

Ranger® 3 Phase

480V Portable Power for the Farm, Ranch or Job Site

Select the Ranger® 3 Phase for portable auxiliary power demands on the farm, ranch or construction sites. This rugged Ranger® delivers up to 11,500 watts peak three phase 480V power for farm irrigation circles, pumps and other power-hungry applications, or 10,500 watts peak single phase power for lights, grinders and farm, shop or home auxiliary power.

But that's not all - use the Ranger® 3 Phase for AC or DC Stick welding and arc gouging. Also, this Ranger® is capable of TIG welding (add TIG module for AC TIG), as well as MIG and flux-cored welding. The low maintenance 23 HP Kohler® **NEW!** engine delivers dependable starting, great fuel efficiency and years of reliable use.

Processes

Stick, TIG, MIG, Flux-Cored, Gouging



Includes sample electrode

Output



Input



KOHLER®

Advantage Lincoln

- 480V 3-Phase AC Generator Power**
 - Most peak & continuous power in its class.
 - 11,500 watts peak / 10,500 watts continuous power.
 - Use for irrigation circles, farm pumps, powering a Pro-Cut® plasma cutter or an Invertec® inverter welder.
- 10,500 Watts Peak Single-Phase 120/240V AC Generator Power**
 - Most peak power in its class.
 - Use peak power for starting single-phase motors.
- 9,500 Watts Continuous Single-Phase 120/240V AC Generator Power**
 - For high capacity needs such as a back-up generator, powering a Pro-Cut® plasma cutter or an Invertec® inverter welder.
 - For lights, a grinder or other power tools.
- AC/DC Welding**
 - Smooth AC/DC welding output for a broad range of stick electrodes such as Lincoln Excalibur® 7018 (AWS E7018) and Fleetweld® 5P+ (AWS E6010).
 - Capable of MIG, Flux-Cored, and TIG welding (with additional optional equipment).
- 23 HP Gasoline Engine **NEW!****
 - Increase from 20 HP to 23 HP for plenty of engine horsepower!
 - 2-cylinder, 4-cycle OHV (overhead valve) air-cooled.
- Three-Year Lincoln Warranty**
 - Three-year Lincoln warranty (parts and labor) on welder. (Engine is warranted separately by the manufacturer.)

TECHNICAL SPECIFICATIONS

Product Name	Rated Output Current/Voltage/Duty Cycle	Output Range	Engine Model	No. of Cyl.	HP @ Speed (rpm)	Dimensions H x W x D inches (mm)	Net Weight lbs (kg)
Ranger 3 Phase	225A AC CC/25V/100% 210A DC CC/25V/100% 200A DC CV/20V/100%	50-225A AC 50-210A DC 15-25V CV 1-Phase 10,500 watts peak 9,500 watts continuous 3-Phase 11,500 watts peak 10,500 watts continuous	Kohler® OHV Command® CH23S NEW!	2	23 @ 3600 NEW!	30.3 x 19.1 x 42.3 (770 x 485 x 1074)	538 (244)

PERFORMANCE

Arc Performance

- Smooth AC/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 (with additional optional equipment).
- Choose DC(+) for a deep penetrating arc or DC(-) for less penetration on thin sheet steel. Select AC for general purpose welding and non-code aluminum TIG welding.
- Rated 225 amps/25 volts for AC, 210 amps/25 volts for DC and 200 amps/20 volts for CV. All rated outputs at 100% duty cycle 104°F (40°C).

AC Generator Performance

- 480V 3-phase AC generator power. Most peak & continuous power in its class. 11,500 watts peak / 10,500 watts continuous power. Use for irrigation circles, farm pumps, and other applications where portable 3-phase power is needed.
- 10,500 watts peak single-phase 120/240V AC generator power. Most peak power in its class. Use peak power for starting single-phase motors.
- 9,000 watts continuous single phase 120/240V AC generator power. For high capacity needs such as powering a back-up generator, Pro-Cut® plasma cutter or Invertec® inverter welder. Also for lights, grinders and other power tools.
- Delivers up to 12.6 amps from the 480V 3-phase, twist-lock covered receptacle. Circuit breaker protection.
- Delivers up to 40 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 GFCI duplex receptacles.
- Get two tools in one when you use the Ranger 3 Phase as a power generator for emergency standby power, and/or for welding.

- 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 LN-15 Across-the-Arc and LN-25 wire feeders for use with a variety of wire electrodes.
- Expand to AC TIG welding with optional TIG Module and related equipment for non-code aluminum and other alloy welding.
- Arc Gouge with up to 5/32" (4.0 mm) carbon electrode.

- GFCI (Ground Fault Circuit Interrupter) receptacles for additional protection from electrical shock.
- Simultaneous welding and AC generator power – power up to 4,500 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 Pro-Cut® 55 plasma cutter to cleanly cut metal.

