OPTIMARC® CV 500P

Best choice for pulse welding of stainless & carbon steel

The digitally controlled OPTIMARC® CV 500P provides constant voltage (CV) output for heavy duty welding applications and delivers superior welding performance and faster response to changes at the arc. It is an ideally suited for MIG/MAG and Flux Cored arc welding processes. Pulse welding of carbon and stainless steel could attain high-quality welding performance.

OPTIMARC® CV 500P could achieve high input power factor ratings for real savings on your electric bills and decrease your welding costs. The welding system including LWF® wire feeder could provide output control with optimum spot to meet the need of arc performance and welding quality from customers.

OPTIMARC® CV 500P is ideal power source for industrial manufacturing such as steel structure, engineering machinery, ship manufacturing, petrochemical.



Pulse MIG / MAG, MIG / MAG, FCAW-GS / SS

Description

Output





nput



Suitable Wire Feeders

LWF®-22, LWF®-24 Plus, LWF®-4GS

Required Accessories

Interconnection Cable Assembly (Includes control cable, welding cable and gas hose)

Work cable Assembly (with earth clamp)

MIG torch

Gas regulator/flow meter



Lincoln Advantage

- ★ Synergic function, preset current is matched with voltage automatically
- ★ Unique low power consumption design with 85% efficiency and 0.94 power factor
- ★ Adjustable arc control, welder can choose soft arc or hard arc based on each mode
- ★ Fast arc response, even output control, uniform appearance, superior arc performance and weld penetration control.
- ★ Digital Meters-accurate weld parameter readings-weld parameter readings retained till welding ends-auto fault diagnostic display
- ★ Both voltage and current are pre-settable
- ★ Precise control, comparing with conventional SCR power source, precise control over arc stability could help realize less spatters and better bead.
- ★ "Made To Last" PC Boards-"Trayed & Potted" PCB's filled with epoxy, double locked wiring harness Connectors, and environmentally protected connectors. Sensibly located to provide maximum protection from the environment
- ★ IP 23 Ratings-designed for harsh environment



TECHNICAL SPECIFICATIONS

Product name	Product No.	Input power	Rated output current / Duty cycle	Power input at rated output (KVA)		Dimensions H* W*D(mm)	Net Weight (KG)
OPTIMARC® CV 500P	K60129-1	380V~415V (±10%) 3/50 or 60 Hz	500A/39V/60% 390A/33.5V/100%	23@60%	16~39V 50~500A	540 x 340 x 800	47

Feature



Front Panel:

- 1. GAS SELECTION
- 2. WIRE DIAMETER SELECTION
- 3. WELDING MODE SELECTION
- 4. ON/OFF POWER SWITCH
- 5. THERMAL INDICATOR
- 6. 2-STEP AND 4-STEP SELECTION
- 7. DIGITAL INDICATION VOLTAGE METER
- 8. SYNERGIC
- 9. CRATER VOLTAGE
- 10. DIGITAL INDICATION CURRENT METER
- 11. CRATER CURRENT
- 12. ARC CONTROL
- 13. NEGATIVE OUTPUT STUD
- 14. POSITIVE OUTPUT STUD
- 15. 6-PIN LWF WIRE FEEDER CONNECTOR
- 16. STATUS INDICATOR



Rear Panel

- 17. INPUT CABLE HOLDING BRACKET
- 18. INPUT BOX
- 19. GROUND LEAD CONNECTION
- 20. AUX. VOLTAGE RECEPTACLE
- 21. FUSE AND FUSE HOLDER
- 22. FUSE AND FUSE HOLDER



Feature

No. Position		Function		
1	ON	Pre-flow		
2	ON	Long cable welding mode		
3 ON		Crater repeat mode		
4	ON	Test mode		
5	ON	Synergic		
6 ON		Fast run-in		
7 ON		24V feeder application		
8 ON		Feeder speed calibration		



NOTE: DIP switch default setting shown as above

DIP switch located on the internal PCB allow you to program the machine to perform as you want

Recommended Package

Air Cooled Recommended Package					
- K60129-1 OPTIMARC® CV 500P Power source					
- K60086-2	LWF-24 Plus Wire feeder				
- K60110-3	LG501 MIG Gun, Asia adapter, 3M				
- K60027-70-3M	Ground cable with earth clamp, 70mm x 3M				
- K60010-70-5M	Interconnection cable(air cooled), 70mm x 5M				
- K60012-4-220	CO2 Gas regulator(heating) - 220V				
- 7FKP61240-12	Drive roll Kits, solid wire 1.0/1.2mm				

Water Cooled Recommended Package					
- K60129-1	OPTIMARC® CV 500P Power source				
- K60120-1	LWF-4GS Wire feeder				
- K60163-3E	SN 510 Water cooled MIG Gun, Euro adapter, 3M				
- K60027-70-3M	Ground cable with earth clamp, 70mm x 3M				
- K69047-70-5M	Interconnection cable(water cooled), 70mm x 5M				
- K60012-4-220	CO₂ Gas regulator(heating) - 220V				
- 7FKP61240-12	Drive roll Kits, solid wire 1.0/1.2mm				
- K60115-1	Welding Trolley				
- K60116-1	Water Cooler				
- 7FL15710-1	Wire feeder swivel				

LWF® Wire Feeder

	Order No.	Specificaiton			
LWF® Wire Feeder	K60084-2	LWF®-22	Two feed rolls, insulated hub Asia Connector		
	K60086-2	LWF®-24 Plus Four feed rolls, insulated hub Asia Connector			
	K60120-1	LWF®-4GS	Four feed rolls, insulated hub Euro Connector		
Euro gun adaptor	KP61108-2		Connection with Euro plug and Asia feeder		





