# FRONTIER<sup>®</sup> 400X PIPE

**Diesel Engine Driven Welder/Generator** 



## **The New Frontier of Pipeline Performance**

The Frontier 400X Pipe diesel engine driven welder/generator breaks the boundaries of pipeline welding innovation - delivering a versatile, next generation system for your go-to choice on the right-of-way.

**Next-Gen Display** – Bright, impact-tested 7 in. digital user interface for unmatched machine control - including save and recall memories, maintenance reminders, and PIN authorization.

**Job-Site Versatility** – Up to 400 amps of welding output and 11kW of auxiliary power in a compact and quite package for plenty of output on the job or at the campsite.

**Optimized Pipe Welding** – Features optimized CC and CV modes, specialized modes to support mechanized and pulse welding, and a dedicated Pipe mode to produce the iconic, smooth DC-style arc for downhill pipe welding.

**CrossLinc® Enabled** – Change weld parameters at the arc without an additional control cable – helping to increase productivity, promote safety, and improve weld quality.

Auto-Stop/Start Technology – Save on fuel and avoid excessive idling and engine wear.

**Field Proven** – Choose between two dependable, field-tested engines with reliable performance and plenty of power to keep your jobsite running.

**Trusted Reliability** – Engineering to withstand harsh conditions and backed by trusted industry support and 3-year warranty.

Shown K3485-1

#### Processes »

SMAW (Stick), FCAW (Flux-Cored), GMAW (MIG), GTAW (TIG), CAC-A (Arc Gouging)





#### Product Number »

K3485-1 (Perkins®) K3485-2 (Kubota®)

#### Industries Served »

- Pipeline
  - Process Industries

### Key Accessories »

- LN-25X<sup>®</sup> Wire Feeder
- Activ8X<sup>®</sup> Pipe Wire Feeder
- Wireless Remote Control
- Engine Service Kits
  Storage Cover
- User Interface Protective
- Cover Cold Weather Kits



#### MACHINE SPECIFICATIONS

Product Name	Product Number	Rated Output @104°F (40°C)	Output Range	Open Circuit Voltage	AC Generator Auxiliary Power <sup>(1)</sup>	Auxiliary Receptacles <sup>(2)</sup>	Dimensions <sup>(3)</sup> H x W x L in (mm)	Weight lb (kg) <sup>[4]</sup>
Frontier 400X Pipe	K3485-1 (Perkins) K3485-2 (Kubota)	IEC Rating – 325A / 33V / 100% Max Rating – 400A / 26V / 60%	Stick / Pipe: 30 – 400 Amps DC TIG: 5 – 400 Amps MIG / FCAW: 10 – 45 Volts Arc Gouging: 60 – 400 Amps	71 Peak OCV @ 1800 RPM	Single Phase: 10 kW Continuous, 11.5 kW Peak, 120V/240V @ 60 Hz Three Phase: 11 kW Continuous, 12.5 kW Peak, 240V @ 60 Hz	NEMA 5-20R (120V / 20A / 1-) NEMA 14-50R (120/240V / 50A / 1-) NEMA 15-50R (240V / 50A / 3-)	Machine Only: 35.9 x 25.3 <sup>[3]</sup> x 60.0 (913 x 643 x 1524) To Top of Exhaust Pipe: 43.8 (1113)	1035 (469)

#### **ENGINE SPECIFICATIONS**

Engine Model	Engine Description	Operating Speed (RPM) @ Full Load	Displacement	Capacities
Perkins 403F-15T <sup>(5)</sup> Tier 4 Final Compliant	3 Cylinder 24.7 hp (18.4 kW) Turbocharged Water Cooled Diesel Engine	High Idle: 1800 Low Idle: 1440	91 cu. in (1.5 L) Bore x Stroke 3.3 in x 3.5 in (84 mm x 90 mm)	Fuel: 20 US gal. (75.7 L) Oil: 6.40 qts. (6.0 L) Cooling System: 1.8 US gal. (6.8 L)
Kubota D1503-M <sup>(5)</sup> Tier 4 Final Compliant	3 Cylinder 24.8 hp (18.5 kW) Naturally Aspirated Water Cooled Diesel Engine		91 cu. in (1.5 L) Bore x Stroke 3.27 in x 3.64 in (83 mm x 92.4 mm)	Fuel: 20 US gal. (75.7 L) Oil: 5.9 qts. (5.6 L) Cooling System: 1.8 US gal. (6.8 L)

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

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

(3) Includes width of door. Base width is 24.0 in. (610 mm).

(4) Machine only – Does not include fuel.

(5) Engine warranted separately by engine manufacturer.

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 Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, and cutting equipment. Our challenge is to meet the needs of our customers, who are experts in their fields, and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or technical information about their use of our products. Our employees respond to inquiries to the best of their ability based on information and specifications 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, or to provide engineering advice in relation to a specific situation. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or communications. Moreover, the provision of such information or technical information, and are expense or implied warrantly that might arise from the information or technical information, including any implied warrantly of merchantability or any warrantly of fitness for any customers' particular purpose or any other equivalent or similar warrantly is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the definition of specifications, and 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** 22801 St. Clair Avenue · Cleveland, OH · 44117-1199 · U.S.A.