

Power Wave® C300

Processes

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

Product Number

- K2675-2 Power Wave® C300
- K2774-2 Power Wave® C300 Steel Ready-Pak®
- K2774-4 Power Wave® C300 Multi-Process Educational Ready-Pak®

Input Voltage

3 Ph 50/60: 208/220-230/380-415/460/575
1 Ph 50/60: 208/220-230

Input Current @ Rated Output

3 Ph / 40% Duty Cycle: 30/28/16/14/11A
1 Ph / 40% Duty Cycle: 53/48/29

Output Range

5-300 amps

Wire Feed Speed Range

50-700 ipm

Rated Output

300A/29V/40%
250A/27V/100%

Weight

100 lbs. (47.6 kg)

Dimensions

(H x W x D)
18.8 x 14 x 27.4 in.
(478 x 356 x 696 mm)

See back for complete specs

Portable. Powerful. Compact. One Machine Does it All!

The Power Wave® C300 is an advanced compact multi-process power source with an integrated wire feeder. It's ideal for welding on a wide variety of materials, including aluminum, stainless, and nickel materials – where arc performance is critical.

FEATURES

- ▶ **PowerConnect™ Technology (Patent-Pending)** – Automatically adjusts to input power from 200-600V, 50 or 60 Hz, single phase or three phase. Welding output remains constant through the entire input voltage range.
- ▶ **Tribrid™ Power Module** – Exceptional welding performance with high power factor and efficiency.
- ▶ **CheckPoint™** – A cloud-based data collection tool allows customers to view and analyze welding data on almost any device – desktop, laptop, iPhone® or iPad®, Blackberry® and others. Track equipment usage, store weld data, configure fault limits and more.
- ▶ **Compact and Durable Case** – IP23 rated to withstand harsh environments.
- ▶ **Integrated TIG Torch and Spool Gun Solenoid** – Makes for fast changeovers to TIG welding or spool gun operation.

APPLICATIONS

- ▶ Construction
- ▶ Aerospace
- ▶ Fabrication
- ▶ Automotive
- ▶ Production
- ▶ Welder Training



Shown:
K2774-4 Multi-Process Educational Ready-Pak®

INPUT



OUTPUT



WHAT'S INCLUDED

K2675-2 Base Unit Includes:

- ▶ Drive Roll Kit, .035 in./0.045 in. (0.9/1.2 mm)
- ▶ Input Cord, 10 ft. (3.0 m)
- ▶ Work Lead and Clamp, 10 ft. (3.0 m)



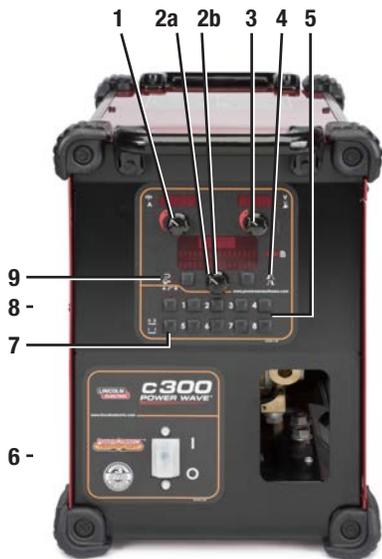
Two Year Extended Warranty Available in the U.S.A. and Canada.



KEY CONTROLS

FRONT VIEW

1. **Continuous Wire Feed Speed (WFS)/ Amps Control** – Adjust WFS for MIG and Flux-Cored; adjust amps for Stick or TIG.
- 2a. **Welding Mode** – Choose from more than 56 standard welding modes.
- 2b. **Weld Mode Search** – Search for an appropriate mode based on material, process, shielding gas and other parameters.
3. **Continuous Volts/Trim Control** – Adjust voltage for MIG and Flux-Cored; adjust arc length (trim) for Pulsed MIG.
4. **Advanced Process Options** – Control pre-weld and post-weld settings to optimize arc starts and stops.
5. **Memory Presets** – Store up to 8 customized weld procedures.
6. **On/Off Power Switch** – Protected from the elements.



Front View

7. **2 Step/4 Step** – For trigger interlock capability.
8. **Dual Procedure** – Toggle between two weld procedures while welding.
9. **UltimArc™ Control** – Adjust arc characteristics to match individual preferences.

BACK VIEW

10. **Ethernet Connection**
11. **Reversible Handles** – Protects the controls and assists two-person carrying around the shop or site.
12. **External Shielding Gas Connection** – For GTAW (TIG) or spool guns.
13. **External Shielding Gas Connection** – For GMAW (MIG) & FCAW.
14. **Power Cord Connection**



