

# CV-655

Energy efficiency, reliability and exceptional performance are what set the CV-655 apart from the rest. Designed primarily for heavy-duty applications, the CV-655 is an outstanding choice for MIG and flux-cored welding on mild steel, stainless steel, aluminum and alloys. This sturdy, powerful DC power source handles CV semiautomatic submerged arc welding and arc gouging with ease. Equipped with electronic and thermostatic protection, PC boards with built-in diagnostics and solid state contactors, the CV-655 is built to last.



## Processes

MIG Flux-Cored Submerged Arc Gouging

## Advantage Lincoln

- Calibrated output control lets operator accurately regulate power levels.
- Line voltage compensation maintains weld consistency, even with line voltage changes of  $\pm 10\%$ .
- 115-volt duplex receptacle provides 20 amps of auxiliary power.
- Separate output studs allow the operator to select high or low inductance.
- Panel switches allow operator to change settings at the power source or wire feeder.
- Solid state circuitry provides extra long life during repetitive applications.
- Three-year warranty on parts and labor.
- Manufactured under a quality system certified to ISO 9001 requirements and ISO 14001 environmental standards.

## Description

Output   Input   

## Recommended General Options

Digital Meter Kit, Air Filter Kit, Dual Process Switch, Remote Output Control, Remote Control Adapter, Undercarriage

## Recommended Wire Feeders

LF-72, LN-742, LN-8, LN-9, LN-9 GMA, LN-10, DH-10, LN-15, LN-23P, LN-25, NA-3, NA-4, NA-5, NA-5R, Cobramatic®

## Order

K1480-1	CV-655	230/460/3/60
K1480-5	CV-655	575/3/60
K1481-1	CV-655	230/400/3/50/60
K1481-2	CV-655	380/500/3/50/60
K1481-4	CV-655	200/400/3/50/60
K1481-5	CV-655	415/3/50/60

Note: Cobramatic® and Python® are registered trademarks of MK Products, Inc.

## TECHNICAL SPECIFICATIONS

Product Name	Product Number	Input Power	Rated Output Current/Voltage/Duty Cycle <sup>(1)</sup>	Input Current @ Rated Output	Output Range	Dimensions H x W x D inches (mm)	Net Weight lbs. (kg)
CV-655	K1480-1	230/460/3/60	650A/44V/100% 815A/44V/60%	94/47A	70-815A 13-44V Max. OCV: 48V	27.5 x 22.2 x 38.0 (699 x 565 x 965)	670 (304)
	K1480-5	575/3/60		38A			
	K1481-1	230/400/3/50/60		94/54A			
	K1481-2	380/500/3/50/60		56/43A			
	K1481-4	200/400/3/50/60		107/54A			
	K1481-5	415/3/50/60		52A			

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

**PERFORMANCE**

- Provides line voltage compensation for maintaining weld consistency, even with changes of  $\pm 10\%$ .
- For heavy duty MIG and flux-cored applications.
- Sub-arc welding with up to 5/64" (2.0mm) diameter electrodes.
- Arc gouging up to 3/8" (10mm) carbons.

**FEATURES**

- Quick, simple 14-pin MS-type (Amphenol) wire feeder connection.
- Low flat-top case can be placed under a workbench or stacked on top of each other for smaller footprint.
- "Cold" electrode with a solid state contactor when the trigger is released for added safety.
- Thermal trip indicator light.

**Key Controls**

1. Optional Voltmeter and Ammeter
2. Output Voltage Control
3. Pilot Light
4. Thermal Protection Light
5. Input Power On/Off Switch
6. Local/Remote Control Switch
7. Output Terminals On/Remote Switch



**QUALITY AND RELIABILITY**

- Electronic and thermostatic protection from current overload or excessive temperatures.
- PC boards have built-in diagnostic routines for quick and easy troubleshooting.
- Circuit boards are protected with a specially insulated coating to extend life and ensure reliable performance.
- Solid state circuitry provides extra long life during repetitive applications.
- Three-year warranty on parts and labor.
- Manufactured under a quality system certified to ISO 9001 requirements and ISO 14001 environmental standards.
- CSA approved for 60 Hz models.

