

OPTIMARC[®] Welding power source

The OPTIMARC[®] platform is designed from LE global inverter Technology of MIG/MAG, features welding waveforms to provide high quality welding application, it stays reliable and offers more stable arc by fast speed control, provide professional welding experience!

Built with more safety margin for the key electrical components. Design focus on industrial environment, where a robust/heavy duty is more expected.

LE style design, is built to work with LE accessories.

It's ideal for using---Steel Structure, Heavy Fab, Ship building, and petrochemical industry



Description

output    input  

Application

Heavy industrial environments such as steel structures, engineering machinery, shipbuilding, and petrochemical industries

Processes

CV-MIG/MAG, CV-FCAW, CV-pulse

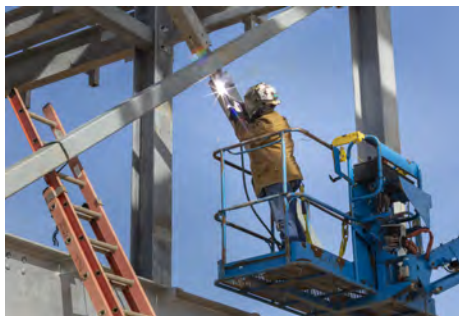
Features

- ★ Digital communication Technology, waveform welding mode developed, optimized arc performance to deliver better beadshape, less spatter.
- ★ Synergic preset voltage based on Current/WFS speed used, also allow to fine tune offset from nominal voltage by operator to meet customized arc length.
- ★ Arc force adjustable to control the arc with minimized spatter and desired penetration
- ★ Inverter based, 94% power fact, 88% efficiency
- ★ Welding current and voltage preset
- ★ Digi-display for Amperage and voltage, with seconds holding when welding arc ended.
- ★ Err Code display available
- ★ Dip Switch on Control PCB expends more features
- ★ Double-protection of PCB
- ★ IP23 & fan-as needed for harsh industrial environment using

