



Thunderbolt® XL AC

225 or 300 Amp Arc Welding Power Source

Processes

 Stick (SMAW)
Welding



Even when using a basic machine, welders can't afford to sacrifice control. That's why our Thunderbolt® XL Stick welding power sources have the control to get the exact heat you need—always. Also, these machines allow weld time to increase when amperage decreases.

Two economical Thunderbolt XL models are available. The 225 offers a full 225 amp output at 20% duty cycle. The 300 provides 300 amps at 20% duty cycle. Both have the range and muscle to handle many Stick welding, hard surfacing, and cutting jobs. At the same time, they have the precision for low hydrogen and special alloy electrodes.

Accu-Set™ (patent pending), a Miller Exclusive design, provides accurate heat control with infinite amperage control. Additionally, 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 225 AC (#903 641) includes 230 V plug. Models do not include wall receptacle.

Features

Accu-Set™ amperage indicator

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.

Infinite current control

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.

High 100% duty cycle rating

For the 225 amp model: 100 amps AC
For the 300 amp model: 130 amps AC

Output selector switch

Allows you to quickly select low or high range without adjusting the output leads.

Fully varnished magnetic coils

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

Forced-draft cooling fan

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

Replaceable weld cables

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

Miller's True Blue® Warranty

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, Single-Phase				Dimensions	Net Weight
		High	Low		115 V	220 V	230 V	400 V		
Thunderbolt® XL 225 AC	225 A at 25 VAC, 60 Hz (15% Duty Cycle at 50 Hz)	40–235	30–150	80	95 4.6*	— —	47.5 2.3*	— —	H: 18-3/4 in (476 mm) W: 12-3/4 in (323 mm) D: 17-1/2 in (445 mm)	85 lb (39 kg)
Thunderbolt® XL 300 AC	300 A at 30 VAC, 50/60 Hz	65–300	40–200	80	— —	70 5.4*	67 3.6*	39 1.8*		104 lb (47 kg)

*While idling

Ordering Information  See back page.



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Electrode Charts

ELECTRODE POLARITY CHART

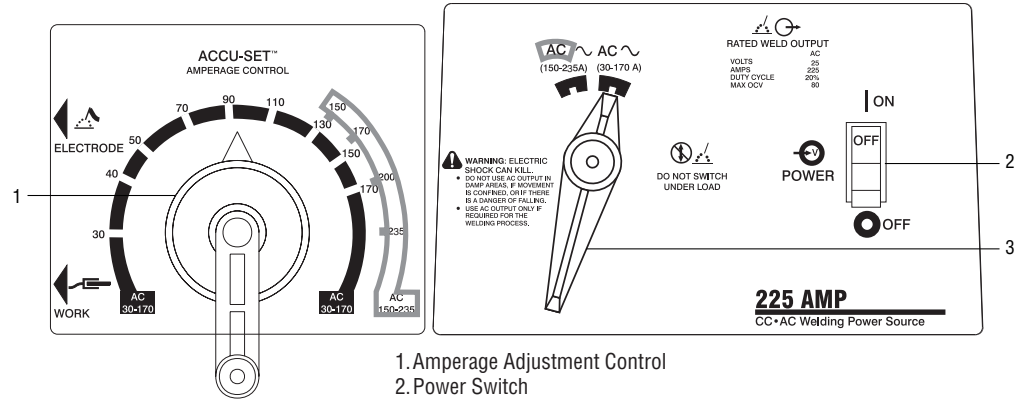
ELECTRODE	DC*	AC	POSITION	PENETRATION	USAGE
6010	EP	—	ALL	DEEP	MIN. PREP, ROUGH, HIGH SPATTER
6011	EP	✓	ALL	DEEP	
6013	EP, EN	✓	ALL	LOW	GENERAL
7014	EP, EN	✓	ALL	MED.	SMOOTH, EASY, FAST
7018	EP	✓	ALL	LOW	LOW HYDROGEN, STRONG
7024	EP, EN	✓	FLAT HORIZ. FILLET	LOW	SMOOTH, EASY, FASTER
Ni-CI	EP	✓	ALL	LOW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

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

ELECTRODE/AMPERAGE CHART

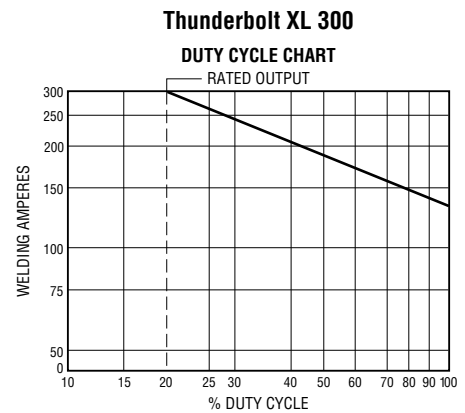
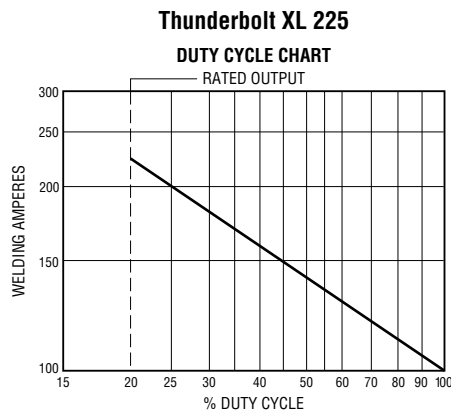
ELECTRODE	DIAMETER		AMPERAGE RANGE				
	IN	MM	MIN.	100A	150A	200A	MAX.
6010 & 6011	3/32	2.4					
	1/8	3.2					
	5/32	4.0					
	3/16	4.8					
6013	1/16	1.6					
	5/64	2.0					
	3/32	2.4					
	1/8	3.2					
7014	5/32	4.0					
	3/16	4.8					
	3/32	2.4					
	1/8	3.2					
7018	5/32	4.0					
	3/32	2.4					
	1/8	3.2					
	5/32	4.0					
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

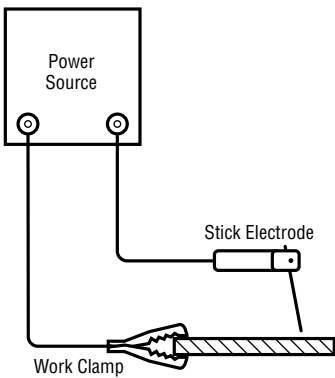


1. Amperage Adjustment Control
2. Power Switch
3. Selector Switch

Performance Data



Ordering Information and System Checklist



Stick (SMAW) Basic Equipment

Power Source and Options	Stock No.	Description	Qty.	Price
Thunderbolt® XL 225 AC	#903 641*	230 V, 50/60 Hz. Includes 5 ft (1.5 m) power cord w/230 V plug		
Thunderbolt® XL 225 AC for International	#903 681	115/230 V, 50/60 Hz. Includes 7 ft (2.1 m) power cord		
Thunderbolt® XL 300 AC	#903 684 #903 685	220 V, 50/60 Hz. Includes 7 ft (2.1 m) power cord 230/400 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:	

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

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