



Thunderbolt® XL AC/DC

225 or 300 Amp Arc Welding Power Source

Processes



Miller's 225 or 300 amp Thunderbolt® XL AC/DC power sources let you choose between AC or DC weld output to expand your welding options to either AC or DC Stick electrodes. DC output means fewer arc outages, less sticking, less spatter, better

control on thin work, and easier out-of-position welding. AC output produces less arc blow and easier starts. Thunderbolt XL AC/DC power sources come in two basic output configurations with models for several input power needs.

Accu-Set™ (patent pending), a Miller Exclusive design, provides accurate heat control with infinite amperage control. Additionally, the Thunderbolt XL allows higher duty cycle when amperage decreases, unlike some competitive products in the market. For the 225 amp model, in the AC welding mode, the duty cycle ranges from 20% at 225 amps to 100% at 100 amps.

Comes Complete with:

- 15 ft (4.5 m) electrode cable
- Electrode holder
- 10 ft (3 m) work cable with clamp
- Power cord (without plug)

Note: Thunderbolt XL AC/DC (#903 642) includes 230 V plug. Models do not include wall receptacle.

Features

Accu-Set™ amperage indicator

Infinite current control

High 100% duty cycle rating

High DC weld output

Output selector switch

Fully varnished magnetic coils

Forced-draft cooling fan

Replaceable weld cables

Miller's True Blue® Warranty

Benefits

Accu-Set™ is a Miller exclusive design for accurately controlling amperage or heat output. As you turn the Accu-Set control, the indicator more clearly shows the amperage setting.

The precise control of the Thunderbolt® XL allows the operator to adjust output by as little as 1-amp increments. Users can always get the exact heat they need, unlike the step control design on competitive products.

For the 225 amp model: 100 amps AC/65 amps DC
For the 300 amp model: 130 amps AC/90 amps DC

Up to 150 amps for the 225 amp model, and up to 200 amps for the 300 amp model, available at 20% duty cycle. Thunderbolt XL 225 AC/DC model has 20% more DC output than competitive products.

Allows you to quickly select AC, DCEP or DCEN without adjusting the output leads.

One reason the Thunderbolt XL is so reliable is the varnish that protects and lengthens the life of the coils inside.

The cooling fan runs continuously and helps to extend the life of the power source.

Removable cables let you lengthen or replace cables easily in the future.

Power source is warranted for 3 years parts and labor. Original main power rectifier parts are warranted for 5 years.

Specifications *(Subject to change without notice.)*

Light Industrial



Model		Rated Welding Output at 20% Duty Cycle	Welding Amperage Range		Max. Open-Circuit Voltage	Amps Input at Rated Output 50 or 60 Hz					Dimensions	Net Weight
			High	Low		115 V	220 V	230 V	400 V	460 V		
Thunderbolt® XL AC/DC	AC	225 A at 25 VAC, 60 Hz, (15% Duty Cycle at 50 Hz)	40-235	30-150	80	95	—	47.5	—	23.7	H: 18-3/4 in (476 mm) W: 12-3/4 in (323 mm) D: 17-1/2 in (445 mm)	104 lb (47 kg)
	DC	150 A at 25 VDC, 60 Hz, (15% Duty Cycle at 50 Hz)	30-160			—	70	67	39	34		
Thunderbolt® XL 300/200 AC/DC	AC	300 A at 30 VAC, 50/60 Hz	65-300	40-200	80	—	70	67	39	34	134 lb (61 kg)	
	DC	200 A at 25 VAC, 50/60 Hz	30-200			—	70	67	39	34		

Ordering Information See back page.



Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com



Electrode Charts

ELECTRODE POLARITY CHART

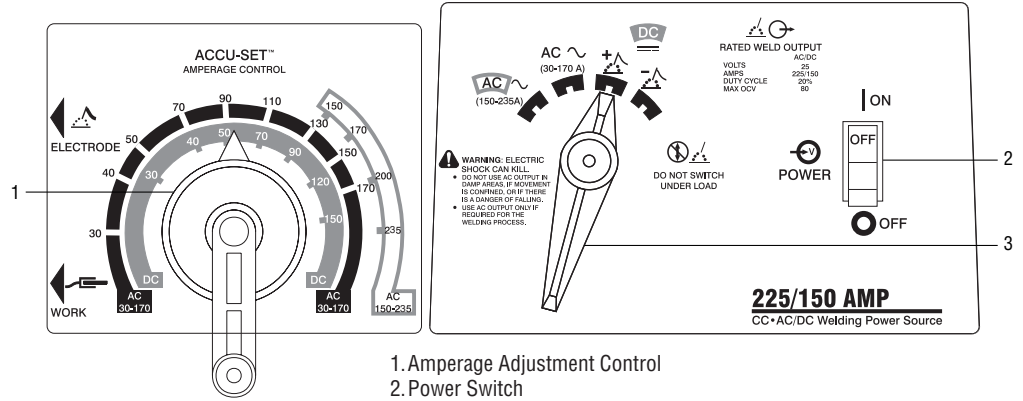
ELECTRODE	DC*	AC	POSITION	PENETRATION	USAGE
6010	EP	—	ALL	DEEP	MIN. PREP, ROUGH, HIGH SPATTER
6011	EP	✓	ALL	DEEP	
6013	EP, EN	✓	ALL	LOW	GENERAL
7014	EP, EN	✓	ALL	MED.	SMOOTH, EASY, FAST
7018	EP	✓	ALL	LOW	LOW HYDROGEN, STRONG
7024	EP, EN	✓	FLAT HORIZ. FILLET	LOW	SMOOTH, EASY, FASTER
Ni-CI	EP	✓	ALL	LOW	CAST IRON
308L	EP	✓	ALL	LOW	STAINLESS

