

Power Wave® 355M

Processes

Stick, TIG, MIG, Pulsed,
Flux-Cored, Gouging

Product Number

K2368-1

See back for complete specs

Input Power

See back for complete specs

Input Current at Rated Output

See back for complete specs

Rated Output Current/Voltage/Duty Cycle

350A/34V/60%
(300A/32V/100%)

Output Range

5-425A

Weight/Dimensions (H x W x D)

81.5 lbs. (37 kg)

14.8 x 13.3 x 27.9 in.

(376 x 338 x 709 mm)

Superior Arc Performance. Revolutionary Communication.

Choose the compact, efficient Power Wave® 355M inverter-based welding power source for advanced process semiautomatic welding, including aluminum push-pull capability.

FEATURES

- ▶ **Lincoln's Waveform Control Technology®** - Gives you the ability to select the right waveform for each application — that means the arc has been optimized for each wire type and size for exceptionally smooth arc performance.
- ▶ **Utilizes ArcLink®** - The leading digital communication protocol for welding, making it the best choice for seamless, time critical integration with the power source.
- ▶ **Push-pull capability** - For ultimate aluminum welding with the Power Feed™ 10M wire feeder.
- ▶ **Pulse-On-Pulse® welding mode** - Improves cleaning action when welding aluminum and delivers a TIG-like bead appearance.
- ▶ **Power Mode®** - Maintains a stable, smooth arc for short arc welding on thin materials.
- ▶ **State-of-the-art inverter technology** - Provides high power efficiency, excellent welding performance and a lightweight, compact design.
- ▶ **Rigorous environmental, mechanical and weld testing** - Ensures ruggedness and reliability.

APPLICATIONS

- ▶ Fabrication
- ▶ Production
- ▶ Automotive



WHAT'S INCLUDED

K2368-1 Includes:

- ▶ 2/0 welding cable 10 ft. (3 m) to be connected to the wire feeder with a Twist Mate™ on one end and a lug on the other.
- ▶ Two male Twist Mate™ cable plugs (K852-70).
- ▶ Input power cable 10 ft. (3 m).

INPUT



OUTPUT



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

IP2IS Rated



THE LINCOLN ELECTRIC COMPANY

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Lincoln Nextweld® Innovations for Challenging Applications

Waveform Control Technology® makes it possible to take advantage of Lincoln Nextweld® innovations like these patented processes using the Power Wave® 355M and a Power Feed™ wire feeder:

Pulse-On-Pulse® uses a sequence of varying pulse wave shapes to produce a TIG-like bead appearance and excellent weld properties when MIG welding aluminum. Pulse-On-Pulse® controls arc length and heat input together, making it easier to achieve good penetration.

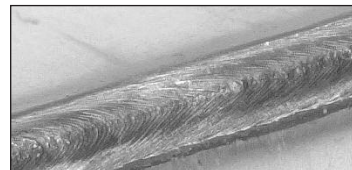
For more information see Nextweld® Document #NX-2.10



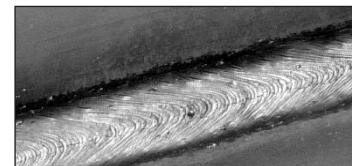
Pulse-On-Pulse® on 3 mm Aluminum

Power Mode® uses high-speed regulation of output power to deliver extremely fast response to changes in the arc, for example, when using a whip technique. The result is improved MIG welding performance, including low spatter, very uniform, consistent bead wetting and controlled penetration. Power Mode® benefits are especially apparent on low voltage applications on thin steel and stainless steel material less than 20 gauge (0.7 mm). It also delivers excellent arc characteristics on aluminum and other alloys such as silicon bronze and nickel alloys.

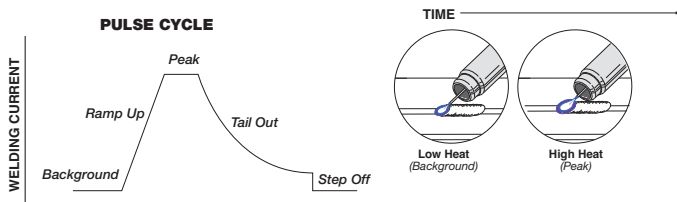
For more information see Nextweld® Document #NX-2.60



Power Mode® reduces spatter and improves bead appearance, even for low voltage procedures on stainless.



Power Mode® aids bead wetting and penetration on aluminum.



Pulsed MIG varies weld current between peak (high heat) and background (low heat) current to provide better control of heat input, which reduces warping and burnthrough on thin materials. Pulsed MIG also enables in-the-flat, horizontal, vertical up, or overhead welding without a slag system. It can be used in hard automation, robotic, and high production semiautomatic applications. Optimized GMAW-P waveforms are readily available to use on aluminum, carbon steel, high strength low alloy steel, stainless steel, and nickel alloys.

