


Commander[®] 300



300 Amp DC Stick and Wire Welder

Rated at 300 amps @100 duty cycle and delivering up to 10,000 watts of AC auxiliary power for the jobsite, this capable industrial diesel engine driven welder / generator is loaded with features that make it a great choice for construction, maintenance, repair and pipe welding. Simply select a Process Mode, including CC-Stick, Downhill Pipe (for stick), Touch-Start™ TIG for easy arc starting or CV Wire for MIG (GMAW) or flux-cored (FCAW) welding and dial in your output. The deluxe model even has presettable dual digital meters for amps or voltage. Lincoln's award-winning  Chopper Technology delivers easy starts, smooth arc action, reduced spatter and great bead appearance. And, you can save time when you order the fully assembled Ready-Pak™, complete with the trailer, cables, and accessories you need to get started right away.

Processes

Stick TIG MIG Flux-Cored Gouging

Advantage Lincoln

- 300 amps DC @ 100% duty cycle and 375 amps DC @ 60% duty cycle. All ratings are at temperatures 104°F (40°C).
- 10,000 watts of continuous AC generator power.
- Simple to Operate – Select one of four Process Modes, including CC-Stick, Downhill Pipe (for stick), Touch-Start™ TIG or CV Wire, and then dial in the desired output.
- Five ranges with full overlap for stick pipe welding and other processes where slope control is desired. Fine-tuning within each range.
- Single, full-range control dial for CC-Stick, CV-Wire, and TIG applications.
- CC-Stick mode is optimized for general purpose stick using E7018 low hydrogen electrode.
- Arc control in CC-Stick and CV-Wire modes for crisp or soft arc.
- Standard Touch-Start™ DC TIG welding, not just scratch start, for easy arc starting that avoids tungsten contamination and the use of high-frequency.
- Deluxe machine has dual digital output meters for pre-setting weld amps or voltage. Also displays actual outputs while welding.
- Three year warranty (engine is warranted separately by the manufacturer).

Description

Output    Input 

Recommended General Options

Dual Output Meters and Gauges, Power Plug Kit, GFCI Receptacle Kit, Medium Welder Trailer, Four Wheeled Steerable Yard Trailer, Ether Start Kit, Oil Drain Kit, Spark Arrestor Kit

Recommended Stick Options

Accessory Kit, Remote Output Control

Recommended TIG Options

Pro-Torch® TIG Torch PTA-26V, Hand Amptrol®, Foot Amptrol, Magnum® Parts Kit, Square Wave® TIG 175 PRO, Invertec® V205-T AC/DC One-Pak™ Package, Full-KVA Adapter Kit

Recommended Wire Feeder Options

LN-25 Wire Feeder, Magnum 300 Innershield® Gun, Magnum 300 MIG Gun, Magnum Gun Connector Kit, Magnum SG Spool Gun, SG Control Module, Input Cable

Recommended Plasma Cutting Options

Pro-Cut® 55, Full KVA Adapter Kit

Order

K1585-1 Commander 300 (Standard model)
K1585-2 Commander 300 (Deluxe model)

TECHNICAL SPECIFICATIONS

Product Name	Rated Output Current/Voltage/Duty Cycle	Output Range	Type of Engine	No. of Cyl.	HP & Speed (rpm)	Dimensions H x W x D inches (mm)	Net Weight lbs (kg)
Commander 300 (Standard)	300A CC / 32V / 100% 375A CC / 34V / 60%	30-375A DC 40-300A Pipe 20-250A TIG 14-32V CV	Deutz® F3L1011F Diesel	3	31@ 1800	50.9 x 31.5 x 63.1 (1293 x 800 x 1603)	1325 (601)
Commander 300 (Deluxe)		AC Power 10,000 Watts					1330 (603)

PERFORMANCE

Arc Performance

- 300 amps @ 100% duty cycle and capable of 375 amps at 60% duty cycle. All ratings are at temperatures of 104°F (40°C).
- Arc Gouging - The Commander 300 is capable of gouging with up to a 1/4" carbon.

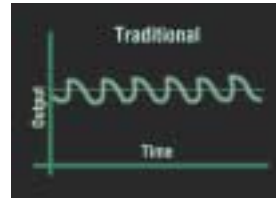
Generator Performance

- The Commander 300 provides added value at the job site by delivering up to 10,000 watts of AC auxiliary power for equipment such as a Lincoln plasma cutter. Also use for lights, grinders and other common construction tools. And, you can simultaneously weld and have access to AC power – For example 3,100 watts can be delivered while welding at up to 230 amps.
- Compare this to the common competitive standard of 4,000 watts. No expensive options are required to add significant generator capacity.
- Two 120V 20 amp duplex receptacles with weather resistant covers. Circuit breaker protection. Will operate up to a 9" grinder.
- Maximum generator power (while not welding) is available at any weld dial setting.
- Optional K1690-1 GFCI (Ground Fault Circuit Interrupter) Kit available for additional protection from electrical shock.

SIMULTANEOUS WELDING AND POWER LOADS

Welding Output (Amps)	Permissible Power (Watts)
0	10,000
60	8,500
90	7,600
150	5,650
230	3,100
300-375	400

WHAT IS CHOPPER TECHNOLOGY?



Traditional weld control is more variable around the desired output.



Chopper Technology delivers extremely fast response for tighter output control.

Patented and award-winning Lincoln **CT** Chopper Technology delivers superior DC arc welding performance for general purpose stick, Downhill Pipe, DC TIG, MIG, cored-wire and arc gouging.

Benefits of Chopper Technology include:

- Easy arc starting
- Smooth arc action
- Low spatter levels
- Excellent bead appearance

WHAT IS TOUCH-START™ TIG?

Touch-Start™ TIG uses a very low voltage to sense when the tip of the tungsten electrode is touched to the work piece. When this occurs, a complete circuit is established. When the tungsten is then raised from the work piece, the circuit senses a change in voltage and initiates the appropriate welding current and voltage to support the TIG welding process.

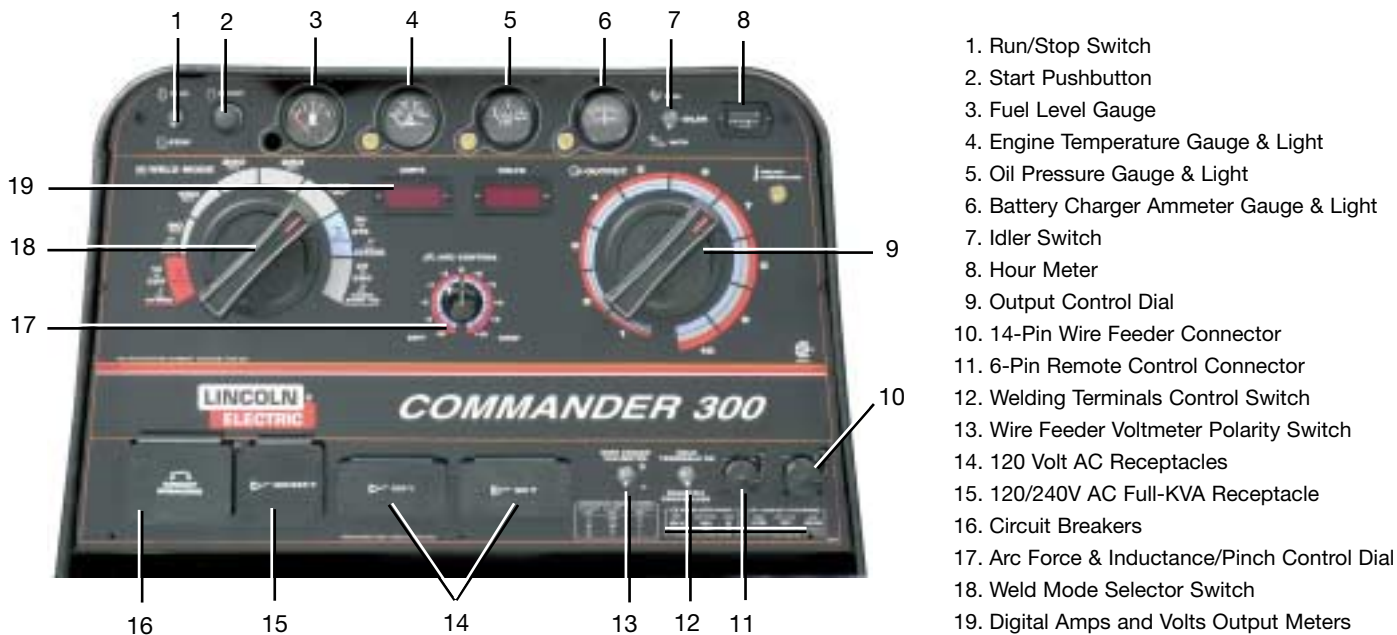
Enjoy the added benefits of Lincoln's Touch-Start TIG when DC TIG welding. Not only do you avoid tungsten contamination when arc starting, but you also don't need extra high frequency equipment.

