

POWERPLUS® II 650

Heavy Duty Welding Solution

POWERPLUS® II 650 is a constant voltage power source designed for heavy duty welding applications. The machine produces excellent output characteristics, and delivers a stable arc across the entire output range.

POWERPLUS® II 650 is Lincoln's solution to the demanding needs of heavy industry welding. It is designed for GMAW, FCAW & Carbon Arc Gouging processes. Excellent CV welding performance is guaranteed when using either pure CO₂ or Argon mixed gas. Reliable performance is optimized for welding carbon steel, stainless steel. It is also suitable for carbon arc gouging using up to 10mm diameter carbon electrodes.



Processes

MIG, Flux-Cored, CAG (Carbon Arc Gouging)

Description

Output   Input  

Wire Feeder Options

PWF® - 2, PWF® - 4, PWF® - 2 Plus, PWF® - 4 Plus, LN -25 PRO (w/optional interface kit) semiautomatic wire feeders.

Required Options

Wire Feeder, Interconnection Cable Assembly (Includes: Control Cable, Welding Cable, Gas Hose), Work Cable with Clamp, Welding Torch, Gas Regulator/Flowmeter.

Advantage Lincoln

- Welding Flexibility - POWERPLUS® II 650 can be used to weld thick steel, stainless steel - heavy duty applications.
- Carbon arc gouging capability.
- Single Range Output - Smooth and precise adjustment to ensure perfect weld settings.
- Digital Voltage and Amperage Meters - Easy to read and accurate. The digital meters "double up" as a fault finding aid with "Error Codes" displayed for easy trouble shooting.
- Potted PC Board - Ensures long life in harsh conditions.
- Built to IP23 Classification - POWERPLUS® II 650 is designed for long life in harsh and demanding environmental conditions.
- "Power Saving" & "F. A. N." Mode - When activated, input power is minimized, and the operating noise and dust intake reduced.
- High Quality Double Dipped Vacuum Impregnated Main Transformer - Provides long life in harsh welding conditions.
- Adjustable "Crater" Control - Gives the operator control over welding conditions at the start and end of welds for improved weld quality.
- 2-Step/4-Step Trigger Control - Gives the operator control over advanced welding features for easier and more precise welding.

TECHNICAL SPECIFICATIONS

Product Name	Product Number	Input Power	Rated Output Current/Voltage /Duty Cycle	Input Power @ Rated Output* [KVA/KW]	Output Range	Dimensions H×W×D (mm)	Net Weight (kg)
POWERPLUS® II 650	K60041-1	380-415V (±10%)/ 3Ph /50HZ /60HZ	650A/44V @ 60% 500A/39V @ 100%	40/35 @ 60%	17-44V 60-650A	785 x 520 x 670	205

Designed to IEC60974-1

A CLOSER LOOK



Front Panel

1. Digital Ammeter
2. Digital Voltmeter
3. Thermal Shutdown Light
4. On/Off Switch
5. Crater Current Control
6. Crater Voltage Control
7. 2-Step/4-Step Output Control
8. Gas Purge/Welding Selection
9. Carbon Arc Gouging/GMAW/FCAW Mode Selection

[Auto fault detection appears on 1. Ammeter & 2. Voltmeter]



Back Panel

1. Lifting Lugs
2. Input Power Connection Box
3. Input Power Cable Clamp
4. 220V/2A Auxiliary Power Receptacle
5. Fuse and Fuse Holder

RECOMMENDED OPTIONS



Work Cable With Clamp

Work Cable With Clamp

Used to connect power source to work piece.

Order:

K60027-50-4M Work cable with clamp, 50mm², 4M

K60027-70-4M Work cable with clamp, 70mm², 4M



Euro Torch Connection Adapter

Euro Torch Connection Adapter

Used as an adapter for Euro connector welding torch.

Order: KP61108-2



Remote Voltage Control

Remote Voltage Control

Remote control of output voltage for the power source.

Designed for POWERPLUS® and LN™-25 PRO wire feeder connection.

Order: K60030-8M

K60030-15M

K60030-30M



Wheel Kit

Wheel Kit

Allows convenient movement of the machine.

Order: KP61163

PWF® WIRE FEEDERS

PWF® Wire Feeder	Order No.	Specification
	K60024-3	PWF® -2. Two feed rolls, insulated hub.
	K60024-9	PWF® -4. Four feed rolls, insulated hub.
	K60006-3	PWF® -2 Plus. Two feed rolls, insulated hub, with carrying handle, rear wheels, skid shoes & gun holder.
	K60006-6	PWF® -4 Plus. Four feed rolls, insulated hub, with carrying handle, rear wheels, skid shoes & gun holder.



PWF® -2



PWF® -2 Plus



PWF® -4



PWF® -4 Plus

POWERPLUS® II 650 WELDING TORCH

POWERPLUS® II 650 Welding Torch	Product No.	Specification			
	K60008-3	500A @ 60%,CO ₂	420A @ 60%,Ar+CO ₂	3m	
	K60008-3E	500A @ 60%,CO ₂	420A @ 60%,Ar+CO ₂	3m	Euro Connector
	K60008-3S	500A @ 60%,CO ₂	420A @ 60%,Ar+CO ₂	3m	Small Gun Neck
	K60008-4	500A @ 60%,CO ₂	420A @ 60%,Ar+CO ₂	4m	
	K60008-4E	500A @ 60%,CO ₂	420A @ 60%,Ar+CO ₂	4m	Euro Connector
	K60008-4S	500A @ 60%,CO ₂	420A @ 60%,Ar+CO ₂	4m	Small Gun Neck
	K60008-5	500A @ 60%,CO ₂	420A @ 60%,Ar+CO ₂	5m	
	K60008-5E	500A @ 60%,CO ₂	420A @ 60%,Ar+CO ₂	5m	Euro Connector
	K60008-5S	500A @ 60%,CO ₂	420A @ 60%,Ar+CO ₂	5m	Small Gun Neck



Asia Connector Torch



Euro Connector Torch



Small Gun Neck Torch

For torch parts selection, please see publication CE101.EN.

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 fitness for any customers particular purpose, with respect to such information or advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such information 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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The product performance data of this brochure and related attachments are from LINCOLN ELECTRIC application engineering laboratory.

Except for special instructions, experiments on welding machines are conducted in accordance with the general standard of IEC60974-1; experiments on welding consumables are conducted in accordance with the general standard of AWS; for specific applicable standards on welding consumables please refer to the product page.

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POWERPLUS® II 650 2018/11

Authorized Distributor: