

Idealarc® DC-600

Processes

Stick, TIG, MIG, Flux-Cored,
Submerged Arc, Gouging

Product Number

K1288-17 230/460V w/meters
K1288-18 230/460V w/meters and MPS
K1288-22 230/460/575V w/meters
K1288-28 230/460/575V w/VRD™
K1365-23 220/380/440V w/meters
K1365-24 380/500V w/meters
K1365-28 380-415V w/VRD™

See back for complete specs

Input Power (Voltage/Phase/Hertz)

K1288-17: 230/460V/3/60
K1288-18: 230/460V/3/60
K1288-22: 230/460/575V/3/60
K1288-28: 230/460/575V/3/60
K1365-23: 220/380/440V/3/50/60
K1365-24: 380/500V/3/50/60
K1365-28: 380-415V/3/50/60

Input Current at Rated Output (100% Duty Cycle)

220V: 116A	440V: 58A
230V: 108A	460V: 54A
380V: 67A	500V: 51A
400V: 64A	575V: 43A
415V: 62A	

Rated Output

600A/44V/100%
680A/44V/60%

Output Range

CV: 70A/13V - 780A/44V
CC: 90A/24V - 780A/44V

Weight/Dimensions (H x W x D)

522 lbs. (237 kg)
30.75 x 22.25 x 39.0 in.
(781 x 567 x 988 mm)

Industrial DC Multi-Process Welders

Rugged construction, simple controls and a 100% duty cycle output rating make these machines a sound investment for heavy duty shop applications. Add the outstanding traditional SCR rectifier arc action delivering high quality, attractive welds and your operators will agree – it's hard to go wrong with an Idealarc® 600.

FEATURES

- ▶ **Full range output voltage control** for easy operation and precise control.
- ▶ **Standard analog ammeter and voltmeter.**
- ▶ **VRD™ (Voltage Reduction Device™)** reduces OCV (open circuit voltage) when not welding for added safety (select models).
- ▶ **Mode switch** for selecting desired output characteristics.
- ▶ **115V, 15 amps, duplex auxiliary power receptacle** – (60 Hz models) makes it easy to power lights, grinders and other shop tools at your work station.
- ▶ **Flat-top case** with a small footprint can be placed under a workbench or stacked up to 3 high on top of each other.
- ▶ **Windings and rectifiers** are protected against moisture and corrosive environments.
- ▶ **Seven-year warranty** on power rectifier.

APPLICATIONS

- ▶ Metal Fabrication
- ▶ Maintenance and Repair
- ▶ Autobody/Farm
- ▶ Light Industrial



Shown: K1288-17

WHAT IS VRD™?

The VRD™ (Voltage Reduction Device™) provides an additional measure of safety, especially when working in an environment with a higher risk of electrical shock such as wet areas and hot, humid, sweaty conditions. The VRD™ reduces the OCV (open circuit voltage) at the welding output terminals while not welding to less than 30 volts DC. Indicator lights will also signal when OCV during welding is above or below 30 volts DC.

Use of VRD™ does not degrade the DC-600 machine rating or the ability to drive current through cables up to 200 ft. (61 m). No new welding techniques are required. The internal system does not require separate modules to operate (available on select models).

INPUT



OUTPUT



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



KEY CONTROLS

1. Local/Remote Switch
2. Output Control
3. Welding Mode Switch
4. Circuit Breakers
5. Weld Terminals On or Remotely Controlled
6. On/Off Switch
7. Power Source Pilot Light
8. Ammeter/Voltmeter
9. VRD™ (select models)



RECOMMENDED ACCESSORIES TO EXPAND MACHINE CAPABILITIES

GENERAL OPTIONS



Multi-Process Switch

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

Order K804-1



Undercarriage

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

Order K842



All-Terrain Undercarriage

For moving by hand at construction sites. Maneuvers over obstacles. Heavy-duty puncture-resistant tires.

Order K1737-1



Paralleling Kit

Permits paralleling of two power sources. (Cannot be used with VRD™ models)

Order K1611-1 for Idealarc®

DC-600 above code 10500

Order K1897-1 for Idealarc®

DC-600 below code 10500



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 E13.40



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, cover plate, work clamp and electrode holder. 400 amp capacity.

Order K704



Remote Output Control

Provides 25 ft. or 100 ft. (7.6 m or 30 m) of remote output control (6-pin plug connection). Requires K864 Control Cable Adapter.

Order K857 25 ft. (7.6 m)

Order K857-1 100 ft. (30 m)



Remote Control Adapter

Y connection adapter for connecting K857 Remote Output Control (6-pin plug connection) and wire feeder input cable (14-pin plug connection) to DC-600 14-pin receptacle.

Order K864



TIG OPTIONS

TIG Module

Supplies high frequency for superior starting, contactor control, remote control capability and a gas valve for TIG welding. (Cannot be used with VRD™ models).

Order K930-2



Control Cable

Connects TIG Module to power source.

Order K936-1 for 9-pin to 14-pin



Adapter Cable

Male 14-pin control cable to terminal strip of power source.

Order K1798



Control Cable Extension

Allows the TIG Module to be operated at distances up to 200 ft. (61 m) from the power source. Available in 45 ft. (13.7 m) sections.

Order K937-45



Docking Kit

Allows you to "dock" the TIG Module on top of a flat-roofed power source, or any other flat surface measuring at least 10 x 15 in. (254 x 381 mm). Includes a latch and provisions for a user-supplied padlock to lock the TIG Module in place.

Order K939-1



Foot Amptrol™

Provides 25 ft. (7.6 m) of remote output control for TIG welding. (6-pin plug connection).

Order K870



Amptrol™ Adapter Kit

Adapts Amptrol's 6-pin MS-type plug connection to terminal strip on power source.

Order K843



Deluxe Adjustable Gas Regulator & 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

PRODUCT SPECIFICATIONS

Product Name	Product Number	Input Power	Rated Output Current/Voltage/Duty Cycle	Input Current @ Rated Output 100%	Output Range	H x W x D inches (mm)	Net Weight lbs. (kg)
Idealarc® DC-600 w/Meters	K1288-17	230/460/3/60	600A/44V/100% 680A/44V/60%	108/54A	CV: 70A/13V - 780A/44V	30.75 x 22.25 x 39.0 (781 x 567 x 988)	522 (237)
Idealarc® DC-600 w/Meters and Multi-Process Switch	K1288-18						
Idealarc® DC-600 w/Meters	K1288-22	230/460/575/3/60		108/54/43A	CC: 90A/24V - 780A/44V		
Idealarc® DC-600 VRD™	K1288-28						
Idealarc® DC-600 w/Meters	K1365-23	220/380/440/3/50/60		116/67/58A			
Idealarc® DC-600 w/ Meters	K1365-24						
Idealarc® DC-600 VRD™	K1365-28	380-415/3/50/60		67/51A 67-62A			

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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ELECTRIC
THE WELDING EXPERTS®