*EP - ELECTRODE POSITIVE (REVERSE POLARITY)
EN - ELECTRODE NEGATIVE (STRAIGHT POLARITY)

ELECTRODE/AMPERAGE CHART

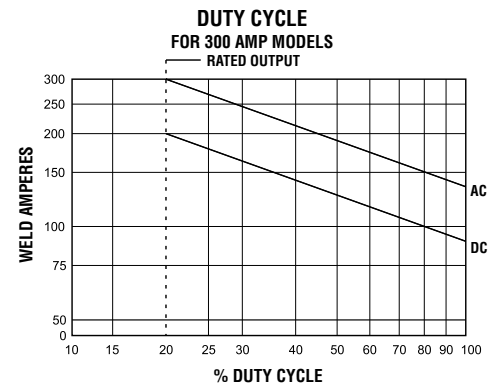
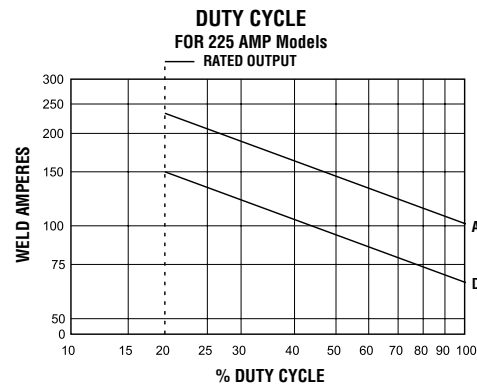
ELECTRODE	DIAMETER	AMPERAGE RANGE			
		MIN.	100A	150A	200A MAX.
6010 & 6011	3/32	2.4			
	1/8	3.2			
	5/32	4.0			
	3/16	4.8			
6013	1/16	1.6			
	5/64	2.0			
	3/32	2.4			
	1/8	3.2			
7014	3/32	2.4			
	1/8	3.2			
	5/32	4.0			
	3/16	4.8			
7018	3/32	2.4			
	1/8	3.2			
	5/32	4.0			
	3/16	4.8			
7024	3/32	2.4			
	1/8	3.2			
	5/32	4.0			
	3/16	4.8			
Ni-CI	3/32	2.4			
	1/8	3.2			
	5/32	4.0			
	3/16	4.8			
308L	3/32	2.4			
	1/8	3.2			
	5/32	4.0			

Control Panel

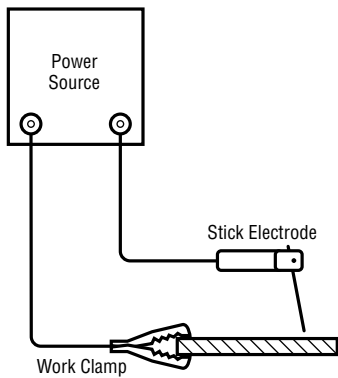


1. Amperage Adjustment Control
2. Power Switch
3. Selector Switch

Performance Data



Ordering Information and System Checklist



Stick (SMAW) Basic Equipment

Power Source and Options	Stock No.	Description	Qty.	Price
Thunderbolt® XL AC/DC	#903 642*	230 V, 50/60 Hz. Includes 5 ft (1.5 m) power cord w/230 V plug		
	#903 683	460 V, 50/60 Hz. Includes 7 ft (2.1 m) power cord		
Thunderbolt® XL AC/DC for International	#903 682	115/230 V, 50/60 Hz. Includes 7 ft (2.1 m) power cord		
Thunderbolt® XL 300/200 AC/DC	#903 686	220 V, 50/60 Hz. Includes 7 ft (2.1 m) power cord		
	#903 687	230/400 V, 50/60 Hz. Includes 7 ft (2.1 m) power cord		
	#903 688	460 V, 50/60 Hz. Includes 7 ft (2.1 m) power cord		
Running Gear	#043 927	Mounts easily to unit and provides convenient portability. Includes two wheels, two feet and a handle.		
Miscellaneous				
Stick Electrodes		See charts above		
Helmet/Gloves/Scratch Brush				
Chipping Slag Hammer				
Wall Receptacle				
Date:			Total Quoted Price:	

* Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

Distributed by:

