

Classic[®] 300D

Processes

Stick, TIG, MIG⁽¹⁾, Flux-Cored⁽¹⁾, Gouging

(1) With K623-1 Wire Feed Module.

Product Numbers

K1643-11	Classic [®] 300D (Perkins [®]) - U.S. and Canada
K1643-7	Classic [®] 300D (Perkins [®]) - Export
K1643-8	Classic [®] 300D w/ Wire Feed Module - U.S. and Canada
K1643-9	Classic [®] 300D (Kubota [®]) - U.S. and Canada
K1643-10	Classic [®] 300D w/ Wire Feed Module - U.S. and Canada

Output Range

40-350A DC Welding
3000 Watts AC Generator

Rated Output - Current/Voltage/ Duty Cycle

300A DC/32V/60%
250A DC/30V/100%

Number of Cylinders

4

HP @ Speed (RPM)

Perkins[®] 32.7 HP @ 1800 RPM
Kubota[®] 35.5 HP @ 1800 RPM

Weight/Dimensions (H x W x D)

See Back Page

See back for complete specs

Excellent for Pipelines, Construction and Maintenance

The Classic[®] 300D features proven, simple and rugged construction, along with Lincoln Electric's well-known pure DC generator design for excellent performance on pipe, construction and maintenance welding.

FEATURES

- ▶ **Pure DC Generator Welding Output**
 - Produces the welding arc preferred by pipeline operators and contractors for precise control of the arc in demanding code applications.
- ▶ **All Copper Windings**
 - Enhances arc stability for a really smooth, high performance arc.
- ▶ **Custom Arc[®] Dial**
 - Dial in the right arc, right now! Kubota[®] model includes 150 RPM high idle OCV adjustment for enhanced fine tuning on pipe (see inside). Not available on Perkins[®] model.
- ▶ **Five Current Ranges with Overlap**
 - For stick welding and other processes where slope control is desired. Fine-tuning within each range.
- ▶ **300 Amps Output @ 60% Duty Cycle**
 - Welds up to 7/32 in. (5.6 mm) Fleetweld[®] 5P+ cellulosic and Excalibur[®] low hydrogen electrode.
- ▶ **Reliable Industrial Diesel Engines**
 - 4-cylinder, water-cooled, 1800 RPM Perkins[®] or Kubota[®] engines run smooth and quiet.
 - Engine gauges allow you to monitor performance at a glance.

APPLICATIONS

- ▶ Pipeline
- ▶ Construction
- ▶ Maintenance and Repair



K1643-10 Kubota[®]
model shown



INPUT



OUTPUT



Perkins[®]

Kubota[®]

CUSTOM
ARC[®]

Dial In The Right Arc, Right Now.



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

THE LINCOLN ELECTRIC COMPANY

22801 St. Clair Avenue • Cleveland, OH • 44117-1199 • U.S.A.
PH: +1.216-481-8100 • www.lincolnelectric.com

PERFORMANCE

Arc Performance

- Arc gouging with up to 3/16 in. (4.7 mm) carbons.
- 2/0 (70 mm²) cable recommended for 200-250 ft. (61-76 m) combined lengths of electrode and work cables.

Generator Performance

- 3,000 total watts of AC power from a 115V or 230V duplex receptacle for power tools and lights.
- Circuit breaker protection. 115V AC 20 amp output will operate up to a 9 in. (229 mm) grinder.
- Weather-protected receptacle covers.
- GFCI (Ground Fault Circuit Interrupter) is sealed from moisture for more reliable operation.

What is Custom Arc®?



Use the High Idle (OCV) engine speed adjustment dial to change the heat input to the arc:

- Set the arc in the machine's "sweet spot".
- Dial in a softer or more digging arc.
- Reduce root pass internal undercut, especially on higher strength X60 and X70 pipe.
- Stack iron faster with low heat and a clear puddle on fill passes.
- Avoid arc breaks. Avoid slag that crowds the arc.
- Control fusion on the cap pass with good puddle size and clarity.

(Available on Kubota® model only.)

FEATURES

- Choice of two industrial 4-cylinder, smooth-running, water-cooled diesel engines:
 - Perkins® 404D-22
98.1 dB sound power (Lwa) at rated load.
73 dBA sound level at 23 ft. (7 m).
 - Kubota® V2403M
99.9 dB sound power (Lwa) at rated load.
75 dBA sound level at 23 ft. (7 m).
- Gauges indicate oil pressure, engine temperature and battery charging amps.
- Engine hour meter to track scheduled maintenance.
- All day welding with 16 gallon (60.6 liters) plastic fuel tank with combination fuel cap/fuel gauge.
- Oil drain valve and tube are standard.
- Compact size for installation on truck beds.
- Local/Remote switch and receptacle are factory installed for easy connection of the remote control.

