

Ranger® 225



Processes

Stick, TIG, MIG, Flux-Cored,
Gouging

Product Number

K2857-1

See inside for complete specs

Output Range

50-225A DC 15-25V CV Welding
10,500 Watts Peak AC Generator
9,000 Watts Continuous AC Generator

Rated Output - Current/Voltage/Duty Cycle

225A DC CC/25V/ 40%
210A DC CC/25V/100%
200A DC CV/20V/100%

Number of Cylinders

2

HP @ Speed (RPM)

23 @ 3,600 RPM

Weight/Dimensions (H x W x D)

514 lbs. (233 kg)
29.9 x 21.5 x 42.3 in.
(759 x 546 x 1074 mm)
36.2 in. (920 mm) To Top of Exhaust Tube

Got It Covered!™ Enclosed-Case Welder

A great choice for getting the job done! For construction contractors, maintenance crews, farmers or ranchers, the Ranger® 225 does a variety of basic welding jobs. And with 10,500 watts of peak AC generator power, it handles a variety of other jobs: lights, grinder, Lincoln Electric inverter, plasma cutter (separate air supply needed) or emergency power. At your service – everyday!™

FEATURES

▶ Totally Enclosed Case

- Engine is fully protected.
- 3 service access doors.
- Low noise – 76.4 dBA sound level at 23 ft. (7 m). 100.7 dB sound power (Lwa) at rated output.

▶ Versatile DC Welding

- Smooth DC welding output for a broad range of stick electrode types.
- MIG, flux-cored and TIG capable (with optional equipment).

▶ 10,500 Watts Peak Single-Phase AC Generator Power

- Peak for motor starting.
- 9,000 watts continuous power for generator, plasma cutter or inverter welder.
- Lights, grinder, power tools.

APPLICATIONS

- ▶ Construction
- ▶ Maintenance and Repair
- ▶ Ranch/Farm



FEATURES, CONT'D.

▶ 23 HP Kohler® Gasoline Engine

- 2 cylinder, 4 cycle overhead valve air-cooled design.
- Oil drain extension for easy oil changes.
- 12 gallon tank for extended run times.
- Only 1.3 gallons/hour at 210 amps DC, 25V, 100% duty cycle. Visual fuel level gauge on both sides of unit.

▶ Rugged Reliability

- Welding and AC generator outputs rated at 104°F (40°C).

INPUT



OUTPUT



Powered By:

KOHLER



Two Year Extended
Warranty Available in
the U.S.A. and Canada.



PERFORMANCE

Arc Performance

- Smooth DC welding output for a broad range of stick electrodes, such as Lincoln Excalibur® 7018 (AWS E7018) and Fleetweld® 5P+ (AWS E6010). Also capable of MIG, flux-cored, and TIG welding.
- Choose DC(+) for a deep penetrating arc or DC(-) for less penetration on thin sheet metal.
- Rated 225 amps/25 volts/40% duty cycle and 210 amps/25 volts/100% duty cycle for CC and 200 amps/20 volts for CV. All rated outputs at 104°F (40°C).
- Simple Output Range Selector can be used to select one of three amperage ranges with generous overlap for Stick/TIG welding, or one Wire Feed welding range.
- Fine adjustment control allows you to dial in just the right welding output for each application.
- Add productivity with self-shielded flux-cored CV wire welding. Compatible with Lincoln Electric LN-25 PRO and LN-15 Across-the-Arc wire feeders for use with a variety of wire electrodes.
- Expand to AC TIG welding with optional Square Wave™ TIG 175 or Invertec® V205-T AC/DC (powered by AC generator power from the Ranger® 225) for aluminum and other alloy welding.
- Arc gouge with up to 5/32 in. (4.0 mm) carbon electrode.

AC Generator Performance

- 10,500 watts peak AC generator power. Most peak power in its class. Use for motor starting.
- 9,000 watts continuous AC generator power. For high capacity needs such as a back-up generator, powering a Tomahawk® 625 plasma cutter, an Invertec® inverter welder or a Square Wave™ TIG 175 welder. Also for lights, a grinder or other power tools.
- Delivers up to 38 amps from the single 120V/240V full-KVA receptacle. Standard circuit breakers protect the machine as well as your power tools.
- Delivers up to 40 amps from two 120V duplex receptacles.
- Get two tools in one when you use the Ranger® 225 as a power generator for emergency standby power, and/or for welding.
- Optional GFCI (Ground Fault Circuit Interrupter) Kit available for additional protection from electrical shock.
- Simultaneous welding and AC generator power – power up to 3,950 watts while welding at 145 amps (AC generator power is reduced when welding simultaneously per table below).
- Take on more jobs – plug in an optional Tomahawk® 625 plasma cutter to cleanly cut metal.