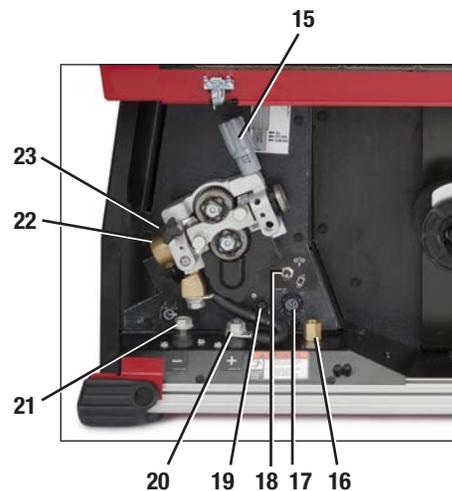
Reversible handles shown



Back View

SIDE VIEW

15. **Wire Drive Pressure Arm** – Calibrated scale can be used to vary drive pressure on the wire for different wires, guns or applications.
16. **5/8 in. (15.9 mm) Shielding Gas Fitting** – For TIG torch or spool gun connection.
17. **12-Pin Universal Remote Control Receptacle** – For connecting remote output control, spool gun or push-pull gun.
18. **Cold Inch/ Gas Purge Switch**
19. **4-Pin MIG Gun Trigger Receptacle**
20. **Positive Polarity Stud**
21. **Negative Polarity Stud**
22. **Gun Bushing** – Brass-to-Brass gun connection.
23. **Thumb Screw** – Used to secure the welding gun.



Side View

WHAT'S INCLUDED

Steel Ready-Pak® Package Includes:

- K2675-2 Power Wave® C300 Base Unit
- K2734-2 Understorage Cart
- K2951-2-6-45 Magnum® PRO Curve™ 300 Gun Package with Magnum® PRO front end expendables
- Harris® Flowmeter/Regulator & Hose

Order **K2774-2**

Multi-Process Educational Ready-Pak® Package Includes:

- K2675-2 Power Wave® C300 Base Unit
- K2734-2 Understorage Cart
- K2951-2-6-45 Magnum® PRO Curve™ 300 Gun Package w/Magnum® PRO front end expendables
- K2505-3 TIG Torch Twist Mate™-to-Stud adapter
- K1782-12 PTA-17 Pro-Torch TIG Torch with Ultra-Flex™ Cable, 12 ft. (3.7 m), 1 pc.
- K1622-1 Twist Mate™ Torch adapter
- KP508 Parts Kit For PTA-17 Series Torches
- Harris® Flowmeter/Regulator & Hose
- K870-2 Foot Amptrol™ with 12-Pin
- K2374-1 Stick Electrode Holder and Cable (includes Twist Mate™ connector)

Order **K2774-4**



Tribrid™ Power Module

Patent-pending Tribrid™ Power Module features Lincoln Electric's PowerConnect™ technology, Planar Transformer™ Technology and 120kHz output to provide exceptional welding performance while still maintaining a high power factor and efficiency.



iARC™ High Speed Digital Controls

iARC™ (Intelligent Architecture for Regulation and Control) digital welding controls are more than 10 times faster than the previous generation, with 128 times more RAM, and 8 times more flash memory. It also features 100Mbps Full Duplex Ethernet.

CheckPoint™



CheckPoint™ cloud server-based and mobile delivery solutions are the welding industry's most advanced weld data collection and monitoring tools, allowing fabricators to analyze their welding operations and processes. CheckPoint™ can provide necessary data for customer ISO, Six Sigma, statistical process control (SPC), quality cost delivery (QCD), overall equipment effectiveness (OEE) and lean manufacturing efforts. CheckPoint™ Standard Edition is offered at no charge with every Power Wave® purchase. An advanced capability Premium Subscription Edition is also available.

DRIVE ROLL KITS

Wire Size		Order Number
Solid	.023-.030 in. (0.6-0.8 mm)	KP1696-030S
	.035 in. (0.9 mm)	KP1696-035S
	.035/.045 in. Combination	KP1696-1(1)
	.040 in. (1.0 mm)	KP1696-2
	.045 in. (1.2 mm)	KP1696-045S
Cored	.035 in. (0.9 mm)	KP1697-035C
	.045 in. (1.2 mm)	KP1697-045C
Aluminum	.035 in. (0.9 mm)	KP1695-035A
	3/64 in. (1.2 mm)	KP1695-3/64A

(1) Included with K2675-2 Base Machine

RECOMMENDED ACCESSORIES

GENERAL OPTIONS



Canvas Cover
Protect your machine when not in use. Made from attractive red canvas that is flame retardant, mildew resistant and water repellent. Fits machine with or without a gas cylinder in the cylinder rack.
Order K2378-1



Remote Output Control with 12-pin Universal Connector
Consists of a control box with choice of two cable lengths. Permits remote adjustment of output.
Order K857-2 for 25 ft. (7.6 m)



Foot Amptrol™ with 12-pin Universal Connector
Provides 25 ft. (7.6 m) of remote current control for TIG welding.
Order K870-2



Hand Amptrol™ with 12-pin Universal Connector
Provides 25 ft. (7.6 m) of remote current control for TIG welding.
Order K963-4



Understorage Cart
For easy shop mobility. Provides shielding gas bottle platform, and handy storage drawer. Also compatible with K2675-1 Power Wave® C300.
Order K2734-2

