# Idealarc<sup>®</sup> DC-600

# **Rugged Multi-Process Power for Industrial Manufacturing**

If your operations include semiautomatic manufacturing or fabrication, your best welding power source selection may be the Lincoln Idealarc® DC-600. Rugged construction, simple controls and plenty of amperage for heavy duty applications on thick steel or other materials make this welder a sound investment. 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® DC-600.

# **Processes**

Stick TIG MIG Flux-Cored Submerged Arc Gouging

# Advantage Lincoln

- 115V, 15 amps, duplex auxiliary power receptacle (60Hz models) makes it easy to power lights, grinders and other shop tools at your work station.
- Full range output voltage control for easy operation and precise control.
- Standard analog ammeter and voltmeter.
- Mode switch for selecting desired output characteristics.
- Windings and rectifiers protected against moisture and corrosive environments.
- Flat-top case with a small footprint can be placed under a workbench or stacked up to 3 high on top of each other.
- Manufactured under a quality system certified to ISO 9001 requirements and ISO 14001 environmental standards.
- Three-year warranty on parts and labor.
- Seven-year warranty on the power rectifier.

# Description





# **Recommended General Options**

Multi-Process Switch, Undercarriage, Paralleling Kit

# **Recommended Stick Options**

Accessory Kit, Remote Output Control, Remote Control Cable Adapter

# **Recommended TIG Options**

Pro-Torch<sup>™</sup> TIG Torches, TIG Module, Control Cable, Control Cable Extension, Docking Kit, Hand Amptrol, Foot Amptrol, Amptrol Adapter Kit, Water Valve Kit, Deluxe Adjustable Gas Regulator and Hose Kit

# **Recommended Wire Feeder Options**

LF-72, LF-74, LN-742, LN-8, LN-9, LN-9 GMA, LN-10, DH-10, LN-15, LN-23P, LN-25, LN-35, Cobramatic®, NA-3, NA-5, LT-7

# Order

K1288-17	Idealarc DC-600	230/460/3/60
K1288-18	Idealarc DC-600	230/460/3/60
	w/multi-process switch	
K1288-22	Idealarc DC-600	230/460/575/3/60

# TECHNICAL SPECIFICATIONS

Product Name	Product Number	Input Power	Rated Output Current/Voltage/ Duty Cycle	Input Current @ Rated Output	Output Range	Dimensions H x W x D in. (mm)	Net Weight Ibs (kg)
	K1288-17	230/460/3/60		108/54A	CV:		
Idealarc® DC-600	K1288-18	200/400/3/00	600A/44V/100%		70-850A, 13-44V	30.7 x 22.2 x 38.0	522
	K1288-22	230/460/575/3/60	680A/44V/60%	680A/44V/60%	108/54/43.2A	CC:	(781 x 565 x 965)
					90-850A, 24-42V		



Publication E5.40 5/05

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# FEATURES

# PERFORMANCE

- The Idealarc® DC-600 is a multiprocess DC arc welding power source that produces outstanding arc characteristics on both constant voltage and constant current processes. This provides great welding versatility in a single power source.
- The Idealarc DC-600 is designed for GMAW (MIG), FCAW, and submerged arc welding processes within the capacity of the machine, plus the capability of stick, and air carbon arc gouging up to 3/8" (10mm) diameter. It produces outstanding performance with a single range continuous control potentiometer.



# FEATURES

- 3-position field or factory installed Multi-Process Switch option allows quick change from electrode positive or negative semiautomatic/automatic wire feed welding to stick, TIG or air carbon arc gouging.
- Air carbon arc gouge with up to 3/8" (10mm) diameter carbons.

# **Key Controls**

- 1. Ammeter/Voltmeter
- 2. Local/Remote Output Control
- 3. Output Control Potentiometer
- 4. Mode Selection Switch
- 5. Weld Terminals On or Remotely Controlled
- 6. On/Off Switch
- 7. Power Source Pilot Light
- 8. Strain Relief for Terminal Strip Connection
- 9. 14-Pin MS-Style Connector for Wire Feeder Connection
- 10. 115 VAC, 15A Covered Outlet



# **QUALITY AND RELIABILITY**

- Fan-cooled with electronic and thermostatic protection from current overload and excessive temperatures.
- Manufactured under a quality system certified to ISO 9001 requirements and ISO 14001 environmental standards.
- Three-year warranty on parts and labor.
- Seven-year warranty on the power rectifier.