Stick Welding

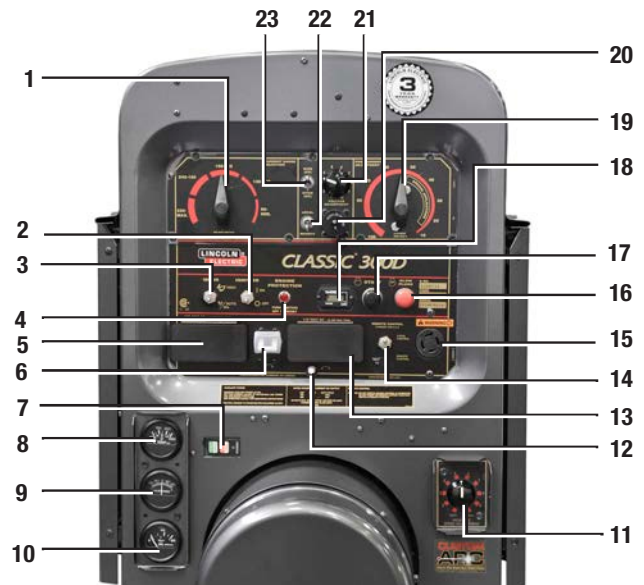
- Optional K924-4 Remote Control Kit for stick welding. Includes remote box and 100 ft. (30 m) cable. Includes local/remote switch and receptacle for older machine control panels. Make fine current adjustments up to 100 ft. (30 m) from the machine.

Wire Welding

- Optional Wire Feed Module for CV-wire welding. Increases productivity and reduces welding costs. Rated at 300 amps, 35 volts at 60% duty cycle, 325 amps, 34 volts at 35% duty cycle. Recommended wire feeders include LN-25 Ironworker™ or Activ8™ across-the-arc models. Module has 14-pin connector for Lincoln Electric wire feeders that use a control cable with 115V AC input: LN-7 GMA and LN-8. Built-in contactor for "cold-tip" electrode. (When CV wire welding with optional Wire Feed Module, idler may need to be set to "high" position for low current processes.)
- Optional K2464-1 Remote Control Kit for stick and wire welding. For machines that have the Wire Feed Module installed. Make output adjustments up to 100 ft. (30 m) from the machine.

KEY CONTROLS

- | | |
|--|---|
| 1. Current Range Selector | 13. 115V AC Receptacles & Cover |
| 2. On/Off Switch | 14. Local/Remote Control Switch |
| 3. Idler Control | 15. Local/Remote Receptacle |
| 4. Engine Protection Light | 16. Glow Plug Button |
| 5. 230V AC Receptacles & Cover | 17. Start Button |
| 6. 230V Circuit Breaker @ 15 amps | 18. Engine Hour Meter |
| 7. Sealed GFCI Module | 19. Fine Current Adjustment for Stick Welding |
| 8. Engine Temperature Gauge | 20. 14-Pin Wire Feeder Connector |
| 9. Battery Charging Ammeter | 21. CV Voltage Adjustment for Wire Welding |
| 10. Engine Oil Pressure Gauge | 22. Local/Remote Control Wire for CV-Wire |
| 11. Custom Arc® High Idle RPM (OCV) Adjustment Dial (Kubota® Model only) | 23. CC-Stick/CV-Wire Switch |
| 12. 115V Circuit Breaker @ 20 Amps | |



Kubota® Model Shown (K1643-10)
with Wire Feed Module Controls

- Both engines have glow plugs for cold weather starting.
- Automatic shutdown protection for low oil pressure or high water temperature.
- Electronic engine idler extends engine life and reduces fuel consumption.
- Engine protection/control printed circuit board is trayed and potted to provide a robust environmental shield.
- Single-side engine access for easy routine maintenance.
- Attractive and durable pearlescent gray finish paint.
- Three-year Lincoln Electric warranty (engines are warranted separately by the manufacturers).
- Manufactured under a quality system certified to ISO 9001 requirements and ISO 14001 environmental standards.
- Canadian Standards Association (CSA) certified.



Cross-country pipe welding with Classic® 300D.

