

# POWER WAVE® S700

Flexible Configuration. Endless Possibilities.



## KEY FEATURES

The Power Wave S700 is the ideal power source for high amperage, high duty cycle applications. Typically recommended for 1/16 inch (1.6mm) wire and up, the Power Wave S700 has a wide output range (20-900A) and delivers maximum performance in semiautomatic, hard automation or robotic environments.

- **Flexible Input Voltage Options** – 200-575 VAC, 3 phase, 50/60Hz
- **Reliable Performance** – Tested for harsh environments and IP23 rated
- **Intelligent Welding** – Embedded Waveform Control Technology® delivers the ideal arc for any application.

### Processes »

Stick, TIG, MIG, Pulsed MIG, Flux-Cored, SAW, Tandem MIG®, Carbon Arc Gouging, HyperFill™

### Applications »

Semiautomatic, Automation, Hard Automation, Heavy Equipment, Transportation, Fabrication

### Output »



### Input »



### Product Numbers »

POWER WAVE S700  
K3279-1

POWER WAVE S700 (CC)  
K3279-2

POWER WAVE S700 (200V)  
K3557-1

POWER WAVE S700 (CE)  
(CE Filter Preinstalled)  
K5372-1

## FEATURES

### High Performance, Versatile Power Source

- Industry-leading performance for high-amperage, high duty cycle applications.
- Wide input voltage range to accommodate global operations (200-575 VAC, 3 phase, 50/60Hz voltage).
- Flexible configuration allows for use in semiautomatic, hard automation or robotic applications.
- Fan-As-Needed™ (F.A.N.) reduces power consumption by shutting the fan down when it is not needed.

### Built-In Advanced Technology

- Power Wave Manager and digital Arclink® Ethernet communication allows for easy system configuration and customization.
- Get easy, accurate heat input calculations with True Energy®. No extra equipment or measuring tools needed.

## TECHNOLOGIES

### CheckPoint® Production Monitoring

- Real-time production monitoring data
- Powerful dashboards for full operation visibility
- Easily export and share
- Secure, cloud-based solution (no hardware, no installation)



### ArcLink Communication

- Industry-leading system communication
- 4x faster arc start detection time
- No external hardware required
- Plug and use simplicity
- On-the-fly process changes

### WaveForm Control Technology®

- Simply select and optimized arc performance for any application
- Large, continuously growing portfolio of application-specific waveforms
- Latest waveform innovations are always free and easy to update.

## CABLES

### ARCLINK/LINC-NET™ CONTROL CABLES

Description	Order Number
8 ft (2.5 m) (without weld cable)	K1543-8
25 ft (7.6 m) (without weld cable)	K1543-25
50 ft (15.2 m) (without weld cable)	K1543-50
100 ft (30.4 m) (without weld cable)	K1543-100
25 ft (7.6 m) Heavy Duty (without weld cable)	K2683-25
50 ft (15.2 m) Heavy Duty (without weld cable)	K2683-50
100 ft (30.4 m) Heavy Duty (without weld cable)	K2683-100

### WELD POWER CABLES

Description	Order Number
Lug to Lug, 3/0, 600A, 60% Duty Cycle, 10 ft (3.1 m)	K1842-10
Lug to Lug, 3/0, 600A, 60% Duty Cycle, 35 ft (10.7 m)	K1842-35
Lug to Lug, 3/0, 600A, 60% Duty Cycle, 60 ft (18.3 m)	K1842-60
Lug to Lug, 4/0, 600A, 60% Duty Cycle, 110 ft (33.5 m)	K1842-110
Lug to Lug, 4/0, 35 ft (10.7 m)	K2163-35 <sup>(1)</sup>
Lug to Lug, 4/0, 60 ft (18.3 m)	K2163-60 <sup>(1)</sup>

<sup>(1)</sup> Two cables per package.