# **GENERAL OPTIONS**

# Multi-Process Switch

3-position switch allows quick and easy change from electrode positive or negative semiautomatic/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

### Paralleling Kit

Permits paralleling of two power sources. Order K1611-1 (For Idealarc® DC-600 Above Code 10500) Order K1897-1 (For Idealarc DC-600 Below Code 10500)

# STICK OPTIONS

For stick welding. Includes 35 ft. (10.7m) 2/0 electrode cable with lug, 30 ft. (9.1m) 2/0 work cable with lugs, headshield, filter plate, work clamp and electrode holder. Order K704

# **Remote Output Control**

For remote output of welding voltage. Consists of control box with 25 or 100 ft. (7.6 or 30m) of four conductor cable and 6 pin MS-type connector. Order K857 for 25 ft. (7.6m) Order K857-1 for 100 ft. (30m)

# **Remote Control Cable Adapter** Y connection adapter for connecting K857 Remote Voltage

Control (6 pin plug connection) and wire feeder input cable (14 pin plug connection) to Idealarc DC-600 14 pin receptacle. Order K864

# **TIG OPTIONS**

# **Pro-Torch TIG Torches**

Light and easy to use, these torches feature flexible head models that give you the power of maximum versatility and maneuverability. A molded, knurled handle gives you a sure grip so you can focus on the weld. Available in either air-cooled or water-cooled designs. See publication E12.150



















# TIG OPTIONS, CONT.

### TIG Module

Portable, high frequency unit with gas valve for TIG welding. Rated at 300 amps/60% duty cycle. Order K930-2

# Control Cable

Connects TIG Module to power source. Order K936-1 for 9-pin to 14-pin

# **Control Cable Extension**

Allows the TIG Module to be operated at distances up to 200 ft. (61m) from the power source. Available in 45 ft. (13.7m) sections. Order K937-45

# **Docking Kit**

Provides a means 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 381mm). It includes a latch and provisions for a usersupplied padlock to lock the TIG Module in place. Order K939-1

# Hand Amptrol

Provides 25 ft. (7.6m) of remote current control for TIG welding. (6 pin plug connection). Velcro straps secure torch. Order K963-3

## Foot Amptrol

Provides 25 ft. (7.6m) 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

# Water Valve Kit

For use with water-cooled TIG torch. Installs inside of TIG Module. Order K844-1

# Deluxe Adjustable Gas Regulator and Hose Kit

Accommodates CO<sub>2</sub>, argon, or argon-based gas cylinders. Includes a cylinder pressure gauge, dual scale flow gauge and 4.3 ft. (1.3m) gas hose. Order K586-1











# **IDEALARC® DC-600 ORDER FORM**

PRODUCT DESCRIPTION	ORDER NUMBER	QUANTITY	PRICE
IDEALARC DC-600 (230/460/3/60)	K1288-17		
IDEALARC DC-600 W/MULTI-PROCESS SWITCH (230/460/3/60)	K1288-18		
IDEALARC DC-600 (230/460/575/3/60)	K1288-22		
RECOMMENDED GENERAL OPTIONS			
Multi-Process Switch	K804-1		
Undercarriage	K842		
Paralleling Kit (Above Code 10500)	K1611-1		
Paralleling Kit (Below Code 10500)	K1897-1		
RECOMMENDED STICK OPTIONS			
Accessory Kit	K704		
Remote Output Control, 25 ft.	K857		
Remote Output Control, 100 ft.	K857-1		
Remote Control Cable Adapter	K864		
RECOMMENDED TIG OPTIONS			
Pro-Torch™ TIG Torches	Request publication E12.150		
TIG Module	K930-2		
Control Cable	K936-1		
Control Cable Extension, 45 ft. (13.7m)	K937-45		
Docking Kit	K939-1		
Hand Amptrol®	K963-3		
Foot Amptrol	K870		
Amptrol Adapter Kit	K843		
Water Valve Kit	K844-1		
Deluxe Adjustable Gas Regulator and Hose Kit	K586-1		
RECOMMENDED WIRE FEEDER OPTIONS			
LF-72, LF-74	See Publication E8.12		
LN-742 Industrial Wire Feeder	See Publication E8.20		
LN-8 Industrial Wire Feeder	See Publication E8.30		
LN-9 & LN-9 GMA Industrial Wire Feeder	See Publication E8.50		
LN-10 Advanced 4 Drive Roll Wire Feeder	See Publication E8.200		
DH-10 Dual Head Version of LN-10	See Publication E8.200		
LN-15 Portable Wire Feeder	See Publication E8.60		
LN-23P Portable Wire Feeder	See Publication E8.90		
LN-25 Portable Wire Feeder	See Publication E8.100		
LN-35 Portable Wire Feeder	See Publication E8.110		
Cobramatic Deluxe Wire Feeder	See Publication E8.300		
NA-3 Automatic Wire Feeder	See Publication E9.10		
NA-5 Automatic Wire Feeder	See Publication E9.30		
LT-7 Automatic Wire Feeder	See Publication E9.70		
	TOTAL:		

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