

Idealarc® R3R-500-I & 600-I



400 and 500 Amp DC Stick Welding Power Sources

Look to the R3R family of power sources from Lincoln Electric for your heavy-duty stick welding needs. Whether you're using mild steel, low hydrogen, stainless steel or hardfacing electrodes, the Idealarc R3R-500-I and R3R-600-I produce a smooth, quality arc for consistent results day-in and day-out. The R3Rs provide peace of mind with their traditional, fan-cooled design for long life expectancy and low cost operation, calibrated current control knob for simple and easy procedure setting, and all weather protection including a powder paint finish for durability in even the roughest environments. The R3R-500-I and 600-I are also proven DC TIG welders – simply add optional TIG accessories and a cylinder of shielding gas.

Processes

Stick TIG Gouging

Advantage Lincoln

- The R3Rs produce a quality, low spatter, smooth arc without pop-outs. Line voltage fluctuations of up to $\pm 10\%$ are handled by the R3Rs input compensation function, which keeps the output constant.
- Calibrated current control knob makes procedure setting simple and easy. Polarity switch, voltmeter and ammeter are standard.
- Smooth arc makes it easy to weld with mild steel, low hydrogen, stainless steel and hardfacing electrodes.
- Stackable case design with built-in lift hook allows for easy storage and handling. Machines can be safely stacked three high (without an undercarriage) to conserve floor space.
- Submersion dipped transformer assembly for added corrosion and moisture protection.
- Totally enclosed fan motor is permanently lubricated.
- Designed to NEMA specifications.
- The R3R-500-I is capable of arc gouging using a carbon electrode with a maximum diameter of 5/16" (7.9mm). Use up to a 3/8" (9.5mm) diameter carbon with the R3R-600-I.
- Three year warranty on parts and labor.
- Manufactured under a quality system certified to ISO 9001 requirements.

Description

Output   Input  

Recommended General Options

Remote Output Control, Undercarriage

Recommended Stick Options

Accessory Kit (400 amp)

Recommended TIG Options

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

Order

K1380-2 R3R-500-I
K1381-2 R3R-600-I

TECHNICAL SPECIFICATIONS

Product Name	Product Number	Input Power	Rated Output Current/Voltage/Duty Cycle(1)	Input Current @ Rated Output	Output Range	Dimensions H x W x D in. (mm)	Net Weight lbs. (kg)
R3R-500-I	K1380-2	220/380/440/3/50/60	400A / 36V / 60%	74 / 47 / 37A	60-500A Max. OCV: 67V	31.0 ⁽²⁾ x 22.3 x 32 (787 x 566 x 813)	402 (183)
R3R-600-I	K1381-2	220/380/440/3/50/60	500A / 40V / 60%	88 / 56 / 44A	75-625A Max. OCV: 67V	31.0 ⁽²⁾ x 22.3 x 32 (787 x 566 x 813)	446 (203)

(1) NEMA Class I Rated Output / Based on a 10 minute period.

(2) Includes lift bail.

RECOMMENDED OPTIONS

GENERAL OPTIONS

Remote Output Control

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

Order:

K857 25 ft. (7.6m)

K857-1 100 ft. (30.5m)

Undercarriage

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

Order K841

STICK OPTIONS

Accessory Kit

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

Order K704

TIG OPTIONS

Pro-Torch™ TIG Torches

A full line of air-cooled and water-cooled torches available. See Literature E12.150.

Twist-Mate™ Cable Plug

For connecting welding cable to output terminal receptacles.

Order:

K852-70 For 1/0 - 2/0 (50 - 70 mm²) cable.

K852-95 For 2/0 - 3/0 (70 - 95 mm²) cable.

Twist-Mate Cable Receptacle

For connecting welding cable to Twist-Mate Cable Plug.

Order:

K1759-70 For 1/0 - 2/0 (50 - 70 mm²) cable.

K1759-95 For 2/0 - 3/0 (70 - 95 mm²) cable.

TIG Module

Supplies high frequency for superior starting, contactor control, remote control capability and a gas valve for DC TIG welding. Rated 300 amps/60% duty cycle.

Order K930-2

TIG OPTIONS CONT.

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 10x15 in. (254x381 mm). Includes a latch and provisions for a user-supplied 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)

Order K963-1 for PTA-9, PTA-17, PTW-20 TIG Torches.

Order K963-2 for PTA-26, PTW-18 TIG Torches.

Foot Amptrol™

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

Order K870

Contactor Kit

For use with the TIG Module.

Order K938-1

TIG OPTIONS CONT.

Water Valve Kit

For use with a water-cooled TIG torch. Controlled by the preflow and afterflow timers. Installs inside the TIG Module.

Order K844-1

TIG Control Cable

Connects the TIG Module to the R3R machine (9 to 6 pin plus 115V plug).

Order K936-3

TIG Control Cable Extension

Allows the TIG Module to be operated up to 45 ft. (13.7m) from power source. Connects between the 2 ft. (0.6m) TIG Control Cable and the TIG Module.

Order K937-45

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. (1.3m) gas hose.

Order K586-1

IDEALARC R3R-500-I AND R3R-600-I ORDER FORM

PRODUCT DESCRIPTION	ORDER NUMBER	QUANTITY	PRICE
IDEALARC R3R-500-I	K1380-2		
IDEALARC R3R-600-I	K1381-2		
RECOMMENDED GENERAL OPTIONS			
Remote Output Control, 25 ft.	K857		
Remote Output Control, 100 ft.	K857-1		
Undercarriage	K841		
RECOMMENDED STICK OPTIONS			
Accessory Kit (400 amp)	K704		
RECOMMENDED TIG OPTIONS			
Pro-Torch™ TIG Torches	See Literature E12.150		
Twist-Mate Cable Plug (for 1/0 - 2/0 (50 - 70 mm ²))	K852-70		
Twist-Mate Cable Plug (for 2/0 - 3/0 (70 - 95 mm ²))	K852-95		
Twist-Mate Cable Receptacle (for 1/0 - 2/0 (50 - 70 mm ²))	K1759-70		
Twist-Mate Cable Receptacle (for 2/0 - 3/0 (70 - 95 mm ²))	K1759-95		
TIG Module	K930-2		
Docking Kit	K939-1		
Hand Amptrol (for smaller handle 9, 17 or 20 series torches)	K963-1		
Hand Amptrol (for large handle 18 or 26 series torches)	K963-2		
Foot Amptrol	K870		
Contactor Kit	K938-1		
Water Valve Kit	K844-1		
TIG Control Cable	K936-3		
TIG Control Cable Extension	K937-45		
Deluxe Adjustable Gas Regulator & Hose Kit	K586-1		
	TOTAL:		