**SYSTEM SELECTION**

**Typical MIG Welding Systems**

**CV-655 / LF-72 Heavy Duty Wire Feeder**

- CV-655 Power Source K1480-1
- LF-72 Heavy Duty K2327-3
- 600 Amp Weld Power Cable – 10 ft. K1842-10<sup>(2)</sup>
- Work Clamp K910-2
- Harris® Flowmeter Regulator and Gas Hose K586-1

**CV-655 / LN-742 Wire Feeder**

*Best for applications where more process control is required – for arc starting, welding and crater control!*

- CV-655 Power Source K1480-1
- LN-742 (Two Roll) Wire Feeder K617-1
- Control Cable - 10 ft. K1819-10
- .045 Drive Roll KP653-052S
- Universal Stand K1524-1
- Swivel Platform K1557-1
- Magnum 400 Gun & Cable Assembly K2286-1<sup>(1)</sup>
- 600 Amp Weld Power Cable – 10 ft. K1842-10<sup>(2)</sup>
- Work Clamp K910-2
- Harris Flowmeter Regulator and Gas Hose K586-1

**CV-655 / LN-10 Wire Feeder**

*Where premium welding performance and control is demanded – this system delivers!*

- CV-655 Power Source K1480-1
- LN-10 wire feeder K1559-1
- Control Cable – 10 ft. K1501-10
- .045 Drive Roll KP1505-045S
- Swivel Platform KP557-1
- Magnum 400 Gun & Cable Assembly K471-21<sup>(1)</sup>
- 600 Amp Weld Power Cable – 10 ft. K1842-10<sup>(2)</sup>
- Work Clamp K910-2
- Harris Flowmeter Regulator and Gas Hose K586-1

**CV-655 / DH-10 Wire Feeder**

For maximum welding flexibility – select the DH-10 dual feeder. Weld with two different types and sizes of wire – with two different welding procedures.

- CV-655 Power Source K1480-1
- DH-10 wire feeder K1499-1
- Control Cable – 10 ft. K1501-10
- .045 Drive Roll KP1505-045S<sup>(2)</sup>
- Magnum 400 Gun & Cable Assembly K471-21<sup>(1)(2)</sup>
- 600 Amp Weld Power Cable – 10 ft. K1842-10<sup>(2)</sup>
- Work Clamp K910-2
- Harris Flowmeter Regulator and Gas Hose K586-1

**CV-655 / Cobramatic® Wire Feeder**

For aluminum welding, select the industries best aluminum feeding system – Cobramatic.

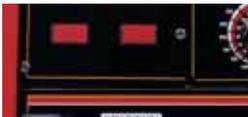
- CV-655 Power Source K1480-1
- Cobramatic® Wire Feeder K2259-1
- .035 Grooved Drive Roll (optional) KP1594-035
- Python® Gun & Cable Assembly K2211-2
- 600 Amp Weld Power Cable – 10 ft. K1842-10<sup>(2)</sup>
- Work Clamp K910-2
- Harris Flowmeter Regulator and Gas Hose K586-1

<sup>(1)</sup>Fully assembled, no gun connector required.

<sup>(2)</sup>Two required.

RECOMMENDED OPTIONS

**GENERAL OPTIONS**



**Digital Meter Kit**  
Displays amps and volts.  
Order K1482-1



**Air Filter Kit**  
Mounts on the front of the machine and uses cleanable, all metal air filters. Not compatible with dual process switch.  
Order K1486-1



**Dual Process Switch**  
Mounts on front of machine and provides polarity change or electrical isolation. Great for arc gouging applications and where two separate feeders require different output polarity or inductance settings. Not compatible with air filter.  
Order K1528-1



**Remote Output Control**  
Consists of a control box with choice of two cable lengths. Permits remote adjustment of output. 6 pin connection.  
Order K857 for 25 ft. (7.6m).  
Order K857-1 for 100 ft. (30m).



**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 power source 14 pin receptacle.  
Order K864



**Undercarriage**  
Platform undercarriage with mountings for two gas cylinders at rear of welder.  
Order K842

**CV-655 ORDER FORM**

PRODUCT DESCRIPTION	ORDER NUMBER	QUANTITY	PRICE
CV-655 230/460/3/60	K1480-1		
CV-655 575/3/60	K1480-5		
CV-655 230/400/3/50/60	K1481-1		
CV-655 380/500/3/50/60	K1481-2		
CV-655 200/400/3/50/60	K1481-4		
CV-655 415/3/50/60	K1481-5		
<b>Recommended General Options</b>			
Digital Meter Kit	K1482-1		
Air Filter Kit	K1486-1		
Dual process Switch	K1528-1		
Remote Output Control:			
for 25 ft. (7.6m)	K857		
for 100 ft. (30m)	K857-1		
Remote Control Adapter	K864		
Undercarriage, Twin Cylinder	K842		
<b>Recommended Wire Feeder Options</b>			
LF-72	See publication E8.11		
LN-742	See publication E8.20		
LN-8	See publication E8.30		
LN-9	See publication E8.50		
LN-9 GMA	See publication E8.50		
LN-10	See publication E8.200		
DH-10	See publication E8.200		
LN-15	See publication E8.60		
LN-23P	See publication E8.90		
LN-25	See publication E8.100		
NA-3	See publication E9.10		
NA-4	See publication E9.10		
NA-5	See publication E9.30		
NA-5R	See publication E9.40		
Cobramatic®	See publication E8.300		
	TOTAL:		

**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 customer's 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 been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

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