FEATURES

- Simple Controls – Keep training time to a minimum with the straightforward control panel of the Commander 300.
- Gauge on standard unit indicates fuel level.
- Gauges on deluxe unit indicate fuel level, oil pressure, oil temperature and battergrade to a deluxe unit.
- Optional field-installed K1768-1 digital meter and engine gauge kit for standard machine to upgrade to a deluxe unit.
- Field-proven three cylinder Deutz F3L1011F industrial diesel engine.
- Automatic engine idler for greater fuel economy and reduced noise.
- Large 25 gallon fuel tank provides run time for an extended day – 18 hours of welding at 300A/32V/100% duty cycle output, or 52 hours at high idle.
- Output at welding terminals controlled by electronic contactor. Can be switched to “Weld Terminals On” or to “Remotely Controlled”.
- Automated Remote Control Capability – Output at welding terminals is automatically switched from the machine to the remote mode when a remote device is connected. (standard 6 pin connector).
- 14-pin connector for Lincoln wire feeders LN-7, LN-8, LN-15, LN-23P, LN-25 and LN-742. Also compatible with the NA-3 Control, LT-7 Tractor and Multi-Weld 350.
- Two Commander 300 units can be paralleled in the CC-Stick Mode to increase output.

A CLOSER LOOK

Key Controls



Deluxe Model Shown

QUALITY AND RELIABILITY

- Single-sided engine access for routine maintenance. Double hinged door located on the right side of the machine opens easily in tight surroundings.
- Engine hour meter for scheduled maintenance.
- Engine protection system: automatic shutdown for broken cooling blower belt/low engine alternator voltage, low oil pressure and high engine temperature.
- Indicator lights for low oil pressure, high oil temperature and broken cooling blower belt/low engine alternator voltage.
- Circuit breaker protection on the battery ignition system provides added component protection.
- Engine has a closed breather system to keep the engine compartment and ground clean. This system eliminates oil mist from collecting inside the engine compartment, especially on surfaces that would lower engine cooling efficiency.
- Self-bleeding engine simplifies startup if your fuel tank runs dry. Manual fuel line bleeding is usually not necessary.
- Attractive and durable pearlescent gray finish paint.
- Approved by the Canadian Standards Association.
- Three Year Lincoln Warranty. (Engine is warranted separately by the manufacturer.)

A CLOSER LOOK

MACHINE SPECIFICATIONS

Product Name	Ordering Information	Description	CC/Pipe-Rated DC Output Current/Voltage/Duty Cycle	CV Rated Output Current/Voltage/Duty Cycle	AC Power (2) (3)	Dimensions (5) H x W x L inches (mm)	Weight lbs (kg)
Commander® 300 (Standard)	K1585-1	300 Amp DC Stick & Wire Welder with 10,000 Watts AC Power Includes Fuel Gauge	DC Constant Current 300A/32V/100% 375A/34V/100% 30-375 Amps Continuous Control	DC Constant Voltage (1) 300A/32V/100% 375A/34V/60% 14-32V Single Dial Continuous Control	10,000 watts 60Hz Four 120V Receptacles 20A per Duplex 40 Total (4)	50.9 x 31.5 x 63.1 (1293 x 800 x 1603)	1325 (601)
Commander® 300 (Deluxe)	K1585-2	300 Amp DC Welder with 10,000 Watts AC Power Digital Meter Output Display & All Engine Gauges	Touch-Start™ TIG Range 250A/30V/100% 20-250 Amps Continuous Control Pipe Welding Range with Fine Adjustment in Each Range 90-300 60-250 50-200 40-150 40-90 EXX10 electrodes 80V DC Max OCV @1900 RPM	Wire Feeder Power 120V/60Hz 42V/60Hz	Full KVA Receptacle 42A@240V 42A@120V Each Branch Circuit (4)		1330 (603)

- (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 60Hz 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 exhaust elbow; 42 in. case top height.

ENGINE SPECIFICATIONS

Engine Model	Description	Horsepower & Displacement	Capacities	Operating Speeds	Fuel Consumption
Deutz® F3L1011F (6)	3 Cylinder, 4 Cycle Oil/Air-Cooled Diesel Engine 12V Electric Start Two-Stage Dry Type Air Cleaner, Fuel Filter with Water Separator	31.0 HP @ 1800 RPM 125.0 cu in (2.0 ltrs)	FUEL: 25 Gals (95 Ltrs) OIL: 6.3 Qts (6.0 Ltrs)	300A Load 1800 RPM	1.1 Gals./Hr (4.2 ltrs/hr)
				High Idle 1900 RPM	0.5 Gals/Hr (1.9 ltrs/hr)
				Low Idle 1475 RPM	0.4 Gals/Hr (1.3 ltrs/hr)

- (6) Deutz warranty is 2 years/2,000 hours for all components, 3 years/3,000 hours for major components.