SIMULTANEOUS WELDING AND POWER LOADS

Welding Output (Amps)	Continuous Power (Watts)	
	1-Phase	3-Phase
0	9,500	10,500
90	6,500	7,500
145	4,500	4,500
225 AC/210 DC	0	0

Note: Use of 3-phase AC power is not recommended while welding.

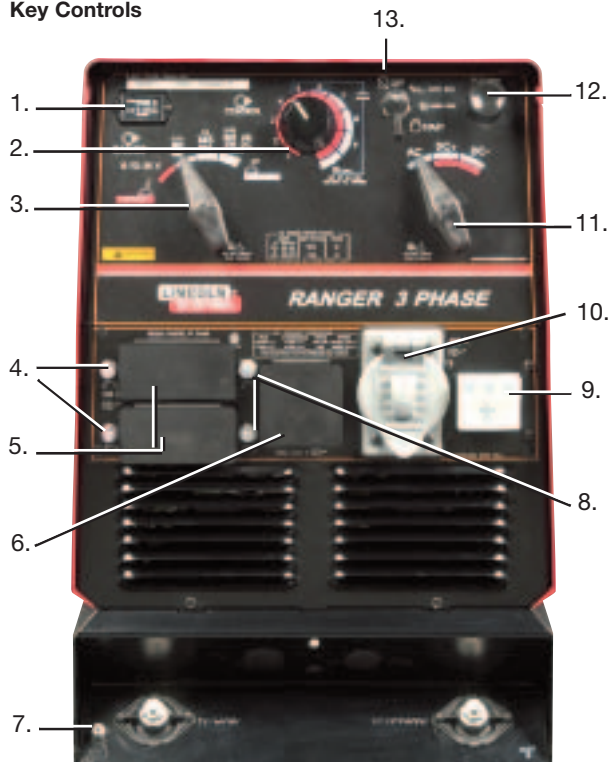
FEATURES

- Kohler® Command® 23 HP CH23S OHV gasoline engine. **NEW!**
- Noise at rated load - 105.7 dB Sound Power (Lwa)
- 81.6 dBA Sound Level at 23 ft. (7 m)
- Sizable 9 gallon fuel tank capacity with new fuel gauge configuration provides extended hours of operation and easy fuel monitoring.
- Easy to maintain – engine requires an oil change only every 100 hours and oil filter change only every 200 hours.
- Electric Start Switch makes it easy to get started every morning. Switch combines OFF, START, and IDLER functions into one simple, compact, easy to use switch.

- Circuit breaker protects battery ignition circuit.
- Built-in feet for easy mounting to truck or trailer.
- Tapered fuel filler neck prevents fuel back-flow when refueling.
- Oil drain valve (no tools required).
- 435 cold cranking amps with the Group 58 battery for extra starting capacity in sub-zero temperatures.

A CLOSER LOOK

Key Controls



1. Engine Hour Meter
2. Fine Output Control
3. 4 Position Output Range Selector
4. 20 Amp/120 VAC Circuit Breakers
5. 120 Volt AC GFCI Receptacles (NEMA 5-20R)
6. 120/240 Volt AC Full KVA Receptacle (NEMA 14-50R)
7. Ground Stud
8. 40 Amp/240 VAC Circuit Breakers
9. 480V 3-Phase Circuit Breaker
10. 480V 3-Phase Receptacle (NEMA L16-20R)
11. Polarity Switch
12. Engine Choke Control (Stainless Steel Cable)
13. Engine Start Switch with Idler Control

QUALITY AND RELIABILITY


- Rugged reliability – Rangers have been subjected to an extensive testing program to ensure reliable operation in a wide variety of environmental conditions.
- Standard engine hour meter makes it easy to schedule regular maintenance.
- Automatic engine shutdown protection for low oil pressure, preventing major engine damage.
- Automatic engine idler for greater fuel economy, longer engine life and added noise control.
- Quiet muffler with reversible exhaust feature mounts on either right or left side of machine for flexible placement options on a trailer or truck bed. The muffler is made from aluminized steel for added service 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.
- Sturdy steel roof and case sides for added toughness.
- High quality electrical insulation used for added dependability and long life.
- Manufactured under a quality system certified to ISO 9001 requirements.
- Three-year Lincoln warranty on welder. (Engine is warranted separately by the manufacturer).
- Backed by Lincoln's Service Parts Commitment – We will ship in-stock parts within 24 hours of receipt of the order to anywhere within the U.S.



The Ranger® 3 Phase is an excellent choice for powering crop irrigation circle pumps.