MACHINE SPECIFICATIONS

Product Name	Ordering Information	Description	Rated DC Output ⁽¹⁾ Current/Voltage/ Duty Cycle	DC Current Fine Adjustment Range	Auxiliary Power ⁽²⁾	Dimensions H x W x L inches (mm)	Weight lbs/(kg)
Classic® 300D (Perkins®)	K1643-11 U.S. and Canada	300 Amp DC Arc Welder	NEMA Ratings 300A / 32V / 60% 250A / 30V / 100%	40 - 350 Amps	3,000 Watts 60 Hz, AC	37.1 x 24.0 x 65.0 (943 x 610 x 1651) To top of exhaust tube: 45.5 (1156)	1354 (614)
	K1643-7 Export	All Copper Windings	98V DC MAX OCV	220 - Max 160 - 240 120 - 190 80 - 130 Min - 90	20 Amps @ 115V with sealed GFCI Module		1389 (630)
	K1643-8 w/ Wire Feed Module U.S. and Canada	Pure DC Power Generator			13 Amps @ 230V		
Classic® 300D (Kubota®)	K1643-9 w/ Custom Arc® U.S. and Canada					37.1 x 24.0 x 66.4 (943 x 610 x 1687) To top of exhaust tube: 45.5 (1156)	1320 (599)
	K1643-10 w/ Custom Arc® & Wire Feed Module U.S. and Canada						1355 (615)

⁽¹⁾ Based on a 10 minute period. High Altitude: Perkins® – For maximum rating, derate the output 2.5% to 3.5% for every 1,000 ft. (300 m). Kubota® – for maximum rating, derate the output 4% for every 1,000 ft (300 m) above 4,900 ft (1500 m).
⁽²⁾ 115V will operate either 60 Hz, or 50/60 Hz power tools, lights, etc.

ENGINE SPECIFICATIONS

Engine Model	Description	Horsepower & Displacement	Ignition	Dry Capacities	Operating Speeds	Fuel Consumption
Perkins® 404D-22 Diesel ⁽³⁾ EPA Tier 4i	4 Cylinder 4 Cycle Water-Cooled Diesel Engine Cast Iron Cylinders Block/Crank Case Mechanical Governor	32.7 HP @ 1800 RPM	Compression Ignited	FUEL: 16 Gals (60.6 liters)	FULL LOAD 300A (1725 RPM)	1.4 Gals/Hr 5.2 liters/Hr
		135.4 cu in (2.2 liters)		OIL: 11.2 Qts (10.6 liters)	HIGH IDLE 1,800 RPM	0.4 Gals/Hr 1.6 liters/Hr
				COOLANT: 9.5 Qts (9.0 liters)	LOW IDLE 1,400 RPM	0.3 Gals/Hr 1.1 liters/Hr
Kubota® V2403M Diesel ⁽⁴⁾ EPA Tier 4i	4 Cylinder 4 Cycle Water-Cooled Diesel Engine Cast Iron Cylinders Block/Crank Case Electronic Governor	35.5 HP @ 1800 RPM	Compression Ignited	FUEL: 16 Gals (60.6 liters)	FULL LOAD 300A (1800 RPM)	1.3 Gals/Hr 5.0 liters/Hr
		149 cu in (2.4 liters)		OIL: 10.0 Qts (9.5 liters)	HIGH IDLE 1,650-1800 RPM With Custom Arc® Dial	0.5 Gals/Hr 1.9 liters/Hr
				COOLANT: 9.5 Qts (9.0 liters)	LOW IDLE 1,400 RPM	0.4 Gals/Hr 1.4 liters/Hr

⁽³⁾ Perkins® warranty is 2 years/2,000 hours, all components, 3 years major components. See warranty for details.
⁽⁴⁾ Kubota® engine warranty for U.S. and Canada is 2 years/2,000 hours, 3 years major components. Some limitations exist for Canada. See warranty statement for details.

Ready-Pak® Welding Packages (Assembled)

Order:

K2242-3 Classic® 300D Perkins® Ready-Pak® Package - U.S. and Canada

K2387-3 Classic® 300D Kubota® Ready-Pak® Package - U.S. and Canada

One-Pak® Welding Packages (Unassembled)

Order:

K3247-3 Classic® 300D Perkins® One-Pak® Package - U.S. and Canada

K1864-3 Classic® 300D Perkins® One-Pak® Package - Export

K2386-3 Classic® 300D Kubota® One-Pak® Package - U.S. and Canada

Get a welding package with one order number.

Each Package Contains:

- Classic® 300D (without Wire Feed Module)
- Medium Welder Trailer (K2636-1)
- Duo-Hitch® 2 in. (51 mm) Ball/Lunette Eye Hitch (included)
- Fender and Light Kit (K2639-1)
- Cable Rack (K2640-1)
- Cable Connectors - two (K2487-1)
- Electrode Cable 2/0, two 50 ft. (15.3 m) lengths (K2485-2)
- Electrode Cable 2/0, 10 ft. (3 m) (K2483-2)
- Work Cable 2/0, 50 ft. (15.3 m) (K2484-2)
- 300A Electrode Holder (K909-7)
- 300A Work Clamp (K910-1)

Ready-Pak® Welding Package (Assembled)



One-Pak® Welding Packages (Unassembled)

(Only major items shown.)