RECOMMENDED OPTIONS

SYSTEM SELECTION

One-Pak™ Welding Packages

Order a Lincoln One-Pak™ and get everything you need to complete a welding package - all with one order number.

(Packages are not assembled.)

Each UNASSEMBLED Package Contains:

- Commander 300 (See Order Number Below)
- Medium Welder Trailer (K953-1)
- Hitch (See Order Number Below)
- Fender and Light Kit (K959-1)
- Cable Rack (K965-1)
- Electrode Cable 2/0, 100 ft. (L-2/0-100-11)
- Work Cable 2/0, 100 ft. (L-2/0-100-11-11)
- 300A Electrode Holder (K909-7)
- 300A Work Clamp (K910-1)

Order:

K1863-1 Standard Model with K958-1 Ball Hitch

K1863-2 Standard Model with K958-2 Lunette Eye Hitch

K1868-1 Deluxe Model with K958-1 Ball Hitch

K1868-2 Deluxe Model with K958-2 Lunette Eye Hitch



Commander 300



K953-1 Medium Welder Trailer



K958-1 2" Ball Hitch



K958-2 Lunette Eye Hitch

Ready-Pak™ Welding Packages

Order a Lincoln Ready-Pak™ and get a **completely assembled** welding package.

Each COMPLETELY ASSEMBLED Package Contains:

- Commander 300 (See Order Number Below)
- Medium Welder Trailer (K953-1)
- Ball Hitch (K958-1)
- Fender and Light Kit (K959-1)
- Cable Rack (K965-1)
- Electrode Cable 2/0, 100 ft. (L-2/0-100-11)
- Work Cable 2/0, 100 ft. (L-2/0-100-11-11)
- 300A Electrode Holder (K909-7)
- 300A Work Clamp (K910-1)
- 1/8" Excalibur™ 7018 - Six 10 lb. Easy Open Cans

Order:

K2179-1 Standard Model

K2180-1 Deluxe Model



Completely Assembled Ready-Pak

GENERAL OPTIONS



Dual Output Meters and Gauge Meters provide preset capability of voltage for wire welding and current for stick welding. Measures both current and voltage when welding. Gauges include: battery ammeter, engine temperature, and engine oil pressure. For Commander 300 standard machine only.
Order K1768-1



120V



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



120V



Power Plug Kit (15A) 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 NEMA common household receptacles.
Order K802R



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. (2 kits required.)
Order K1690-1



Medium Welder Trailer For heavy-duty road, off-road plant and yard applications. Includes wheeled jack, safety chains, 14" wheels, and large rear bumper. Stiff 3/16" steel frame, E-Coated and powder painted for rust & corrosion resistance. Low sway suspension gives outstanding stability with manageable tongue weight. E-Z Lube™ Axle-pack wheel bearings with a grease gun. 57" max. width for stability with easy tracking.
Order:
K953-1 Trailer
K958-1 2" Ball Hitch
K958-2 Lunette Eye Hitch
K959-1 Fender & Light Kit
K965-1 Cable Rack

GENERAL OPTIONS CONT.



Four Wheeled Steerable Yard Trailer For in plant and yard towing. Includes lunette eye towbar.
Order:
K767-2 Trailer
K958-1 2" Ball Hitch



Ether Start Kit Provides maximum cold weather starting assistance for frequent starting below 10° F (-12.2° C). Required ether tank is not provided with kit.
Order K887-1



Oil Drain Kit Includes ball valve, hose and clamp.
Order K1604-1



Spark Arrestor Kit Easily mounts to standard muffler.
Order K1898-1

STICK OPTIONS



Accessory Kit Includes 35 ft. (10.7m) #2/0 electrode and 30 ft. (9.1m) #2/0 work cables, headshield, work clamp, and electrode holder. 400 amp capacity.
Order K704



Remote Output Control Consists of a control box with choice of two cable lengths. Permits remote adjustment of output. 6 pin connection.
Order:
K857 (for 25 ft.)
K857-1 (for 100 ft.)

TIG OPTIONS



Pro-Torch® PTA-26V TIG Torch Air-cooled 200 amp torch equipped with valve for gas flow control.
Order K1783-9



Hand Amptrol® Provides 25 ft. (7.6m) of remote current control for TIG welding. (6 pin plug connection)
Order K963-2 for PTA-26, PTW-18 TIG Torches.