Application



Construction Machinery



Steel Structure

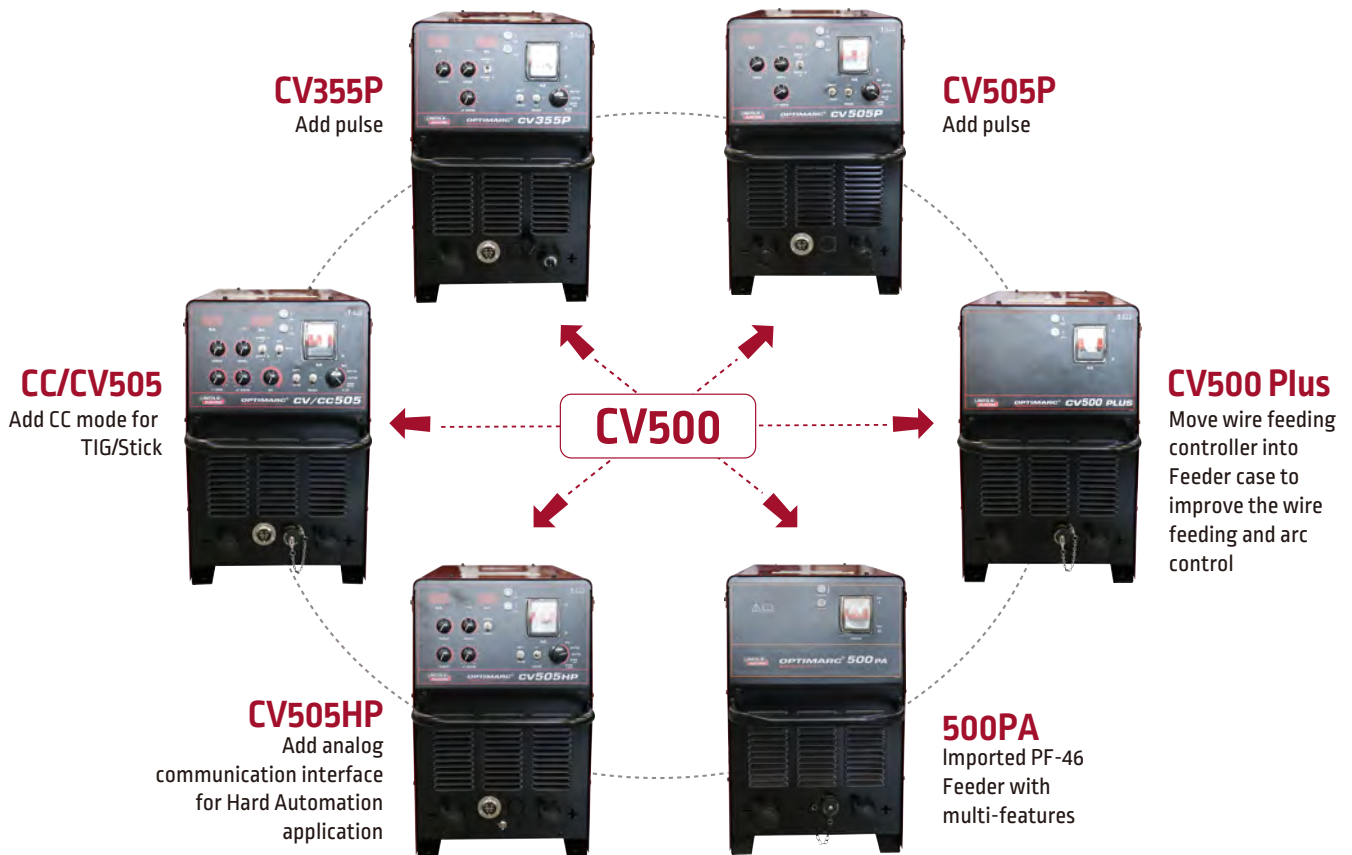


Marine Engineering

Technical Specification

Features	OPTIMARC® CV355P	OPTIMARC® CV505P	OPTIMARC® CV505HP	OPTIMARC® CV/CC505	OPTIMARC® CV500 PLUS	OPTIMARC® 500PA
Product Number	K60171-1	K60139-1	K60172-1	K60169-1	K60168-1	K60131-1
Type	MIG CV pulse machine	MIG CV pulse machine	MIG CV machine	Multi-processes machine	Multi-processes machine	Multi-processes machine
Input Voltage	380 [-10%~+20%]	380 [-10%~+20%]	380 [-10%~+20%]	380 [-10%~+20%]	380 [-10%~+20%]	380 [-10%~+20%]
Input cord [option]	M20748-4	M20748-4	M20748-4	M20748-4	M20748-4	M20748-4
Code compliance	IEC60974-1 GB/T15579.1	IEC60974-1 GB/T15579.1	IEC60974-1 GB/T15579.1	IEC60974-1 GB/T15579.1	IEC60974-1 GB/T15579.1	IEC60974-1 GB/T15579.1
Input Capacity	14.5KVA	23.4KVA	23.4KVA	23.4KVA	23.4KVA	23.4KVA
Input power	11.3KW	22KW	22KW	22KW	22KW	22KW
Power factor	0.9	0.94	0.94	0.94	0.94	0.94
Efficiency	87%	87%	87%	87%	87%	87%
Duty Cycle	100%@350A/31.5V	100% 500A 39V	100% 500A 39V	100% 500A 39V	100% 500A 39V	100% 500A 39V