Classic® 300D



K2640-1 Cable Rack



K2636-1 Medium Welder Trailer



Duo-Hitch® 2 in. (51 mm) Ball/Lunette Eye Hitch (included)

RECOMMENDED ACCESSORIES



115 Volt



GENERAL OPTIONS

Power Plug Kit

Provides two 115V plugs rated at 20 amps each, and two 230V plugs rated at 15 amps each. 115V plugs may not be compatible with common household receptacles.
Order K802D

Spark Arrestor Kit

Attaches to muffler exhaust tube. Virtually eliminates spark emissions.
Order K903-1

Medium 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 124 in. (3150 mm).
Order:
K2636-1 Trailer
K2639-1 Fender & Light Kit
K2640-1 Cable Rack

Stainless Steel Sheet Metal Kit

Stainless steel roof and doors. Also includes decals (mounted), door latches, door hooks, bumpers and all required mounting hardware. Fits K6090-9 and -10 Pipeliner® 200D and K1643-1 thru -11 Classic® 300D
Order K2423-1

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

Remote Control

Remote control rheostat permits machine output changes up to 100 ft. (30 m) from the machine. Includes local/remote switch and receptacle for older machine control panels.
Order K924-4

TIG OPTIONS

PTA-26V TIG Torch

Air-cooled 200 amp torch equipped with valve for gas flow control. 25 ft. (7.6 m) length.
Order K1783-9



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 back cap, alumina nozzles and tungstens in a variety of sizes, all packaged in an easy to carry reclosable pack.
Order KP509



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 welder and TIG Module controls.
Order K936-4



Control Cable Extension

Allows the TIG Module to be operated at distances up to 200 ft. (61.9 m) from the power source. 45 ft. (13.7 m) length.
Order K937-45



Arc Start™ Switch

Needed if an Amptrol™ is not used when TIG welding. Comes with a 25 ft. (7.6 m) cable. Attaches to the TIG torch for convenient finger control.
Order K814



Contactor Kit

For use with TIG Module and Classic® 300D.
Order K938-1

WIRE FEEDER OPTIONS

Wire Feed Module

Provides constant voltage (CV) output with excellent arc stability for Innershield® welding and MIG welding. Easy installation. Recommended wire feeder is the LN-25 Ironworker™.
Order K623-1

Remote Control Kit (Stick & Wire)

For Classic® and Pipeliner® machines that have the wire feed module. Contains a rheostat for stick output, a potentiometer for wire output and 100 ft. (30 m) of control cable.
Order K2464-1

LN-25 Ironworker™ Wire Feeder

Portable CV unit for flux-cored and MIG welding with MAXTRAC® wire drive system. Includes digital meters for wire feed speed/amperage and voltage, gas solenoid, internal contactor and 5/64 in. (2.0 mm) drive roll kit for cored wire. Has 83% reduced wire feed speed capability for 6 o'clock pipe welding with Innershield® wire.
Order K2614-9



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. (1.7-1.8 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 in. and .045 in. (0.9 mm and 1.1 mm) solid steel wire.
Order KP1696-1



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 the 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



PRODUCT SPECIFICATIONS

Product Name	Product Number	Rated Output Current/Voltage/ Duty Cycle	Output Range	Engine	Number of Cylinders	HP & Speed (RPM)	H x W x D inches (mm)	Net Weight lbs. (kg)
Classic® 300D (Perkins®)	K1643-11 U.S. and Canada K1643-7 Export	250A/30V/100% 300A/32V/60%	Welding: 40-350A DC AC Power: 3,000 watts	Perkins® 404D-22 Diesel EPA Tier 4i	4	32.7 @ 1800	Machine only 37.1 x 24.0 x 65.0 (943 x 610 x 1651) <i>To top of exhaust tube: 45.5 (1156)</i>	1354 (614)
Classic® 300D (Perkins®) w/Wire Feed Module	K1643-8 U.S. and Canada							1389 (630)
Classic® 300D One-Pak® (Perkins®)	K3247-3 U.S. and Canada K1864-3 Export							—
Classic® 300D Ready-Pak® (Perkins®)	K2242-3 U.S. and Canada							—
Classic® 300D (Kubota®)	K1643-9 U.S. and Canada			Kubota® V2403M Diesel EPA Tier 4i		35.5 @ 1800	Machine only 37.1 x 24.0 x 66.4 (943 x 610 x 1687) <i>To top of exhaust tube: 45.5 (1156)</i>	1320 (599)
Classic® 300D (Kubota®) w/Wire Feed Module	K1643-10 U.S. and Canada							1355 (615)
Classic® 300D One-Pak® (Kubota®)	K2386-3 U.S. and Canada							—
Classic® 300D Ready-Pak® (Kubota®)	K2387-3 U.S. and Canada							—

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

Manufactured at a facility with certified ISO Quality and Environmental Management Systems.

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.

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.