Foot Amptrol® Provides 25 ft. (7.6m) of remote current control for TIG welding. (6 pin plug connection)
Order K870

TIG OPTIONS CONT.

Magnum Parts Kit for PTA-26V TIG Torch

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



Square Wave TIG 175 PRO

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 amp-trol, gas regulator and hose. Requires the K1816-1 Full-KVA Adapter Kit.
Order K1478-3



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 K2350-1



Full-KVA Adapter Kit

Provides convenient connection of Lincoln Electric equipment with NEMA 6-50R plug to Lincoln engine-driven welders having a Full-KVA receptacle.
Order K1816-1



WIRE FEEDER OPTIONS

LN-25 Wire Feeder

Portable CC/CV unit for flux-cored and MIG welding. Includes gas solenoid & internal contactor.
Order K449



WIRE FEEDER OPTIONS

Magnum® 350 Innershield® Gun (for LN-25)

For self-shielded wire with 15 ft. (4.5m) cable. For .062-3/32" (1.6-2.8mm) wire.
Order K126-2



Magnum® 300 MIG Gun (for LN-25)

For .035" (0.9mm) gas-shielded wire with 15 ft. (4.5m) cable.
Order K470-2



Magnum Gun Connector Kit (for LN-25 Wire Feeder)

Order K466-1



Magnum SG Spool Gun

Hand held semiautomatic wire feeder. Requires SG Control Module.
Order K487-25



SG Control Module

The interface between the power source and the spool gun. Provides control of wire speed and gas flow. For use with a spool gun.
Order K488



Input Cable (For SG Control Module)

For Lincoln engine power sources with 14-pin MS-type connection, separate 115V NEMA receptacles and output stud connections.
Order K691-10



PLASMA CUTTING OPTIONS

Pro-Cut® 55

Cuts mild steel using the AC generator power from the engine-driven welder. Requires the K1816-1 Full-KVA Adapter Kit.
Order K1580-1



Full-KVA Adapter Kit

Provides convenient connection of Lincoln Electric equipment with NEMA 6-50R plug to Lincoln engine-driven welders having a Full-KVA receptacle.
Order K1816-1



COMMANDER 300 ORDER FORM

PRODUCT DESCRIPTION	ORDER NUMBER	QUANTITY	PRICE
COMMANDER 300 (Deutz®-Standard)	K1585-1		
COMMANDER 300 (Deutz-Deluxe)	K1585-2		
RECOMMENDED GENERAL OPTIONS			
Dual Output Meters and Gauges (Standard Models)	K1768-1		
Power Plug Kit (20 Amps)	K802N		
Power Plug Kit (15 Amps)	K802R		
GFCI Receptacle Kit (2 Required)	K1690-1		
Medium Welder Trailer	K953-1		
- 2" Ball Hitch	K958-1		
- Lunette Eye Hitch	K958-2		
- Fender & Light Kit	K959-1		
- Cable Rack (fits K953-1)	K965-1		
Four Wheeled Steerable Yard Trailer (with lunette eye towbar)	K767-2		
- 2" Ball Hitch	K958-1		
Ether Start Kit	K887-1		
Oil Drain Kit	K1604-1		
Spark Arrestor Kit	K1898-1		
RECOMMENDED STICK OPTIONS			
Accessory Kit	K704		
Remote Output Control (25 ft. cable)	K857		
Remote Output Control (100 ft. cable)	K857-1		
RECOMMENDED TIG OPTIONS			
Pro-Torch® PTA-26V TIG Torch	K1783-9		
Hand Amptrol® (for PTA-26, PTW-18 TIG Torches)	K963-2		
Foot Amptrol	K870		
Magnum® Parts Kit (for PTA 26 Torch)	KP509		
Square Wave TIG 175 PRO (for AC TIG welding)	K1478-3		
Invertec V205-T AC/DC One-Pak Package	K2350-1		
- Full-KVA Adapter Kit (required) For K1478-3 and K2350-1	K1816-1		
RECOMMENDED WIRE FEEDER OPTIONS			
LN-25 Wire Feeder with Contactor, Solenoid	K449		
Magnum® 350 Innershield® Welding Gun	K126-2		
Magnum® 300 MIG Gun	K470-2		
Magnum Gun Connector Kit	K466-1		
SPOOL GUN WELDING			
Magnum SG Spool Gun	K487-25		
SG Control Module	K488		
Input Cable (for SG Control Module)	K691-10		
PLASMA CUTTING			
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.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.



THE LINCOLN ELECTRIC COMPANY

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