SIMULTANEOUS WELDING AND POWER LOADS

DC Welding Output (Amps)	Permissible Power (Watts)
0	9,000
90	6,000
145	3,950
225	0

FEATURES

- Top-of-the-line OHV engine: Kohler® Command® 23 HP CH23S.
- Three engine doors provide machine protection and easy service access.
- Easy to Maintain – Engine requires an oil change only every 100 hours and every 200 hours for the oil filter.
- Electric Start Switch for easy starts. Switch combines OFF, START, and IDLER functions into one simple, compact, easy to use switch.
- Circuit breaker protects battery ignition circuit.
- Convenient truck or trailer mounting with front and rear holes in base.
- Fuel level slots in both sides of the base with a decal to easily read the fuel level in the tank. Helps you avoid running out of fuel during critical jobs.

- Large top fuel filler neck is easily accessed for refueling.
- Oil drain valve (no tools required) with removable extension tube.
- Easy access battery cover.



KEY CONTROLS



1. Engine Hour Meter
2. 4 Position Output Range Selector
3. Circuit Breakers
4. 120 Volt AC Receptacles (NEMA 5-20R)
5. Output Stud Covers
6. Ground Stud
7. 120/240 Volt AC Full KVA Receptacle (NEMA 14-50R)
8. Fine Output Control
9. Engine Choke Control (Stainless Steel Cable)
10. Engine Start Switch with Idler Control

QUALITY AND RELIABILITY

- Oil dip stick, filters, spark plugs, etc. are easily accessed with left, right and top engine doors. Left and right doors are removable, if desired, for service.
- Adjust exhaust direction with top-mounted 360° rotatable exhaust muffler. Muffler made from aluminized steel for long life.
- Red and black powder paint finish offers increased durability with added protection from rust and corrosion. Also ultraviolet resistant to better retain color and gloss.
- Longer engine life, reduced noise emissions and greater fuel economy with automatic engine idler.
- Conveniently located engine maintenance label under top engine door.
- Automatic engine shutdown protection for low oil pressure.
- 550 cold cranking amps with the Group 58 battery for extra starting capacity in cold temperatures.
- Dependability and long life aided by all-copper windings in rotor and stator with high quality insulation.
- Manufactured under a quality system certified to ISO 9001 requirements.
- Canadian Standards Association (CSA) certified.
- Three-year Lincoln Electric warranty (parts and labor) on welder (engine is warranted separately by the manufacturer).
- Backed by Lincoln Electric's Service Parts Commitment—We will ship in-stock parts within 24 hours of receipt of the order to anywhere within the U.S.

MACHINE SPECIFICATIONS

Product Name	Ordering Information	Description	CC Rated Output Current/Voltage/Duty Cycle	CV-Rated Output Current/Voltage/Duty Cycle	Generator AC Power ⁽²⁾⁽³⁾	Dimension H x W x L inches (mm)	Weight lbs. (kg)
Ranger® 225 (Kohler® OHV)	K2857-1	225 Amp DC Arc Welder 10,500 Watts Peak 9,000 Watts Continuous AC Power	DC Constant Current 225A/25V/40% 210A/25V/100% Current Ranges 120-225A 70-145A 50-90A Max OCV @ 3700 RPM 80V RMS	DC Constant Voltage ⁽¹⁾ 200A/20V/100% 15-25V	10,500 Watts Peak 9,000 Watts Continuous 60 Hz Single Phase Two 120V Duplex Receptacles 20A per Duplex 40A Total ⁽⁴⁾ 120V/240V Receptacle 38A Each 120V Branch ⁽⁴⁾ 38A @ 240V	29.9 x 21.5 x 42.3 (759 x 546 x 1074) To top of exhaust tube: 36.2 (920)	514 (233)

⁽¹⁾ DC constant voltage capability provides convenience and added safety when welding in electrically hazardous conditions.

⁽²⁾ When welding, available auxiliary power will be reduced. Output voltage is within +/- 10% at all loads up to rated capacity.

⁽³⁾ 120V will operate either 60 Hz or 50/60 Hz power tools, lights, etc.

⁽⁴⁾ Circuits cannot be wired in parallel to operate the same device.