### 14-PIN TO 14-PIN CONTROL CABLES

For use with FANUC® Arms Having Integrated Cable	Order Number
18 in (0.45 m)	K1785-2
2 ft (0.61 m)	K1785-3
4 ft (1.2 m)	K1785-4
12 ft (3.6 m)	K1785-12
16 ft (4.8 m)	K1785-16
25 ft (7.6 m)	K1785-25
40 ft (12.2 m)	K1785-40
50 ft (15.2 m)	K1785-50
100 ft (30.4 m)	K1785-100
For External Dress of FANUC® Arm or Hard Automation	Order Number
25 ft (7.6 m)	K2709-25
50 ft (15.2 m)	K2709-50
100 ft (30.4 m)	K2709-100

**GENERAL OPTIONS**

**CE Filter**

High power filter that enables a Power Wave® CE "ready" machine to conform to the EMC standards of Europe and Australia.

**Order K2444-4**

*Note: Filter comes preinstalled on K5372-1*



**Deluxe Adjustable Gas Regulator and Hose Kit**

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

**Order K586-1**



**Welding Fume Extractors**

Lincoln offers a wide variety of welding fume extraction environmental system solutions, ranging from portable systems easily wheeled around the shop to shop-wide central systems servicing many dedicated welding stations.

**Request Publication MC08-70**



**Work Voltage Sense Lead Kit**

Required to accurately monitor voltage at the arc.

**Order**

**K940-25** for 25 ft. (7.6 m)

**K1811-50** for 50 ft. (15.2 m)

**K1811-100 [shown]** for 100 ft. (30.5 m)



**Wireless Connectivity Module**

Simple and secure machine connectivity solution for monitoring and control capabilities without the hassle of costly network cables.

**Order K4352-2**



**WIRE FEEDER OPTIONS**

**AutoDrive® 19 Controller**

Relays wire feed commands from Power Wave® S Series power source to any AutoDrive® Series robotic wire drive for automated welding operation. Not compatible with Power Wave® R-Series power sources.

**Order K3004-1**



**AutoDrive® 19 Tandem Controller**

Relays wire feed commands from Power Wave® S-Series power source to any AutoDrive® Series robotic wire drive for automated tandem welding operations.

**Order K3171-1**



**Power Feed® 84**

Advanced, digital wire feeders that provide comprehensive process control in a simple-to-use, rugged design.

**See publication E8.268**



**Power Feed® 25M**

Advanced, compact wire feeders designed to provide comprehensive process control with push-pull capability in a rugged, portable design.

**See Publication E8.271**



**AutoDrive® 4R220**

Robotic wire feeding system that offers powerful, industry-proven wire feeding performance for robotic and hard automation applications.

**See publication E10.12**



**AutoDrive® S**

Servo-driven robotic wire feeding system that employs touch-retract starting technology for improved arc starts and wire feed consistency

**See publication E10.17.1**



## PRODUCT SPECIFICATIONS

Product Name	Product Number	Input Power Voltage/Phase/Hertz	Rated Output Current/Voltage/Duty Cycle	Input Current @ Rated Output	Output Range	H x W x D in (mm)	Net Weight lbs (kg)
Power Wave S700	K3279-1	380-415, 440-460, 500, 575 / 3 / 50, 60	700A / 44V / 100% (900A / 44V / 60%)	55A / 46A / 42A / 38A (74A / 60A / 56A / 49A)	20 - 900A	30.1 x 19.1 x 36.7 (765 x 485 x 932)	400 (181)
Power Wave S700 (CCC)	K3279-2						
Power Wave S700 (200V)	K3557-1	200, 230 / 3 / 50, 60		106 / 92A (138A / 120A)			
Power Wave S700 (CE)	K5372-1	380-415, 460-480, 500 / 3 / 50, 60		55A / 46A / 42A/ (72A / 60A / 54A)			365 (165)

For best welding results with Lincoln Electric equipment, always use Lincoln Electric consumables. Visit [www.lincolnelectric.com](http://www.lincolnelectric.com) for more details.  
Manufactured at a facility with certified ISO Quality and Environmental Management Systems.

### CUSTOMER ASSISTANCE POLICY

The business of Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, and cutting equipment. Our challenge is to meet the needs of our customers, who are experts in their fields, and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or technical information about their use of our products. Our employees respond to inquiries to the best of their ability based on information and specifications provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment, or to provide engineering advice in relation to a specific situation. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or communications. Moreover, the provision of such information or technical information does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or technical information, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose or any other equivalent or similar warranty is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the definition of specifications, and 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

