

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 Multiprocess Educational Ready-Pak®

See back for complete specs

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)

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.
- ▶ **Production Monitoring™ 2** – Track equipment usage, store weld data and configure fault limits to aid in production analysis and process improvements.
- ▶ **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®

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)

INPUT



OUTPUT



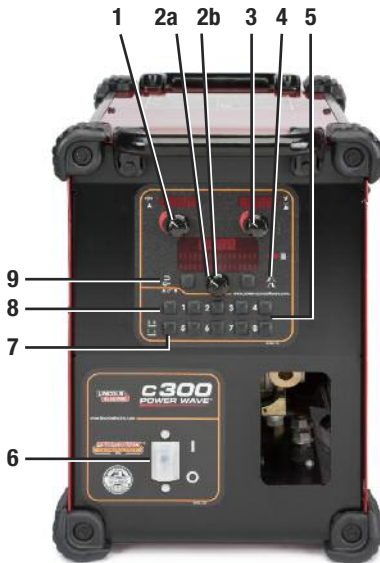
Two Year Extended Warranty Available in U.S.A. and Canada.



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**



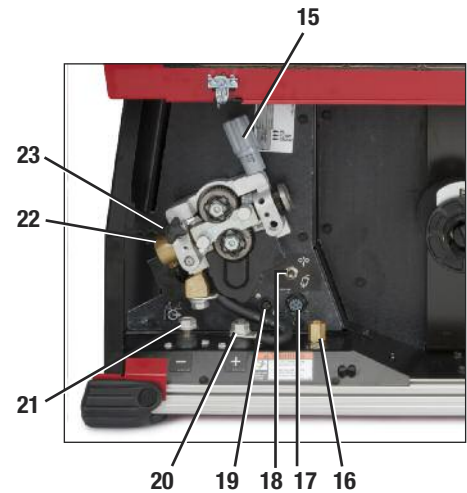
Reversible handles shown



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**

Multiprocess 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 Amprol™ with 12-Pin
- K2374-1 Stick Electrode Holder and Cable (includes Twist Mate™ connector)

Order **K2774-4**

DETAILS



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 to support Lincoln's Production Monitoring™ 2 and run with advanced diagnostics.



Production Monitoring™ 2

Production Monitoring™ 2, the welding industry's most advanced weld data collection and monitoring tool, allows fabricators to analyze their welding operations and processes. It will also aid in your company's ISO, Six Sigma, statistical process control (SPC), quality cost delivery (QCD), overall equipment effectiveness (OEE) and lean manufacturing efforts. Download from powerwavesoftware.com.

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 TO EXPAND MACHINE CAPABILITIES

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



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



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



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



TIG Torch Twist-Mate™ to Stud Adapter Cable, 2 ft. (3.7 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

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 TO EXPAND MACHINE CAPABILITIES, CON'T.

WIRE FEEDER OPTIONS



Aluminum Feeding Kit

Conversion kit for welding with 3/64 in. (1.2 mm) aluminum wire. Includes tension spring, drive rolls, contact tips (qty. 2), non-metallic wire guides and cable liner.

Order K1703-1



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. Feature 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)



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 MC05-183

Python®-Plus Air-Cooled Push-Pull Gun

The Python®-Plus push-pull gun features the same great performance and ergonomics as the standard Python® gun but features a Magnum® style back end for easy connection without an adapter. The ergonomic handle design, fingertip controls and foolproof set-up make the Python® the most advanced gooseneck gun on the market. The Python®-Plus gun with standard air-cooled barrel is rated 200A @100% duty cycle, 250A @ 50% duty cycle. Requires 7-pin to 12-pin Adapter (K2910-1).

Order K3038-1 for 15 ft. (4.5 m)

Order K3038-2 for 25 ft. (7.6 m)

Order K3038-3 for 50 ft. (15.2 m)

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	300A/29V/40% 250A/27V/100%	3 Ph / 40% Duty Cycle: 30/28/16/14/11A	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	1 Ph 50/60: 208/220-230		1 Ph / 40% Duty Cycle: 53/48/29A			40.2 x 24 x 45.2 (1021 x 609 x 1148)	180 (81.6)
Power Wave® C300 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

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