# Classic® 300 HE

# EPA Tier 4

## **Processes**

Stick, TIG, MIG(1), Flux-Cored(1), Gouging (1) CV wire welding with K3964-1 Wire Feed Module

## **Product Numbers**

K3198-1 Classic® 300 HE (Kubota®)

See back for complete specs

## **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** 

3

## HP @ Speed (RPM)

Kubota® 24.7 HP @ 1800 RPM

## Weight/Dimensions (H x W x D)

37.1 x 24.3 x 62.8 in.

To Top of Exhaust Tube

## **Excellent for Pipelines, Construction and Maintenance**

The Classic® 300 HE 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**

NAVA

## Fuel Efficient Industrial Diesel Engine

- 3-cylinder, water-cooled, 1800 RPM engine.
- Big fuel savings compared to previous engine!
  - Kubota<sup>®</sup>: 15% at 300A, 30% at low idle vs. Classic® 300 D.
- Fuel gauge on control panel.

## 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.

#### 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.





## **APPLICATIONS**

- Pipeline
- Construction
- Maintenance and Repair

#### INPUT





OUTPUT









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





(943 x 616 x 1594 mm)

45.5 in. (1156 mm)

#### **PERFORMANCE**

#### **Arc Performance**

- 350 Amp maximum output.
- Arc gouging with up to 3/16 in. (4.7 mm) carbons.
- 2/0 (70 mm<sup>2</sup>) 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 120V or 240V duplex receptacle for power tools and lights.
- Circuit breaker protection. 120V 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.

#### **FEATURES**



- Industrial 3-cylinder, smooth-running, water-cooled diesel engine:
  - Kubota® D1503



- Fuel gauge on control panel to easily monitor fuel level.
  - Engine hour meter to track scheduled maintenance.
  - Additional engine gauges indicate oil pressure and engine temperature.
  - 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 is available 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
- 2. Fuel Gauge/Engine Hour Meter **Engine Temperature Gauge Oil Pressure Gauge**
- 3. Engine Battery Charging Light
- 4. Engine Protection Light
- 5. Idler Control
- 6. Run/Stop Switch
- 7. Start Button
- 8. Glow Plug Button
- 9. 240V Circuit Breaker @ 15 amps
- 10. Sealed GFCI
- 11. Local/Remote Control Switch
- 12. Local/Remote Receptacle
- 13. 120V Circuit Breaker @ 20 Amps
- 14. 120V AC Receptacles and Cover
- 15. 240V AC Receptacles and Cover
- 16. Fine Current and O.C.V. Adjustment for Stick Welding





## **QUALITY AND RELIABILITY**

- · Both engines have glow plugs for cold weather starting.
- Automatic shutdown protection for low oil pressure or high water temperature with indicator light on control panel.
- Indicator light for a malfunction of the engine battery charging system.
- Electronic engine idler extends engine life and reduces fuel consumption.
- ECU (Engine Control Unit for engine protection, idler and governor) is in a sealed housing for a robust environmental shield
- Single-side engine access for easy routine maintenance.
- Attractive and durable pearlescent gray finish paint.
- Three-year Lincoln Electric warranty (engine is warranted separately by the manufacturer).
- Manufactured under a quality system certified to ISO 9001 requirements and ISO 14001 environmental standards.
- Canadian Standards Association (CSA) certified.



Cross-country pipe welding.

MACHINE SPECIFICATIONS							
Product Name	Ordering Information	Description	Rated DC Output <sup>(1)</sup> Current/Voltage/ Duty Cycle	DC Current Fine Adjustment Range	Auxiliary Power <sup>(2)</sup>	Dimensions H x W x L inches (mm)	Weight lbs/(kg)
Classic® 300 HE (Kubota®)	K3198-1	300 Amp DC Arc Welder All Copper Windings Pure DC Power Generator	NEMA Ratings 300A / 32V / 60% 250A / 30V / 100% 90V DC MAX OCV	40 - 350 Amps 220 - Max 160 - 240 120 - 190 80 - 130 Min - 90	3,000 Watts 60 Hz, AC 20 Amps @ 120V with sealed GFCI Module 13 Amps @ 240V	37.1 x 24.3 x 62.8 (943 x 616 x 1594) To top of exhaust tube: 45.5 (1156)	1371 (622)

<sup>(1)</sup> Based on a 10 minute period. High Altitude: Kubota® - for maximum rating, derate the output 4% for every 1,000 ft (300 m) above 4,900 ft (1500 m).

<sup>(2) 120</sup>V 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		
Kubota® D1503 Diesel <sup>(3)</sup> EPA Tier 4	3 Cylinder 4 Cycle Water-Cooled Diesel Engine Cast Iron Cylinders Block/Crank Case Electronic Governor	24.7 HP @ 1800 RPM 91.5 cu in (1.5 liters)	Compression Ignited	FUEL: 16 Gals (60.6 liters) OIL: 5.9 Qts (5.6 liters)  COOLANT: 7.8 Qts (7.4 liters)	FULL LOAD 300A (1,800 RPM) HIGH IDLE 1,800 RPM LOW IDLE 1,440 RPM	1.1 Gals/Hr 4.2 liters/Hr 0.4 Gals/Hr 1.3 liters/Hr 0.3 Gals/Hr 1.0 liters/Hr		

<sup>(3)</sup> 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 Package (Assembled)

Order:

K2387-5 Classic® 300 HE Kubota® Ready-Pak® Package

One-Pak® Welding Package (Unassembled)

Order:

K2386-5 Classic® 300 HE Kubota® One-Pak® Package

Get a welding package with one order number.

## **Each Package Contains:**

- Classic® 300 HE (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 Package (Unassembled)

(Only major items shown.)



Classic® 300 HE



K2640-1 Cable Rack



K2636-1 Medium Welder Trailer (shown with K2639-1 Fender & Light Kit)



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





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



Shown with optional K2639-1 Fender & Light Kit

Medium Welder Trailer

For heavy-duty road, off-road, plant and vard 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, Classic® 300 HE, SAE-300®, SAE-300® HE.

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 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  $\mathsf{Amptrol}^{\scriptscriptstyle\mathsf{TM}}$  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 K3964-1



#### 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 SPECIFICATION	ONS							
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 Ibs. (kg)
Classic® 300 HE	K3198-1	250A/30V/100% 300A/32V/60%	Welding: 40-350A DC AC Power: 3,000 watts	Kubota® D1503 Diesel EPA Tier 4	3	24.7 @ 1800	Machine only 37.1 x 24.3 x 62.8 (943 x 616 x 1594) To top of exhaust tube: 45.5 (1156)	1371 (622)
Classic® 300 HE One-Pak®	K2386-5							_
Classic® 300 HE Ready-Pak®	K2387-5							_

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

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