ENGINE SPECIFICATIONS

Engine Model	Description	Horsepower & Displacement	Ignition	Capacities	Operating Speeds	Fuel Consumption
Kohler® OHV ⁽⁵⁾ Command CH23S (Gasoline)	2 Cylinder, 4 Cycle, OHV Air-Cooled Gasoline Engine Aluminum Alloy with Cast Iron Liners	23 HP @ 3600 RPM 41.0 cu in (674 cc)	Electric Start 12V Battery 435 Cold Cranking Amps Manual Choke	FUEL: 12 Gals (45 Ltrs) OIL: 2.0 Qts (1.9 Ltrs)	210A DC	1.3 Gals/Hr
					3,500 RPM	4.9 Ltr/Hr
					High Idle	0.7 Gals/Hr
					3,700 RPM	2.8 Ltr/Hr
					Low Idle	0.4 Gals/Hr
					2,200 RPM	1.5 Ltr/Hr

⁽⁵⁾ Kohler® warranty is 3 years.



A Ranger® 225 is an excellent choice for a wide variety of projects.

RECOMMENDED ACCESSORIES

GENERAL OPTIONS



Power Plug Kit (20 amp)
Provides four 120V plugs rated at 20 amps each, and one dual voltage, full KVA plug rated at 120/240V, 50 amps. 120V plug may not be compatible with common household receptacles.
Order K802N



Full-KVA Power Plug
One dual voltage plug rated at 120/240V, 50 amps. (NEMA 14-50P)
Order T12153-9



GFCI Receptacle Kit
Includes one UL approved 120V ground fault circuit interrupter duplex type receptacle and installation instructions. Replaces the factory-installed 120V duplex receptacle. Each receptacle of the GFCI duplex is rated at 20 amps. Maximum total current from the GFCI duplex is limited to 20 amps. Two kits required.
Order K1690-1



Spark Arrestor Kit
Attaches to muffler exhaust tube. Virtually eliminates spark emissions.
Order K1898-1



Canvas Cover
To protect the Ranger® 225 when not in use. Made from attractive red canvas material that is flame retardant, mildew resistant and water repellent.
Order K886-2



All-Terrain Undercarriage
For moving by hand at construction sites. Maneuvers over obstacles. Heavy-duty puncture-resistant (inner tube and sealant) tires.
Order K1737-1



Factory Undercarriage
For moving by hand on smooth surface floors. Heavy-duty, puncture-resistant (inner tube and sealant) tires and front caster. Convenient steering handle.
Order K1770-1



Welding Gas Cylinder/LPG Tank Holder
Holds welding gas cylinder or LPG tank (for products with LPG engine). For LPG: Use one holder for LPG tank and a second holder for welding gas cylinder. Both holders will attach to the K1770-1 undercarriage.
Order K1745-1



Small Two Wheel Welder Trailer
For heavy-duty road, off-road, plant and yard use. Includes pivoting jack stand, safety chains, and 13 in. (330 mm) wheels. Stiff .120 in. (3.0 mm) welded rectangular steel tube frame construction is phosphate etched and powder coat painted for superior rust and corrosion resistance. Low sway suspension gives outstanding stability with manageable tongue weight. Wheel bearings are packed with high viscosity, high pressure, low washout Lubriplate® grease. Includes a Duo-Hitch™, a 2 in. (51 mm) ball/lunette eye combination hitch. Overall width 60 in. (1524 mm). Overall length 110 in. (2794 mm).
Order:
K2635-1 Trailer
K2639-1 Fender & Light Kit
K2640-1 Cable Rack



STICK OPTIONS

Accessory Kit
For stick welding. Includes 35 ft. (10.7 m) #2/0 electrode cable with lug, 30 ft. (9.1 m) #2/0 work cable with lugs, headshield, filter plate, work clamp and electrode holder. 400 amp capacity.
Order K704



Accessory Kit
For stick welding. Includes 20 ft. (6.1 m) #6 electrode cable with lug, 15 ft. (4.6 m) #6 work cable with lugs, headshield, filter plate, work clamp, electrode holder and sample pack of mild steel electrode. 150 amp capacity.
Order K875



TIG OPTIONS

Pro-Torch™ PTA-26V TIG Torch
Air-cooled 200 amp torch (2 piece) equipped with valve for gas flow control. 25 ft. (7.6 m) length.
Order K1783-9



