POWERPLUS® 1000HD



Submerged Arc Power Source

POWERPLUS® 1000HD is designed for constant current and constant voltage Submerged Arc Welding. The welding arc is stable over a wide range of parameters and the output can be precisely controlled. The power source is combined with the Lincoln Electric Rover™ Tractor to create a robust automatic welding package.

POWERPLUS® 1000HD is rugged and reliable to operate in the harshest welding conditions. It is often used for welding mild steel, low alloy steel, and stainless steel. The POWERPLUS® 1000HD can also be used by itself for carbon arc gouging. It is used in many industries, such as shipbuilding, wind tower and pressure vessels.

POWERPLUS® 1000HD is available for CE.



Processes

Submerged Arc, Gouging

Wire Feeder Options

Rover[™] Tractor

Required Options

Tractor, Control Cable, Welding Cable, Work Cable with Clamp, Track

Design Features

- The main transformer is built to H grade.
- High reliable SCR Insulation Classification ensures excellent output stability.
- Designed with optimum cooling efficiency.
- Overheating, overcurrent, loss of phase and short circuit protection ensures long-lasting performance.
- Potted PC boards ensure long life in harsh conditions.
- Built to IP23S classification.

Description

Output





Input





Advantage Lincoln

- Precise output control results in a stable arc.
- Ability to preset the current.
- Line voltage compensation maintains consistent welding within ±10% variation.
- 1,000A @ 100% duty cycle with a maximum output capacity of 1,200A.
- 500 amps output terminal enhances low current arc characteristics.
- User-friendly operation panel with analog meters to display current and voltage while welding.
- Can be stacked up to two machines high to save on floor space.



TECHNICAL SPECIFICATIONS

Product Name	Product Number	Input Power	Rated Output Current/Voltage /Duty Cycle	Input Power @ Rated Output (KVA)	Output Range	Dimensions H×W×D (mm)	Net Weight (Kg)
POWERPLUS® 1000HD	K60067-5*	380-415V[±10%]/ 3Ph/50HZ/60HZ	1,200A/44V@ 60% 1,000A/44V@ 100%	69 @ 100%	200~1,200A	900 x 600 x 970	335

*K60067-5 is for CC/CV output

A CLOSER LOOK



Front Panel

- 1. Thermal Indicator
- 2. Polarity Switch
- 3. Output Control Knob
- 4. Power On Pilot Light
- 5. ON/OFF Power Switch
- 6. Gouge/CC Submerged Arc/CV Submerged Arc Switch
- 7. Amp Meter
- 8. Volt Meter



Output Stud

- 1. Negative Output Stud
- 2. Control Cable Connector
- 3. 500A Output Stud
- 4. 1000A Output Stud



Back Panel

- 1. Input Power Connection
- 2. Input Power Cable Holder Bracket
- 3. 2A Fuse and Fuse Holder
- 4. 8A Fuse and Fuse Holder



Rover™ Tractor Wire Feeder

Submerged Arc Wire Feeder

Rover[™] Tractor is a self-propelled automatic tractor designed for submerged arc welding. It easily follows the welding joint when moving along the required track sections (sold separately). It can be connected with the POWERPLUS® 1000HD, Idealarc® DC-1000 and Idealarc® DC-1500. The Rover[™] Tractor is sturdy, durable and has a compact profile. It can be used to weld a wide range of thicknesses of mild steel, low alloy steel or stainless steel. The Rover[™] Tractor is the ideal choice for welding applications such as shipbuilding, structural steel, boilers and pressure vessels.

Order number

K60068-2

Processes

Submerged Arc

Description

Output



Input AC

Advantage Lincoln

- Stable travel speed for consistent welding results.
- Ability to preset the wire diameter (2.4 to 4.8mm) for optimized arc startings.
- Easy adjustment of head and torch.
- Standard wire straightener to provide stable feeding with less power loss.
- Duty cycle: [1,000A@100%]1,200A @ 60%
- Easy to understand operation panel.

Design Features

- Ability to preset amps and volts.
- Wire diameter selection helps to optimize the welding performance using diameter-specific welding parameters.
- Fixed point start function allows for precise wire positioning.
- Touch sense function ensures that the wire stops when touching the plate.





Front panel

- 1. Welding Voltage LED
- 2. Welding Current LED
- 3. Travel Speed LED
- 4. Power On Pilot Light
- 5. Inch Up
- 6. Inch Down
- 7. Wire Diameter Selection Control
- 8. Stop Button
- 9. Start Button
- Travel Direction Forward/ Backward
- 11. Travel Mode Auto/OFF/Manual
- 12. Travel Speed Control
- 13. Welding Current Output
 Control
- 14. Welding Voltage Output
 Control



TECHNICAL SPECIFICATION

Items	Specification		
Welding travel speed	0.1~1.2m/min		
Wire feeding speed	0.2~2.5m/min		
Rated output	1000A		
Wire diameters (mm)	2.4 3.2 4.0 4.8		
Type of wires applicable	Steel, Solid & Cored Wire		
Adjustable height of cross beam	70mm		
Adjustable distance of tractor head (mm)	100×100×70 (up, down; left, right; front, rear)		
Rotatable angle of cross beam around vertical column	±90°		
Tractor head inclination	±45°		
Torch inclination	±45°		
Flux container volume	6L		
Inner diameter of wire spool	φ300mm		
Wire spool capacity	25kg		
Dimension (L×W×H) (mm)	1080×480×740		
Weight	55kg (does not include wire)		

Options

Description	Order Number	Specification
Control cable (9-pin tractor to 14-pin power source)	K69024-15M	15M
Control cable (5-pin tractor to 14-pin power source)	K69024-30M	30M
Welding cable	K60052-70-15M	70mm², 15M *
vveiding cable	K60052-70-30M	70mm², 30M *
Work cable with clamp	K60027-70-4M	70mm², 4M *
Track	KP63127	1 Meter
	KP63098-24	2.4mm
Tine	KP63098-32	3.2mm
Tips	KP63098-40	4.0mm
	KP63098-48	4.8mm
Replacement Nozzle assembly	KP63086	
Extension tube	KP63160	

^{*}Recommend to use 2 pcs welding cable and work cable on welding

Customer Assistance Policy

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for advice or information about their use of our products. We respond to our customers based on the best information in our possession at that time. Lincoln Electric is not in a position to warrant or guarantee such advice, and assumes no liability, with respect to such information or advice. We expressly disclaim any warranty of any kind, including any warranty of any kind, including any warranty of any kind, including any warranty of advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such inarration or advice once it has not been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

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