FLEXCUT® 35 AIR

PLASMA CUTTER



CLEAR CUT PERFORMANCE

The FlexCut™ 35 Air delivers reliable cutting performance for small projects and light fabrication work. With steady power, consistent output, and a built-in air compressor, it keeps you moving without the need for shop air. The self-contained design makes setup faster, enhances portability, and ensures clean, reliable cuts anywhere you work. Built for versatility and ease of use, it offers precision and durability in a compact package. Perfect for everyday cutting of mild steel, aluminum, stainless steel, and grating, it's designed to run efficiently while keeping operation simple.

Processes »
Plasma Cutting, Grid cutting,

Applications »
On-site maintenance, Small construction sites, Air ducting installation (HVAC), Demolition work, & Rental

Output »
DC

Input »
1 PHASE, 60 Hz, 120V, 230V

Product Numbers »
K5822-H HANDHELD ASSEMBLY
K5822-PS POWER SOURCE ONLY

Cut Performance - Mild Steel»

1/4 in (6 mm)	3/8 in (10 mm)	1/2 in (13 mm)
Recommended	Maximum	Severance

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VALUE-ADDED FEATURES

- **35 Amps of Cutting Power:** Tackle thicker materials with confidence and precision.
- **High Duty Cycle:** Built for demanding applications without overheating or slowing down.
- **LCD Display:** Bright, easy-to-read screen with simple controls for quick and precise adjustments.
- **Dual Voltage Flexibility:** Plug into 120V or 230V power sources.
- **Multi-Process Capability:** Drag cutting, and grid cutting with one machine.
- **Portable Yet Rugged:** Portable design without compromising strength—easy to move, hard to damage.
- **Industrial IP23S Protection:** Resists dust and water spray for dependable performance in challenging conditions.

KEY CONTROLS

1. Handle
2. User Interface
3. Main Control Knob
4. Torch Connection
5. Work Connection
6. Input Power Cable
7. On/Off Switch
8. Air Inlet
9. Cooling Fan





USER INTERFACE

1. Amperage
2. Process
3. Adjust Air Source
4. Guided Cutting Setup
5. Advanced Settings
6. Gas Purge



GUIDED CUTTING SETUP

From power-on to precision cutting in seconds

Don't waste time with complicated setup. With FlexCut™, you're ready to cut in seconds.

1. Adjust machine amperage to recommended setting
2. **Select the Cutting Guide** icon on the main user interface.
3. **Enter your material type and thickness.**
4. **View the recommended cutting amperage**—automatically calculated for clean, precise results.



BUILT-IN AIR COMPRESSOR

Integrated Air Supply: Built-in compressor eliminates the need for an external air source, making setup faster and easier.

Consistent Air Pressure: Provides steady, regulated airflow optimized for cleaner, more reliable cuts.

Compact Footprint: Self-contained design allows you to cut anywhere, even on jobsites or locations without shop air.

Enhanced Portability: Delivers full cutting performance in any environment where mobility matters.

MORE CUTS. LESS COST. ZERO HASSLE.

Long-Life Consumables: Advanced electrode design and optimized airflow deliver more cuts per part, reducing replacement frequency and lowering operating costs.

Threadless Electrode Connection: No more seized threads—just smooth, quick changes every time.

Snap-In Installation: Tool-free design means you can replace consumables in seconds.



CUTTING SPECIFICATIONS

Recommended Cut Thickness / Speed	1/4 in 20 ipm
Maximum Cut Thickness / Speed	3/8 in 10 ipm
Severance Cut Thickness / Speed	1/2 in 5 ipm



WHAT'S INCLUDED

		Handheld Package K5822-H	Power Source Only K5822-PS
FlexCut® 35 Plasma Cutter	N/A	●	●
FlexCut® PRO Air Torch	KP5848-12-5	●	
Air Filter	KP5843-1	●	●
Work Clamp & Cable	KP6035-1	●	●
Input Power Cord	N/A	●	●
Shoulder Strap	KP6012-1	●	●
Consumable Starter Kit	N/A	●	
120V Input Adapter	KP6034-1	●	●

RECOMMENDED ACCESSORIES



Plasma Circle Cutting Guide Kit
For cutting circles 3-33in in diameter. Works with all Lincoln Electric FlexCut PRO torches
Order KP5916-1

Plasma Straight & Angle Cutting Kit
Guide for making straight cuts with any plasma cutting torch
Order KP5917-1



OMNIShield™ Face Shield
Shade 5 IR lens provides infrared light protection for plasma cutting applications
Order K3754-1



FlexCut PRO Torch
Includes 12.5 ft torch cable
Order KP5848-12-5



Cutting & Grinding Goggles Full coverage shade 5 goggles for plasma cutting opperations
Order K3118-1



35A Drag Cutting Consumable Kit
Full consumable kit for handheld plasma cutting at 35A with the FlexCut Air's internal air compressor
Order KP5829-35A

PRODUCT SPECIFICATIONS

Product Name	Product Number	Package Type	Input Power Voltage/Phase/ Hertz	Rated Output Current/Voltage/ Duty Cycle	Recommended Circuit Breaker	Output Range	Engine Drive Auxiliary Power Requirement	Gas Pressure Required [External Air Only]	Dimensions H x W x D in (mm)	Net Weight lb (kg)
FlexCut 35 Air	K5822-H	Handheld	120/240/1/50/60	35% @ 35A [230V] 60% @ 31A [230V] 100% @ 21A [230V] 20% @ 27A [120V	30A	15-35A	5.5kW for 35A	90-130PSI	18.4 [468] 8.1 [205] 14.1 [359]	35 [15.9]
	K5822-PS	Power Source Only								

For best cutting results with Lincoln Electric® equipment, always use Lincoln Electric consumables. Visit www.lincolnelectric.com for more details.

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