OCV	60V	60V	60V	60V	60V	60V
Min. current [CV]	50A	50A	50A	50A	50A	50A
Min. current [Stick]	---	---	---	15A	15A	15A
Min. current [TIG]	---	---	---	5A	5A	5A
Max. current	23A@380V 21A@415V	39A@380V 35.5A@415V	39A@380V 35.5A@415V	39A@380V 35.5A@415V	39A@380V 35.5A@415V	39A@380V 35.5A@415V
Size (LxWxH)	800X340X540	800X340X540	800X340X540	800X340X540	800X340X540	800X340X540
Weight	47KG	47KG	47KG	47KG	47KG	47KG
Operate Temp.	-10°C~+40°C	-10°C~+40°C	-10°C~+40°C	-10°C~+40°C	-10°C~+40°C	-10°C~+40°C
Storage Temp.	-25°C~+55°C	-25°C~+55°C	-25°C~+55°C	-25°C~+55°C	-25°C~+55°C	-25°C~+55°C
Certificate	CCC	CCC	CCC	CCC	CCC	CCC
IP rating	IP23	IP23	IP23	IP23	IP23	IP23
Cooling	Fan as needed	Fan as needed	Fan as needed	Fan as needed	Fan as needed	Fan as needed
Insulation class	H-main transformer & inductance, B-Aux. transformer	H-main transformer & inductance, B-Aux. transformer	H-main transformer & inductance, B-Aux. transformer	H-main transformer & inductance, B-Aux. transformer	H-main transformer & inductance, B-Aux. transformer	H-main transformer & inductance, B-Aux. transformer