A CLOSER LOOK

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(5) x W x L inches (mm)	Weight lbs. (kg)
Ranger 3 Phase (Kohler OHV)	K2337-2 	225 Amp AC/210 Amp DC Arc Welder 1-Phase 10,500 Watts Peak 9,500 Watts Continuous AC Power 3-Phase 11,500 Watts Peak 10,500 Watts Continuous AC Power	AC Constant Current 225A/25V/100% DC Constant Current 210A/25V/100% Current Ranges 120-225A (AC) 120-210A (DC) 70-145A 50-90A Max OCV @ 3700 RPM 80V RMS	DC Constant Voltage (1) 200A/20V/100% 15-25V	1-Phase 60 Hz 10,500 watts peak 9,500 watts continuous 3-Phase 11,500 watts peak 10,500 watts continuous 120V Duplex GFCI Receptacles 20A per Duplex(4) 40A Total 120V/240V Receptacle 40A Each 120V Branch(4) 40A @ 240V 480V 3-Phase Twist-Lock Receptacle 12.6 amps @ 480V	30.3 x 19.1 x 42.3 (770 x 485 x 1074)	538 244

- (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.
 (5) Height is to top of lift bail. Enclosure height is 26.6" (676 mm).

ENGINE SPECIFICATIONS

Engine Model	Description	Horsepower & Displacement	Ignition	Capacities	Operating Speeds	Fuel Consumption
Kohler OHV (6) 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: 9 Gals (34 Ltrs.) OIL: 2.0 Qts (1.9 Ltrs)	Full Load 210A DC 3,500 RPM High Idle 3,700 RPM Low Idle 2,200 RPM	1.4 Gals/Hr 5.2 Ltr/Hr 0.8 Gals/Hr 2.9 Ltr/Hr 0.4 Gals/Hr 1.3 Ltr/Hr

- (6) Kohler warranty is 3 years.

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



Power Plug Kit (15 amp)
Provides four 120V plugs rated at 15 amps each, and one dual voltage, full KVA plug rated at 120/240V, 50 amps. 120V plug is compatible with common household receptacles.
Order K802R



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



Spark Arrester Kit
Attaches to end of muffler. Virtually eliminates spark emissions.
Order K894-1



Canvas Cover
Protects the Ranger 3 Phase when not in use. Made from attractive red canvas material that is flame retardant, mildew resistant and water repellent.
Order K886-1



Hand Moving Undercarriage
For moving by hand. Overall width 27 in. (0.7 m). Includes heavy-duty puncture-resistant tires.
Order K889-2



Hand Moving Undercarriage
Includes no-flat puncture proof tires. For moving by hand. Overall width 27 in (0.7 m).
Order K889-3



GENERAL OPTIONS CONT.

All-Terrain Undercarriage
For moving by hand at construction sites. Maneuvers over obstacles. Heavy-duty puncture-resistant tires.
Order K1737-1



Factory Undercarriage
For moving by hand on smooth surface floors. Heavy-duty, puncture-resistant 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 first holder for LPG tank and second holder for welding gas cylinder. Both holders will attach to the K1770-1 undercarriage.
Order K1745-1



Roll Cage
Improves damage protection and includes built-in cable rack. Attaches to K1737-1 or K1770-1 undercarriage. Can mount to K2635-1 trailer.
Order K1788-1



Small Two Wheel Welder Trailer
For heavy-duty road, off-road, plant and yard use. includes pivoting jack stand, safety chains, and 13" wheels. Stiff .120" 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" ball/lunette eye combination hitch. Overall width 60".

NEW!

Available March 2007

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. 200 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 for PTA-26V TIG Torch
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



TIG Module
Portable, high frequency unit with gas valve for TIG welding. Rated at 300 amps/60% duty cycle.
Order K930-2



Control Cable
Connects TIG Module to the Ranger 3 Phase. 5 ft. (1.5 m) length.
Order K936-4

TIG OPTIONS CONT.



Arc Start Switch
Comes with a 25 ft. (7.6 m) cable. Attaches to the TIG torch for convenient finger control.
Order K814



Docking Kit
Secures TIG Module to top of flat-roofed power source.
Order K939-1



Contactor Kit
For use with TIG Module.
Order K938-1



Control Cable Extension
Allows the TIG Module to be operated at distances up to 200 ft. from the power source. Available in 45 ft. (13.7 m).
Order K937-45



Precision TIG® 225 Ready-Pak®
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, foot amptrol, gas regulator and hose. Requires the K1816-1 Full KVA adapter kit.
Order K2535-1



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 K1816-1 Full-KVA Adapter Kit.
Order K2350-1



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 Lincoln engine-driven welders.
Order K1816-1

WIRE FEEDER OPTIONS



LN-25 Wire Feeder
 Portable CC/CV unit for flux-cored and MIG welding. Includes gas solenoid and internal contactor. For spools up to 44 lbs (20 kg).
Order K449



