

Idealarc[®] DC-400

The Idealarc[®] DC-400 by Lincoln Electric[®] is universally considered to have the best welding arc characteristics in the market. Tried and true, it remains one of our premium multi-process welders. With a SCR controlled DC power source this machine provides both constant voltage and constant current output. It operates in three modes: CV Wire/Innershield[®], CV Submerged Arc and CC Stick/TIG and is a great choice for arc gouging. Flexibility doesn't mean complicated – the DC-400 is easy to set-up and use. Changeover between processes is as simple as turning a switch with the factory or field-fitted multi-process switch.

Applications

Field construction, shipbuilding, cross country pipelines, offshore oil platforms, heavy engineering, mining maintenance and general fabrication.

Arc Force Control

The Idealarc[®] DC-400 is especially suited for critical welding applications and with built-in arc force control it also adds to the operator appeal of these units. By simply adjusting the Arc Force Control, you can either create a soft welding arc for critical applications or a forceful crisp arc for cellulose, low hydrogen and carbon arc gouging.

Built to Last

With all weather protection, the Idealarc[®] DC400 features a totally enclosed control circuit compartment, designed to IP-23 requirements. Submerged dipping of all transformer base assemblies in a special epoxy-based sealing/insulating enamel provides added protection against moisture or corrosive conditions such as salt air.

Advantage Lincoln

- Large, conveniently located switch makes it easy to change between CC (Stick/TIG/arc gouging), CV (MIG/flux-cored) and CV (Submerged Arc) modes.
- Arc force control adjusts short circuit current for a soft arc or a forceful driving arc in the CC (Stick/TIG) mode. J5.20 12/04
- Arc control adjustment changes pinch effect of the arc to control spatter, fluidity and bead shape in the MIG/Flux-cored mode.
- Capable of stick and DC TIG welding as well as air carbon arc gouging with up to 8mm diameter carbon rods.
- Solid state circuitry provides extra long life for repetitive welding applications.
- Outstanding welding performance with a single range full output control potentiometer.
- Factory-fitted analog amp/voltmeters.
- ± 10% input line voltage compensation for maintaining weld consistency.
- Low profile case allows stacking machines up to three high to conserve floor space. (Stacking not recommended when using undercarriage)
- Fan-cooled for long life expectancy. Electronic and thermostatic protection safeguards the DC-400 from current overload and excessive temperatures.
- Windings and rectifiers are protected against moisture and corrosive environments.
- 14 pin MS-style cable connection for remote control and wire feeder connections.
- Circuit breaker protected onboard power for a wirefeeder: 42V and 115V available from the 14-pin connector receptacle.
- 115V AC power on/off switch with pilot light provides added user safety.
- Three year warranty on parts and labour.
- Manufactured under a quality system certified.



Shown with multi-process switch (optional)

TECHNICAL SPECIFICATIONS

Part Number	Input Voltage	Rated Output Current/Voltage/Duty Cycle	Rated Output AS1966.1	Output Range	Dimensions H x W x D mm	Net Weight kg
KA1369-1 KA1369-3	220/380/440/3/50/60 415/3/50/60	500A/40V/50% 450A/38V/60% 400A/36V/100%	73/42/37A 39A	60-500A	698 x 566 x 840	215

Recommended Options



Multi-Process Switch

3-position switch allows quick and easy change from electrode positive or negative semiautomatic/automatic welding to stick or air carbon arc gouging.
Order K804-1



Water Valve

For use with TIG Module. Shuts off water flow when the arc is extinguished when using Magnum water-cooled TIG torches.
Order K844-1



Foot Amptrol

Varies current for making critical TIG welds. Depress pedal to increase current. Depressing pedal fully achieves maximum set current. Fully raising the pedal finishes the weld and starts the afterflow cycle. Includes 7.6m control cable.
Order K870



TIG Module

Supplies high frequency for superior starting, contactor control, remote control capability and a gas valve for TIG welding.
Order K930-2



Hand Amptrol

Varies current for making critical TIG welds. Fastens to the torch for convenient thumb control. Comes with a 7.6m cable. Fully extend the slide forward to achieve maximum current. Returning to the start position finishes the weld and starts the afterflow cycle.

Order K963-1 (for smaller handle 9, 17 or 20 series torches).

Order K963-2 (for larger handle 26 or 18 series torches)

Undercarriage

Platform undercarriage with mountings for two gas cylinders at rear of welder.
Order KA1236

LN-25 Wire Feeder

Portable CC/CV unit for flux-cored and MIG welding. Includes Gas Solenoid and internal Contactor.
Order K449



LN-9 Wire Feeder

A semi-automatic wire feeder designed for heavy duty applications for FCAW, GMAW and submerged arc welding.



Shown with optional wire reel stand



Remote Output Control

Consists of a control box with choice of two cable lengths. Permits remote adjustment of output. 6 pin connection.

Order

K857-8.5-6

8.5 lead & 6 pin plug

K857-20-6

20m lead & 6 pin lead

K857-20-14

20m lead & 14 pin plug

K857-30-14

30m lead & 14 pin plug

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.

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