# 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<sup>™</sup> 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<sup>™</sup> 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	Specificati	on
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		70mm <sup>2</sup> , 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	KP63097		
Extension tube	KP63160		

<sup>\*</sup>Recommend to use 2 pcs welding cable and work cable on welding

#### **Customer Assistance Policy**

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TEL:86-21-6673 4530 FAX:86-21-6602 6621 www.lincolnelectric.com.cn