Features



Features

Features	OPTIMARC® CV355P	OPTIMARC® CV505P	OPTIMARC® CV505HP	OPTIMARC® CV/CC505	OPTIMARC® CV500 PLUS	OPTIMARC® 500PA
Type	MIG CV pulse machine	MIG CV pulse machine	MIG CV machine	Multi-processes machine	Multi-processes machine	Multi-processes machine
Process						
MIG/MAG Carbon	0.8, 1.0, 1.2	1.0, 1.2, 1.6	1.0, 1.2, 1.6	1.0, 1.2, 1.6	1.0, 1.2, 1.6	0.8, 0.9, 1.0, 1.2, 1.32, 1.6
FCAW Carbon	1.2	1.2, 1.6	1.2, 1.6	1.2, 1.6	1.2, 1.6	1.2, 1.6
MIG Pulsed-Carbon	0.8, 1.0, 1.2	1.0, 1.2, 1.6	---	---	CV feeder (1.0, 1.2, 1.6)	0.8, 0.9, 1.0, 1.2, 1.32, 1.6
MIG pulsed-S.S	0.8, 1.0, 1.2	1.0, 1.2, 1.6	1.0, 1.2, 1.6	---	CV feeder (1.0, 1.2, 1.6)	0.8, 1.0, 1.2, 1.6
FCAW-S	---	2.0	2.0	2.0	2.0	2.0
MIG/MAG CV std	---	---	---	---	---	●
FCAW CVstd	---	---	---	---	---	●
4xxx/5xxx Al CV/Pulse	---	---	---	---	---	1.2, 1.6
Stick / TIG (lift)	---	---	---	●	CV/CC feeder selected	●
Front/Rear panel						
Over-heated indicator	●	●	●	●	●	●
Err code indicator	●	●	●	●	●	●
Digital display	●	●	●	●	---	---
LED display	---	---	---	---	---	---
2/4 step adjustable	●	●	2 step only (crater)	●	●	See IM of feeder
Crater Timer	---	---	2 step only (crater)	---	---	See IM of feeder
Arc Force	●	●	●	●	●	See IM of feeder
Hot Start	---	---	---	●	With CV/CC Feeder	See IM of feeder
Remote Control	Feeder	Feeder	Feeder/Remote Box	Feeder/Remote Box	Feeder	Feeder
Output Studs	M10Screw	M10Screw	M10Screw	M10Screw	M10Screw	M10Screw
Control Cable Connector	6-pins	6-pins	6-pins	6-pins	5-pins	5-pins receptacle
Aux. power(Gas heater)	36V/200W	36V/200W	36V/200W	36V/200W	36V/200W	36V/200W
Aux. power fuse	8A/250V	8A/250V	Extended	8A/250V	8A/250V	8A/250V
Extended function						
Pre Flow	DIPS1on	DIPS1on	DIPS1on	DIPS1on	See feeder IM	See feeder IM
Long Cable	DIPS2on	DIPS2on	DIPS2on	DIPS2on	See feeder IM	---
Repeat Crater Fill	DIPS3on	DIPS3on	DIPS3on	DIPS3on	See feeder IM	---
Preset Syn.	DIPS5on	DIPS5on	DIPS5on	DIPS5on	See feeder IM	See feeder IM
Low/Hi Run-in	DIPS6	DIPS6	DIPS6	DIPS6	See feeder IM	See feeder IM
Wire Feeding Calibration	DIPS7	---	---	DIPS7	See feeder IM	---
Crater Control	DIPS7&S8on	DIPS7&S8on	DIPS7&S8on	DIPS7&S8on	See feeder IM	---
Analog input (I/U preset)	---	---	DIPS7on	---	---	---
Torch with On/Off	---	---	● 14 pins Amphenol	---	---	---
Gas Flow On/Off	---	---	● 14 pins Amphenol	---	---	---
Cold Inch On/Off	---	---	● 14 pins Amphenol	---	---	---
Arc On/Off signal	---	---	● 14 pins Amphenol	---	---	---
Analog output (I/U Display)	---	---	● 5 pins Amphenol	---	---	---
Feeder Recommended						
Option 1-Euro end torch	LWF-32GS K60137-1	LWF-32GS K60137-1	LWF-32GS K60137-1	LWF-32GS K60137-1	LWF-32GS PLUS CV/CC K60137-5	PF42 K14107-1
Option 2- Euroend torch	LWF-34GS K60137-3	LWF-34GS K60137-3	LWF-34GS K60137-3	LWF-34GS K60137-3	LWF-32GS PLUS CV K60137-7	PF46 K69040-3
Option 3-Asia end torch	LWF-34GS K60137-9	LWF-34GS K60137-9	LWF-34GS K60137-9	LWF-34GS K60137-9	---	---
Option 4 -Asia end torch	LWF-32 K60137-11	LWF-32 K60137-11	LWF-32 K60137-11	LWF-32 K60137-11	---	---
Option 5 -Asia end torch	LWF-34 K60137-13	LWF-34 K60137-13	LWF-34K 60137-13	LWF-34 K60137-13	---	---
Option 6 (No spool frame)	LWF-10 Asia K60137-15	LWF-10 Asia K60137-15	LWF-10 Asia K60137-15	LWF-10 Asia K60137-15	---	---
	LWF-10 Euro K60137-16	LWF-10 Euro K60137-16	LWF-10 Euro K60137-16	LWF-10 Euro K60137-16	---	---
Features on Feeder						
A/V display	---	---	---	---	●	PF42 feeder
A/V display LED	---	---	---	---	---	PF46 feeder
Current preset	●	●	●	●	●	●
Voltage Preset	●	●	●	●	●	●
Gas Purge	●	●	●	●	●	●
Cold Inch	●	●	●	●	●	●
Gas valve connector	Male thread: 9/16-18	Male thread: 9/16-18	Male thread: 9/16-18	Male thread: 9/16-18	Male thread: 9/16-18	Quick Female
Electrode Cable Stud	M10Screw	M10Screw	M10Screw	M10Screw	M10Screw	Euro quick (Male)
Control cable connector	6-pins receptacle (Male)	6-pins receptacle (Male)	6-pins receptacle (Male)	6-pins receptacle (Male)	6-pins receptacle (Male)	5-pins receptacle (Male)
2/4 Step (Crater)	---	---	---	---	●	●
Arc force	---	---	---	---	●	●
Hot start	---	---	---	---	[CV/CC feeder]	●
Gas Pre flow	---	---	---	---	DIPS1on	●
Long cable	---	---	---	---	DIPS2on	---