Magnum® Parts Kit
Provides all the torch accessories you need to start welding. Parts kit provides collets, collet bodies, a back cap, alumina nozzles and tungstens in a variety of sizes, all packaged in an easy to carry reclosable pack.
Order KP509 for PTA-26V

Square Wave™ TIG 175
For AC TIG welding with square wave performance, use the AC generator of the engine-driven welder to supply the power (full rated output may not be available). Easy setup. Includes torch, foot Amptrol®, gas regulator and hose. Requires the K1816-1 Full KVA Adapter Kit.
Order K1478-5



Invertec® V205-T AC/DC One-Pak® Package
For AC TIG welding with square wave performance, use the AC generator of the engine-driven welder to supply the power. Easy setup. Includes torch, parts kit, regulator and hose kit, Twist Mate™ torch adapter, work cable with Twist Mate™ end and foot Amptrol®. Requires the K1816-1 Full-KVA Adapter Kit.
Order K2350-2



Full - KVA Adapter Kit
Provides convenient connection of Lincoln Electric equipment having a 240V AC 1-phase plug (NEMA 6-50P) to the full-KVA receptacle on engine-driven welders.
Order K1816-1



WIRE FEEDER OPTIONS

LN-25 PRO Wire Feeder
Portable CC/CV unit for flux-cored and MIG welding with MAXTRAC® wire drive system. Includes gas solenoid and internal contactor.
Order K2613-5



K126™ PRO Innershield® Gun
For self-shielded wire with 15 ft. (4.5 m) cable. For .062-5/64 in. (1.6-2.0 mm) wire. Includes K466-10 Connector Kit.
Order K126-12



Drive Roll and Guide Tube Kit
For .068-.072 in. (1.8 mm) cored or solid steel wire.
Order KP1697-068



Magnum® PRO 350 Ready-Pak® 15 ft., .035-5/64 in.
Magnum® PRO MIG/flux-cored welding guns are rated 100% duty cycle. The guns are designed for high amperage, high duty cycle applications in extreme environments where heat-resistance and fast serviceability are key.
Order K2652-2-10-45



Drive Roll and Guide Tube Kit
For .035-.045 in. (0.9-1.1 mm) solid steel wire.
Order KP1696-1



POWER MIG® 180C
Premium compact wire welder with continuous voltage control for MIG and flux-cored welding. 30 to 180 amp output range. Get input power from the AC generator of the engine-driven welder with the K1816-1 Full-KVA Adapter Kit (required). Add the K2532-1 Magnum® 100SG Spool Gun for aluminum MIG welding.
Order K2473-1

RECOMMENDED ACCESSORIES



Full - KVA Adapter Kit

Provides convenient connection of Lincoln Electric equipment having a 240V AC 1-phase plug (NEMA 6-50P) to the full-KVA receptacle on engine-driven welders.

Order **K1816-1**



PLASMA CUTTING

Tomahawk® 1000

Cuts metal using the AC generator power from the engine-driven welder. Requires the K1816-1 Full KVA Adapter Kit.

Order **K2808-1**



Magnum® 100SG Spool Gun

Designed to easily feed 4 in. (102 mm) diameter 1 lbs. (0.45 kg) spools of .030 in. (0.8 mm) or .035 in. (0.9 mm) diameter SuperGlaze® aluminum MIG wire. Includes gun, adapter kit, .035 in. (0.9 mm) contact tips (qty. 3), gas nozzle, and a 1 lbs. (0.45 kg) spool of SuperGlaze® 4043 .035 in. (0.9 mm) MIG wire. Packaged in a convenient carrying case.

Order **K2532-1**



Full-KVA Adapter Kit (1-Phase)

Provides convenient connection of Lincoln Electric equipment having a 240V AC 1-phase plug (NEMA 6-50P) to the full-KVA receptacle on Lincoln engine-driven welders.

Order **K1816-1**

PRODUCT SPECIFICATIONS

Product Name	Product Number	Rated Output Current/Voltage/Duty Cycle	Output Range	Engine Model	Number of Cylinders	HP@ Speed (rpm)	H x W x D inches (mm)	Net Weight lbs. (kg)
Ranger® 225	K2857-1	225A DC CC/25V/40% 210A DC CC/25V/100% 200A DC CV/20V/100%	50-225A DC 15-25V CV 10,500 watts peak 9,000 watts continuous	Kohler® OHV Command® CH23S	2	23 @ 3600	29.9 x 21.5 x 42.3 (759 x 546 x 1074) To top of exhaust tube: 36.2 (920)	514 (233)

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

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 information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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