LN-15 Across-The-Arc Wire Feeder
 Portable, lightweight, compact CC/CV unit for flux-cored and MIG welding. Includes gas solenoid, adjustable flow meter and internal contactor. For 10-15 lb (4.5 - 6.8 kg) spools.
Order K1870-1



Magnum® 350 Innershield® Gun (for LN-25, LN-15)
 For self-shielded wire with 15 ft. (4.5 m) cable. For .062-3/32" (1.6-2.4 mm) wire.
Order K126-2



Drive Roll and Guide Tube Kit (for LN-25)
 For .068-3/32" (1.8-2.4 mm) cored or solid steel wire.
Order KP653-3/32



Drive Roll and Wire Guide Kit (for LN-15)
 For 1/16" (1.6 mm) cored wire.
Order KP1697-1/16C



Gun Receiver Bushing
 For LN-15 and K126-2.
Order K1500-1



WIRE FEEDER OPTIONS CONT.

Magnum® 300 MIG Gun
 For .035-.045" (0.9-1.2 mm) gas-shielded wire with 15 ft. (4.5 m) cable.

LN-25
Order K1802-1
 (includes Connector Kit)

LN-15
Order:
K470-2 Magnum 300 MIG Gun
K466-10 Connector Kit



Drive Roll and Guide Tube Kit (for LN-25)
 For .035-.040" (0.9-1.0 mm) solid steel wire.
Order KP653-035S



Drive Roll and Wire Guide Kit (for LN-15)
 For .035" (0.9 mm) solid steel wire.
Order KP1696-035S



PLASMA CUTTING OPTIONS

Pro-Cut® 55
 Cuts metal using the AC generator power from the engine-driven welder. Maximum cut thickness is 9/16" (14 mm). Requires the K1816-1 Full-KVA adapter kit.
Order K1580-1



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 Lincoln engine-driven welders.
Order K1816-1

RANGER® 3 PHASE ORDER FORM

PRODUCT DESCRIPTION	ORDER NUMBER	QUANTITY	PRICE
RANGER 3 PHASE (Kohler OHV Command CH23S Engine)	K2337-2		
RECOMMENDED GENERAL OPTIONS			
Power Plug Kit (20 amp)	K802N		
Power Plug Kit (15 amp)	K802R		
Full-KVA Power Plug	T12153-9		
Spark Arrester Kit	K894-1		
Canvas Cover	K886-1		
Undercarriages			
Hand Moving Undercarriage	K889-2		
Hand Moving Undercarriage	K889-3		
All Terrain Undercarriage	K1737-1		
Factory Undercarriage	K1770-1		
-Welding Gas Cylinder / LPG Tank Holder (for K1770-1)	K1745-1		
-Roll Cage (attaches to K1737-1 and K1770-1 and K2635-1 trailer)	K1788-1		
Small Two Wheel Welder Trailer & Duo Hitch™ - Available March 2007	K2635-1		
-Fender and Light Kit	K2639-1		
-Cable Rack	K2640-1		
RECOMMENDED STICK OPTIONS			
Accessory Kit, 400 amp	K704		
Accessory Kit, 200 amp	K875		
RECOMMENDED TIG OPTIONS			
Pro-Torch PTA-26V TIG Torch	K1783-9		
Magnum Parts Kit	KP509		
TIG Module	K930-2		
Control Cable (required)	K936-4		
Arc Start Switch (required)	K814		
Docking Kit	K939-1		
Contact Kit (required)	K938-1		
Control Cable Extension	K937-45		
Precision TIG® 225 Ready-Pak® (for AC TIG Welding)	K2535-1		
Invertec® V205-T AC/DC One-Pak® Package (for AC TIG welding)	K2350-1		
-Full KVA Adapter Kit (required for K2535-1 and K2350-1)	K1816-1		
RECOMMENDED WIRE FEEDER OPTIONS			
LN-25 Wire Feeder with Contactor, Solenoid	K449		
LN-15 Across-The-Arc Wire Feeder	K1870-1		
Magnum® 350 Innershield Gun	K126-2		
Drive Roll and Guide Tube Kit (for LN-25)	KP653-3/32		
Drive Roll and Wire Guide Kit (for LN-15)	KP1697-1/16C		
Gun Receiver Bushing (for LN-15 and K126-2)	K1500-1		
Magnum® 300 MIG Gun			
-For LN-25 (includes Connector Kit)	K1802-1		
-Magnum 300 MIG Gun (for LN-15)	K470-2		
-Connector Kit (for LN-15)	K466-10		
Drive Roll and Guide Tube Kit (for LN-25)	KP653-035S		
Drive Roll and Wire Guide Kit (for LN-15)	KP1696-035S		
RECOMMENDED PLASMA CUTTING OPTIONS			
Pro-Cut 55	K1580-1		
-Full-KVA Adapter Kit (required)	K1816-1		
TOTAL:			

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 customer's 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 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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