For more information see Nextweld® Document #NX-2.70

Digital Communications

Fast, Reliable, System-Wide

ArcLink® is the leading digital communications protocol for the arc welding industry. It integrates all welding components for seamless, time-critical data transfer. The strength of ArcLink® lies in the ability to communicate with each system component in a pre-defined welding language. In addition, ArcLink® is an open communications protocol, meaning that Lincoln Electric publishes how it works and encourages other companies to adopt it.

For more information see Nextweld® Document #NX-1.30

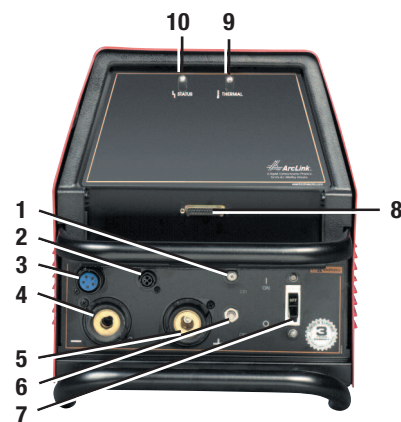


KEY CONTROLS

- 1) CB1 Wire Feeder Circuit Breaker
- 2) Lead Connector (Sense Lead)
- 3) Wire Feeder Receptacle (5-Pin)
- 4) Negative Twist Mate™ Terminal
- 5) Positive Twist Mate™ Terminal⁽¹⁾
- 6) Internal Power Circuit Breaker

- 7) Power Switch
- 8) RS232 Serial Communication Port
- 9) High Temperature Light
- 10) Status Light

⁽¹⁾ Machine is shipped with a 2/0 welding cable 10 ft. (3 m) to be connected to the wire feeder.



QUALITY AND RELIABILITY

Design

Safety, reliability and serviceability are built into Lincoln Electric inverter design.

- A Power Wave® inverter operates at a high efficiency (88%) at rated output and is capable of operating from a universal input voltage (208 to 575 volts).
- Thermostatically protected.
- Electronic output over-current protection and electronic input over-voltage protection.
- Operating Temperature Range: -20°C to +40°C.
- Storage Temperature Range: -40°C to +40°C.
- Double insulation and varnish on main transformer.
- Electrical connections coated with insulating compound for long term reliability in harsh environments.

Testing

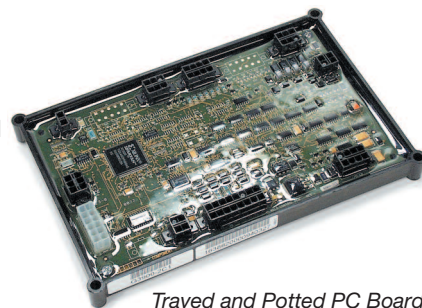
All Lincoln Electric inverters are fully tested for reliability before and after assembly.

- Lincoln Electric inverters are tested in an environmental chamber under extreme conditions of temperature and humidity.
- Mechanical testing, including vibration and drop testing, is performed.



Environmental Chamber

- Tough PC Boards — potted and trayed, filled with epoxy, double locked harness connectors, environmentally protected connectors, electrical silicone grease, high current rating. Extra attention to detail provides excellent protection from dirt, dust and the environment.



Trayed and Potted PC Board

- Fan-As-Needed™ — reduces power consumption and the amount of debris that gets drawn into the machine by shutting the fan down when it is not needed.

- Extensive temperature testing is performed to ensure that all components are running within their allowable range.
- Three-year warranty on parts and labor.
- Manufactured under a quality system certified to ISO 9001 requirements and ISO 14001 environmental standards.
- Designed to the IEC/EN 60974-1 standard.
- Meets tough NEMA EW 1, CSA NRTL/C standards.
- Meets rigorous IP21S environmental rating.

Power Wave® 355M Ready-Pak® (for Steel)

Take the hassle out of ordering — Order a Ready-Pak® pre-assembled welding package.

Includes:

- Power Wave® 355M Power Source
- Power Feed™ 10M Wire Feeder (Bench Model)
- .035 (0.9 mm) Drive Roll and Split Wire Guide Kit
- .045 (1.1 mm) Drive Roll and Split Wire Guide Kit
- Magnum® 400 Gun and Cable Package
- Work and Wire Feeder Power Cables Package
- Inverter and Wire Feeder Cart
- Harris® Flowmeter and Regulator

Order K2372-1



Standard MSP4 panel from the Power Feed™ 10M wire feeder is the user interface that allows selection of welding processes.