TIG OPTIONS



PTA-17 150 Amp Air-Cooled TIG Torch
Order K1782-2 for 12.5 ft. (3.8 m) length, 2-cable
Order K1782-4 for 25 ft. (7.6 m) length, 2-cable



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. (Requires K2909-1 12-pin to 6-pin Adapter).
Order K814



PTA-26 200 Amp Air-Cooled TIG Torch
Order K1783-2 for 12.5 ft. (3.8 m) length, 2-cable
Order K1783-4 for 25 ft. (7.6 m) length, 2-cable



TIG Torch Twist Mate™ to Stud Adapter Cable, 2 ft. (0.61 m) Gas Hose
Use for connecting a one piece TIG torch and Twist Mate™ connector to the Power Wave® C300 and TIG solenoid.
Order K2505-3



6-pin to 12-pin Adapter
Use for adapting existing 6-pin remote controls such as the K870, K857, and K963-3 to the new 12-pin connector.
Order K2909-1



7-pin to 12-pin Adapter
Use for connecting 7-pin push-pull guns such as the Python®-Plus to the new 12-pin connector.
Order K2910-1



Parts Kits
Magnum® Parts Kits provide all the torch accessories you need to start welding. Parts kits provide collets, collet bodies, a back cap, alumina nozzles and tungstens in a variety of sizes, all packaged in an easy to carry reclosable box.
Order KP508 for PTA-17
Order KP509 for PTA-26

STICK OPTIONS



Accessory Kit
Complete kit for stick welding. Includes 30 ft. (9.1 m) electrode cable, 25 ft. (7.6 m) work cable, headshield, work clamp and electrode holder. 150 amps.
Order K875

RECOMMENDED ACCESSORIES

WIRE FEEDER OPTIONS



Fast-Mate™ Adapter
Allows guns with a Fast-Mate™ type back end to plug into a Power Wave® C300.
Order K489-8



Magnum® 250LX Spool Gun
280 amps, 60% duty cycle. Feeds .025-3/64 in. (0.6-1.2 mm) diameter aluminum wire on 2 lb. (0.9 kg) spools. With remote wire feed speed control. 25 ft. (7.6 m) cable. Requires K2910-1 12-pin to 7-pin Adapter.
Order K2490-1



Magnum® 250LX Spool Gun Control Cable Extension
Extend your spool gun reach. Features a 7-pin female MS-type connector on the spool gun end and a 7-pin male MS-type connector on the power source end. 25 ft. (7.6 m) extension. Requires K2910-1 12-pin to 7-pin Adapter.
Order K2519-1



Cougar™ Pistol-Grip Air-Cooled Push-Pull Guns
Cougar™ push-pull guns are intended for those operators who prefer an upright pistol-grip design for aluminum welding fabrication or production. Features Sure-Grip™ handle, integrated strain relief and multi-turn potentiometer. Rated 300A @ 60% duty cycle w/Argon. Requires K2910-1 12-pin to 7-pin Adapter.
Order
K2704-2 Air Cooled, 25 ft. (7.6 m)
K2704-3 Air Cooled, 50 ft. (15.2 m)



Magnum® PRO AL Air-Cooled Push-Pull Guns
The Magnum PRO AL gooseneck-style guns are designed to optimize a push-pull welding operation for aluminum. Uses Magnum PRO MIG Gun expendables. Available in 7-pin and 12-pin connections.
Request Publication E12.14



Welding Fume Extractors
Lincoln offers a wide variety of welding fume extraction environmental system solutions, ranging from portable systems easily wheeled around the shop to shop-wide central systems servicing many dedicated welding stations.
Request Publication MC08-70



Cool Arc® 55
Designed to integrate directly with the Power Wave® S-Series power sources, the Cool Arc® 55 is a rugged, reliable water cooler capable of cooling torches rated up to 500 amps. It is recommended for robotic and hand-held MIG, TIG and plasma cutting applications.
Order K3086-1

PRODUCT SPECIFICATIONS

Product Name	Product Number	Input Power Voltage/Phase/Hertz	Rated Output Current/Voltage/Duty Cycle	Input Current @ Rated Output	Wire Feed Speed Range ipm (m/min)	Wire Size Range inches (mm)	H x W x D inches (mm)	Net Weight lbs. (kg)
Power Wave® C300	K2675-2	3 Ph 50/60: 208/220-230/380-415/460/575 1 Ph 50/60: 208/220-230	300A/29V/40% 250A/27V/100%	3 Ph / 40% Duty Cycle: 30/28/16/14/11A 1 Ph / 40% Duty Cycle: 53/48/29A	50-700 (1.27-17.8)	Solid: .023-.045 (0.6-1.2) Cored: .035-.045 (0.9-1.2)	18.8 x 14 x 27.4 (478 x 356 x 697)	100 (47.6)
Power Wave® C300 Steel Ready-Pak® Pkg.	K2774-2						40.2 x 24 x 45.2 (1021 x 609 x 1148)	180 (81.6)
Power Wave® C300 Multi-Process Educational Ready-Pak® Pkg.	K2774-4							

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.

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THE WELDING EXPERTS®