

Cool-Arc™ 40



The Cool-Arc™ 40 is a reliable and affordable water cooler for water-cooled MIG or TIG as well as plasma cutting applications. Available in both 115 and 230 volt models, the Cool-Arc 40 is compatible with all Lincoln water-cooled systems including Cobramatic®. The Cool-Arc 40 features a rugged industrial pump manufactured by Pro-Con®, the leading pump manufacturer for welding water coolers. This pump is an industry standard, making the Cool-Arc 40 easy to service and maintain. The Cool-Arc 40 operates smoothly and minimizes vibrations that would otherwise be transferred to the welding torch.

Processes

TIG MIG PAC (Plasma Arc Cutting)
PAW (Plasma Arc Welding)

Advantage Lincoln

- Industry standard Pro-Con® internal water pump is easy to service and maintain and is designed for continuous operation, delivering a steady flow and pressure.
- Powerful “muffin-style” tube axial fan provides efficient cooling, low noise, and smooth operation to minimize vibration in the welding torch.
- Plastic, non-corrosive, 2-gallon reservoir limits loaded Cool-Arc 40 weight to 60 lbs.
- Unit can be mounted and operated either horizontally or vertically for minimal footprint.
- Compatible with all Lincoln water-cooled systems including Cobramatic water-cooled push-pull torches.
- Color-coded inlet and outlet coolant connections are standard female CGA-style (5/8-18 left-hand thread).
- No special coolant required for indoor use - uses tap water.
- CE (Europe) and C-Tick (Australia) compliant (K2187-1 only).

Description

Input   Output 

Recommended General Options

Horizontal Mounting Bracket, Vertical Mounting Bracket, Quick Connect Water Adapter, Water Cooler Hoses (CGA to QD), Water Cooler Hoses (CGA to CGA), Magnum® Flow Sensor, Pro-Torch™ Water-Cooled TIG Torches, Water Cooler Coolant

Order

K1813-1 Cool-Arc™ 40 115/1/50/60
K2187-1 Cool-Arc™ 40 220-240/1/50/60

TECHNICAL SPECIFICATIONS

| Product Name | Product Number | Input Power | Pump Hydraulic Rating | | Reservoir gal. (ltr) | Input Current | Dimensions H x W x D inches (mm) | Net Weight lbs (kg) |
|--------------|----------------|-----------------|----------------------------|-------------------------------------|----------------------|---|----------------------------------|---|
| | | | Open Flow English (metric) | Typical | | | | |
| Cool-Arc™ 40 | K1813-1 | 115/1/50/60 | 60 PSIG (4.14 bar) | 53-57 PSIG (3.65-3.93 bar) | 2 (7.57) | 60 Hz: 3.2A 50 Hz: 4.0A @ 115 volts | 34 x 9 x 9 (863 x 229 x 229) | Empty: 45 (20.4) Full: 61.2 (27.7) |
| Cool-Arc™ 40 | K2187-1 | 220-240/1/50/60 | 1.66 gal/min (6.2 ltr/min) | .45-.60 gal/min (1.70-2.27 ltr/min) | | 60 Hz: 1.5A 50 Hz: 2.2A @ 230 volts | | |

Note: K1813-1 includes a male, three prong, NEMA Type 5-15P plug.
K2187-1 includes a two prong Continental European (Schuko) plug.

A CLOSER LOOK

COOLANT REQUIREMENTS

- **For Use Above Freezing:**
Clean tap, distilled or deionized water.
- **For Use Below Freezing:**
50% pure ethylene glycol mixture, 50% water.

- **Important Application Note:**
 - **The Cool-Arc 40 is designed for continuous operation and should never be installed in conjunction with a water solenoid.** Therefore, if using the Cool-Arc 40 in a previous Magnum 10 or 20 application, the water solenoid on the power source should not be used.
 - **Do not use oil based coolants.**
 - **Do not use automotive antifreeze with rust or leak inhibitors.**

RECOMMENDED OPTIONS

GENERAL OPTIONS

Horizontal Mounting Bracket

For mounting cooler horizontally on top of the power source. For use with CV-305, CV-400, CV-655, DC-400, DC-600, DC-655.
Order K559-2

Vertical Mounting Bracket

For mounting cooler vertically in the cylinder rack. For use with CV-305 with K874 undercarriage, and Power Wave 455 with K1570-1 undercarriage.
Order K559-3

Magnum® Flow Sensor

Protects valuable torches, guns and robotic welding systems from damage when loss of coolant flow has occurred for any reason, such as a blocked or kinked water line or ruptured hose.
Order K1536-1

Quick Connect Water Adapter

Converts a male 5/8"-18 left hand hose fitting (CGA style) to a female quick connect fitting. The female quick connect mates with the male quick connect on water-cooled MIG guns or hoses.
Order KP1529-1

Water Cooler Hoses (CGA to QD)

For use with wire feeders having female disconnect fittings. Kit contains two 25 ft. hoses with 5/8" left hand CGA fittings on cooler side and male quick disconnect fittings on the feeder end.
Order K1859-1

Water Cooler Hoses (CGA to CGA)

For 5/8" LH CGA fitting applications at both cooler and wire feeder. Kit contains two 25 ft. hoses with 5/8" left hand CGA fittings on both ends of hose.
Order K1859-2

Magnum 450WC Water-Cooled MIG and Gas-Shielded Flux-Cored Gun & Cable Assembly

Extend the life of your gas diffusers, nozzles and contact tips. Rated up to 450 amps, 100% duty cycle when used with 100% CO₂. Requires K489-x Adapter Kit depending on wire feeder brand and model.
Order K684-x.
Request Publication E12.70

Python Water-Cooled Push-Pull MIG Gun & Cable Assembly

Interchangeable barrels and cups allow you to optimize the capabilities, cost and weight of your Python push-pull torch for each application. Rated up to 400 amps, 100% duty cycle with optional water-cooled barrel (KP2224-1) and Cup (KP2225-1).
Order K2212-x.
Request Publication E12.13

Pro-Torch™ Water-Cooled TIG Torches

Lightweight with ergonomically designed handles and superflex cables. Rugged and reliable for high performance welding applications.
Request Publication E12.150



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 advice or information about their use of our products. We respond to our customers based on the best information in our possession at that time. Lincoln Electric is not in a position to warrant or guarantee such advice, and assumes no liability, with respect to such information or advice. We expressly disclaim any warranty of any kind, including any warranty of fitness for any customer's particular purpose, with respect to such information or advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such information or advice once it has been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

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.