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Type	MIG CV pulse machine	MIG CV pulse machine	MIG CV machine	Multi-processes machine	Multi-processes machine	Multi-processes machine
Repeat crater fill	---	---	---	---	DIPS3on	---
Preset Syn.	---	---	---	---	DIPS5on	●
Low/High Run-in	---	---	---	---	DIPS6	●
Feeder type selection	---	---	---	---	DIPS7	---
Wire Feeding Calibration	---	---	---	---	DIPS7S8on	---
Gas meter equipped	---	---	---	---	●	Option
Lighting	---	---	---	---	---	PF-46 only
USB connector	---	---	---	---	---	●
Gas Post-flow	---	---	---	---	---	●
Burn-back time	---	---	---	---	---	●
Spot timer	---	---	---	---	---	●
2/4step (arc strike)	---	---	---	---	---	PF-46 only
Procedure Memory	---	---	---	---	---	●
WFS display unit	---	---	---	---	---	●
Knob lockout	---	---	---	---	---	PF-46 only
Torch recommended						
LG 351C, MIG, Asia	K60111-3	K60111-3	K60111-3	K60111-3	---	---
LG 351C, MIG, Euro	K60111-3E	K60111-3E	K60111-3E	K60111-3E	K60111-3E	K60111-3E
LG 501C, MIG, Asia	---	K60110-3	K60110-3	K60110-3	---	---
LG 501C, MIG, Euro	---	K60110-3E	K60110-3E	K60110-3E	K60110-3E	K60110-3E
SN 510, Water Cooler MIG, Euro	---	K60163-3E	K60163-3E	K60163-3E	K60163-3E	K60163-3E
LG 351C-AL, MIG, Euro -AL	---	---	---	---	---	K60111-3AE
LG 501C-AL, MIG, Euro -AL	---	---	---	---	---	K60110-3AE
SN 510, Water Cooler MIG, Euro -AL	---	---	---	---	---	K60613-3AE
FCAW Self-Shielded, Asia	K60167-45M	K60167-45M	---	K60167-45M	---	---
FCAW Self-Shielded, Euro	K60170-45M	K60170-45M	---	K60170-45M	K60170-45M	K60170-45M
GTAW torch	---	---	---	K60056-1/-2	K60056-1/-2	K60078-1
Stick Torch	---	---	---	K60057-70-XM	K60057-70-XM	K60057-70-XM
Cables/Hose						
Work cable (Heavy clamp)	K60027-50-XM	K60027-70-XM	K60027-70-XM	K60027-70-XM	K60027-70-XM	K60027-70-XM
Work Cable [C clamp]	---	K60027-70-4MT	K60027-70-4MT	K60027-70-4MT	K60027-70-4MT	K60027-70-4MT
Electrode Cable	K60052-50-XM	K60052-70-XM	K60052-70-XM	K60052-70-XM	K60052-70-XM	---
Control Cable	K60044-XM	K60044-XM	K60044-XM	K60044-XM	K69051-X	K69051-X
Gas hose	K600049-XM	K60049-XM	K60049-XM	K60049-XM	K60049-XM	---
Interconnection cable						
Interconnection Cable assembly	K60010-50-XM	K60010-70-XM	K60010-70-XM	K60010-70-XM	---	K69036-70-XM
Air cooled with cover	K60181-50-XM	K60181-70-XM	K60181-70-XM	K60181-70-XM	---	---
Water cooled	---	K69047-70-XM	K69047-70-XM	K69047-70-XM	K69106-70-XM	K69046-70-XM
Gas Flow Meter						
CO ₂ regulator with heater	K60012-LE1	K60012-LE1	K60012-LE1	K60012-LE1	K60012-LE1	K60012-LE1
Ar regulator	K60012-5	K60012-5	K60012-5	K60012-5	K60012-5	K60012-5
Ar meter	K60012-9	K60012-9	K60012-9	K60012-9	K60012-9	K60012-9
Water cooler, tool box and accessories						
Cooler 55 water cooler	K60116-2S-CNP05	K60116-2S-CNP05	K60116-2S-CNP05	K60116-2S-CNP05	K60116-2S-CNP05	K60116-2S-CNP05
Tool box	K60117-2	K60117-2	K60117-2	K60117-2	K60117-2	K60117-2
Quick lock foot	7FS33556-3 (Note: Necessary accessory for mounting Power Source without water cooler on cart)					

Customer Assistance Policy

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