five user-programmable opto isolated relays; programmable normally open or normally closed contacts: 30 VDC at 0.5 A Conditions: weld, end of weld, alarm, out of limits, ready, weld counter	Five user-programmable opto isolated relays; programmable normally open or normally closed contacts: 30 VDC at 0.5 A Conditions: weld, end of weld, alarm, out of limits, ready, weld counter	Five user-programmable opto isolated relays; programmable normally open or normally closed contacts: 30 VDC at 0.5 A Conditions: weld, end of weld, alarm, out of limits, ready, weld counter
Abmessungen (L x B x H)	381 mm x 213 mm x 305 mm (15 in x 8.4 in x 12 in)	381 mm x 213 mm x 305 mm (15 in x 8.4 in x 12 in)	381 mm x 213 mm x 305 mm (15 in x 8.4 in x 12 in)
Gewicht	22 kg (49 lb)	22 kg (49 lb)	22 kg (49 lb)



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Specifications UB-4000A Lineare DC-Punktschweißsteuerung mit eingebautem Monitor (ehemals DC29) 2/2

Modellnummer	Resolution (steps)	Ranges (ms)	Resolution (steps)
Nennnetzspannungen (einphasig)	.1(0-9.9), 1(10-99)	0 - 99.9	.1(0-9.9), 1(10-99)
Repetierrate	1	0-999	1
Einstellbereiche: Strom			
Einstellbereiche: Spannung			
Einstellbereiche: Leistung			
Spitze: Strom			
Spitze: Spannung			
Spitze: Leistung			
Leistungsregelung im Vergleich zu Netzspannungsvarianz			
Leistungsregelung im Vergleich zu Lastwiderstandsvianz			
Schweißzeitbereiche			
Erster/Zweiter Impuls, Stromanstieg/Stromabfall und Kühlperioden			
Squeeze/hold periods			
Ausgabegenaugkeit: Strom			
Ausgabegenaugigkeit: Spannung			
Ausgabegenaugigkeit: Leistung			
Merkmale			
Schweißwärmeprofilsteuerung			
Schweißimpulssteuerung			
Programmierbare Schweißimpulssegmente			
Schweißplan-Speicher			
Weld schedule chaining			
Built-in weld monitor functions			
Messparameter			
Grafikdisplay			
Measurement selection			
Strommessbereich/-genauigkeit			
Spannungsmessbereich/-genauigkeit			
Leistungsmessbereich/-genauigkeit			
Alarne			
Programmierbare Schweißenergiegrenze			
Schweißvorprüfung			
Aktiver Teilekonditionierer			
E/A- und Datenkommunikation			
Input: Input Isolation			
Input: Control voltages			
Input: Foot switch initiation			
Input: Firing switch initiation			
Input: Remote control			

Input: RS232

Input: Electrode voltage

Output: Monitor

Output: Weld head air valve driver

Output: Alarm relays

Abmessungen (L x B x H)

Gewicht



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Product applications UB-4000A Lineare DC-Punktschweißsteuerung mit eingebautem Monitor (ehemals DC29)



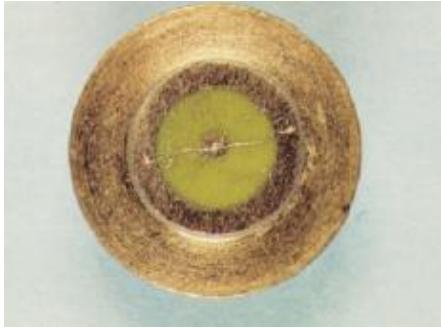
Battery tab to lithium ion cell



Halogen lamp filaments



Catheter guide wire assembly



Air bag detonator module (squib wire)

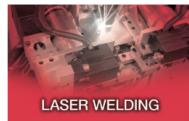


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OUR TECHNOLOGIES



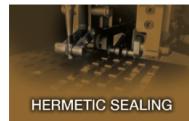
RESISTANCE WELDING



LASER WELDING



LASER MARKING



HERMETIC SEALING



HOT BAR REFLOW
SOLDERING & BONDING



SYSTEMS SOLUTIONS

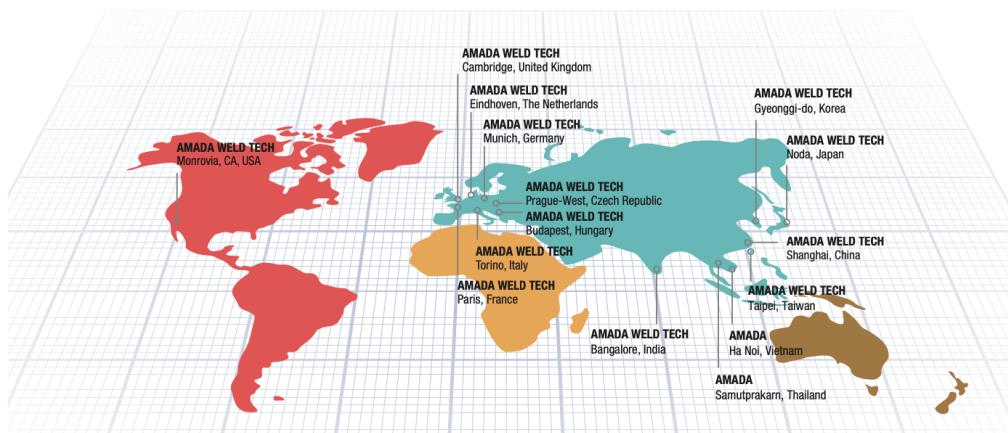


LASER CUTTING



MICRO TIG WELDING

OUR SALES OFFICES



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