

# Idealarc® DC600

## Processes

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

## Product Number

K1288-17 230/460V  
K1288-18 230/460V with Multi-Process Switch  
K1288-22 230/460/575V  
K1288-28 230/460/575V with VRD™  
K1365-23 220/380/440V  
K1365-24 380/500V  
K1365-28 380-415V with 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® DC600.

## 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 2 volts DC. Indicator lights will also signal when output voltage during welding is above or below 30 volts DC.

Use of VRD™ does not degrade the DC600 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  
the 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

### 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® DC600 above code 10500  
**Order K1897-1** for Idealarc® DC600 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) 2/0 work cable with lugs, headshield, filter plate, cover plate, work clamp and electrode holder. 400 amp capacity.  
**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 DC600 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 Amptril™

Provides 25 ft. (7.6 m) of remote output control for TIG welding. (6-pin plug connection).  
**Order K870**



#### Amptril™ Adapter Kit

Adapts Amptril's 6-pin MS-type plug connection to terminal strip on power source.  
**Order K843**



#### Deluxe Adjustable Gas Regulator & Hose Kit

Accommodates CO<sub>2</sub>, 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® DC600	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® DC600 with Multi-Process Switch	K1288-18						
Idealarc® DC600	K1288-22	230/460/575/3/60		108/54/43A	CC: 90A/24V - 780A/44V		
Idealarc® DC600 with VRD™	K1288-28						
Idealarc® DC600	K1365-23	220/380/440/3/50/60		116/67/58A			
Idealarc® DC600	K1365-24						
Idealarc® DC600 with VRD™	K1365-28	380-415/3/50/60		67-62A			

For best welding results with Lincoln Electric equipment, always use Lincoln Electric consumables. Visit [www.lincolnelectric.com](http://www.lincolnelectric.com) for more details.

## CUSTOMER ASSISTANCE POLICY

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**ELECTRIC**  
THE WELDING EXPERTS®