RECOMMENDED ACCESSORIES TO EXPAND MACHINE CAPABILITIES

GENERAL OPTIONS

Deluxe Adjustable Gas Regulator and Hose Kit

Accommodates CO₂, Argon or Argon-blend gas cylinders. Includes a cylinder pressure gauge, dual scale flow gauge and 4.3 ft. (1.3 m) gas hose.

Order K586-1

Inverter and Wire Feeder Cart

Rear-wheeled cart includes front casters and no-lift gas bottle platform. Convenient handles allow for easy cable storage while full length side trays store parts and tools. Shipped fully assembled. Small footprint fits through 30 in. (762 mm) door.

Order K1764-1

Dual Cylinder Mounting Kit

Permits side-by-side mounting of two full size gas cylinders, with easy loading. For use with Inverter and Wire Feeder Cart and direct mounting to POWER MIG® models.

Order K1702-1

Twist Mate™ Cable Plug

For connecting welding cable to output terminal receptacles.

For 1/0-2/0 (50-70 mm²) cable.

Order K852-70

Twist Mate™ Cable Plug

For connecting welding cable to output terminal receptacles.

For 2/0-3/0 (70-95 mm²) cable.

Order K852-95

Twist Mate™ Cable Receptacle

For connecting welding cable to Twist Mate™ cable plug. For 1/0-2/0 (50-70 mm²) cable.

Order K1759-70

Twist Mate™ Cable Receptacle

For connecting welding cable to Twist Mate™ cable plug. For 2/0-3/0 (70-95 mm²) cable.

Order K1759-95

Twist Mate™ to Lug Adapter

For connection of lugged cable to Twist Mate™ connectors. 18 in. (457 mm) long.

Order K2176-1

Sense Lead Kit

Recommended for extended cable length. Application allows machine to sense voltage directly at the work piece for improved arc performance. Connects at the front of the machine. 25 ft. (7.6 m).

Order K940-25

Production Monitoring™ 2 Software

Production Monitoring™ 2 is the welding industry's most advanced weld data collection and monitoring tool designed to allow fabricators to analyze and improve their welding operations and processes.

Visit www.lincolnpowermonitoring.com for a test drive

Work and Wire Feeder Power Cables Package

Includes work cable with ground clamp and Twist Mate™ connector and wire feeder power cable with lug and Twist Mate™ connector. Capacity is 350 amps at 60% duty cycle.

Order K1803-1

WIRE FEEDER OPTIONS

Power Feed™ 10M Bench and Dual Bench

Choose the Power Feed™ 10M Bench Models for automotive manufacturing, shipbuilding, pressure vessels/heavy plate, oil, gas and pipeline construction, particularly where code-quality work is required. The Power Feed™ 10M Dual Bench has all the features of the Power Feed™ 10M Bench, plus a second wire reel for twice the productivity.

Order K2230-1 Bench

Order K2234-1 Dual Bench

Power Feed™ 10M Boom and Dual Boom

Choose the Power Feed™ 10M Boom Models for boom arm applications in automotive manufacturing, shipbuilding, pressure vessels/ heavy plate, oil, gas and pipeline construction, particularly where code-quality work is required. The Power Feed™ 10M Dual Boom has all the features of the Power Feed™ 10M Boom, plus a second wire reel for twice the productivity.

Order K2314-1 Boom

Order K2316-1 Dual Boom

Power Feed™ 25M

Rugged, portable advanced process wire feeder for shop, construction or shipbuilding environments. Features standard push-pull capability, our MSP4 Mode Select Panel to access Waveform Control Technology® waveforms and eight memory presets for commonly accessed procedures.

Order K2536-2 Aluminum Case

Order K2536-3 Plastic Case

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

TIG OPTIONS

TIG-Mate™ 17V TIG

Torch Starter Pack

Get everything you need for TIG welding in one complete easy-to-order kit packaged in its own portable carrying case. Includes: PTA-17V torch, parts kit, Harris® flowmeter/regulator, 10 ft. gas hose and work clamp and cable. Includes K960-1 Twist Mate™ torch adapter.

Order K2265-1

PRODUCT SPECIFICATIONS

Product Name	Product Number	Input Voltage	Rated Output Current/Voltage/Duty Cycle	Input Current @ Rated Output	Output Range	H x W x D inches (mm)	Net Weight lbs. (kg)
Power Wave® 355M	K2368-1	3 ph: 200/208-230/380-400/415-460/575/3/50/60 1 ph: 208-230/415-460/575/1/50/60	350A/34V/60% (300A/32V/100%) 350A/34V/60% (300A/32V/100%)	3 ph: 50/50-42/28-27/26-23/18A 1 ph: 94-85/64-42/37A	5-425A	14.8 x 13.3 x 27.9 (376 x 338 x 709)	81.5 (37)

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

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.

LINCOLN®
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THE WELDING EXPERTS®