Euro gun adaptor



INTERCONNECTION CABLES (includes welding cable, control cable and gas hose/water hose)

Product No.	Description	Product No.	Description	Product No.	Description
K60010-50-2M K60010-50-5M K60010-50-10M K60010-50-15M K60010-50-20M K60010-50-30M K60010-50-40M	Air cooled,2M,50mm ² Air cooled,5M,50mm ² Air cooled,10M,50mm ² Air cooled,15M,50mm ² Air cooled,20M,50mm ² Air cooled,30M,50mm ² Air cooled,40M,50mm ²	K60010-70-2M K60010-70-5M K60010-70-10M K60010-70-15M K60010-70-20M K60010-70-30M K60010-70-40M	Air cooled,2M,70mm ² Air cooled,5M,70mm ² Air cooled,10M, 70mm ² Air cooled,15M, 70mm ² Air cooled,20M, 70mm ² Air cooled,30M, 70mm ² Air cooled,40M, 70mm ²	K69047-70-2M K69047-70-5M K69047-70-10M K69047-70-15M K69047-70-20M K69047-70-30M K69047-70-40M	Water cooled,2M,70mm ² Water cooled,5M,70mm ² Water cooled,10M, 70mm ² Water cooled,15M, 70mm ² Water cooled,20M, 70mm ² Water cooled,30M, 70mm ² Water cooled,40M, 70mm ²
KP61156	Control Cable Socket	K00010-70-40M	All cooled,40M, 70HHH	K09U47-7U-4UW	water cooled,40M, 70MM



MIG WELDING TORCH

	Product No.		Adaptor		
	K60111-3	350A @ 65%,CO2	350A @ 55%,Ar+CO2	3m	Asia
	K60111-4	350A @ 65%,CO2	350A @ 55%,Ar+CO2	4m	Asia
LG351C air cooled	K60111-45	350A @ 65%,CO2	350A @ 55%,Ar+CO2	4.5m	Asia
MIG Welding Torch	K60111-5	350A @ 65%,CO2	350A @ 55%,Ar+CO2	5m	Asia
	K60111-3E	500A @ 60%,CO2	500A @ 50%,Ar+CO2	3m	Euro
	K60110-4E	500A @ 60%,CO2	500A @ 50%,Ar+CO2	4m	Euro
	K60110-45E	500A @ 60%,CO2	500A @ 50%,Ar+CO2	4.5m	Euro
	K60110-5E	500A @ 60%,CO2	500A @ 50%,Ar+CO2	5m	Euro
LG360G air cooled MIG Welding Torch	K10413-36-4M	335A @ 60%,CO2	335A @ 50%,Ar+CO2	4m	Euro
	K60110-3	500A @ 60%,CO2	500A @ 50%,Ar+CO2	3m	Asia
	K60110-4	500A @ 60%,CO2	500A @ 50%,Ar+CO2	4m	Asia
LG501C air cooled	K60110-45	500A @ 60%,CO2	500A @ 50%,Ar+CO2	4.5m	Asia
MIG Welding Torch	K60110-5	500A @ 60%,CO2	500A @ 50%,Ar+CO2	5m	Asia
	K60110-3E	500A @ 60%,CO2	500A @ 50%,Ar+CO2	3m	Euro
	K60110-4E	500A @ 60%,CO2	500A @ 50%,Ar+CO2	4m	Euro
	K60110-45E	500A @ 60%,CO2	500A @ 50%,Ar+CO2	4.5m	Euro
	K60110-5E	500A @ 60%,CO2	500A @ 50%,Ar+CO2	5m	Euro
SN 510 Water cooled	K60163-3E	500A @ 100%,CO2	450A @ 100%,Ar+CO2	3m	Euro
MIG Welding Torch	K60163-4E	500A @ 100%,CO2	450A @ 100%,Ar+CO2	4m	Euro
	K60163-5E	500A @ 100%,CO2	450A @ 100%,Ar+CO2	5m	Euro







LG air cooled MIG Welding Torch



SN 510 Water cooled MIG Welding Torch



OPTIONAL ACCESSORIES



Work cable with Clamp Used to connect work piece Order No.: K60027-50-4M Work cable with clamp, 50mm², 4M K60027-70-4M Work cable with clamp, 70mm², 4M



CO₂, Gas Regulator/Flow Meter (Inlet G5/8"-14,Outlet M16X1.5/∅8) Includes CO₂ flow meter and CO₂ heater Order No.: K60012-4-220



Argon regulator/Gas flowmeter (Inlet G5/8"-14,Outlet M16X1.5/⊘8) Includes cylinder pressure gauge, argon flow meter Order no: K60012-5



Water Cooler & Cart Water Cooler (Coming soon) Order Number: K60116-1



Tools Box

Order Number: K60117-1



Cart

Order Number: K60115-1

Swivel

Order Number: 7FL15710-1

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 customers 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 not 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. Please refer to www.lincolnelectric.com.cn for any updated information.



No. 195, Lane 5008, Hu Tai Road, Shanghai, China 201907 Tel: +86 21 6673 4530 Fax: +86 21 6602 6621

www.lincolnelectric.com.cn

OPTIMARC® CV 500P 2018/10

Α	utn	oriz	eaı	DI!	stri	bι	ITO	r: