

# Maxstar® 280 DX

TIG/Stick Welding Power Source  

## Quick Specs



### Industrial Applications

Precision fabrication  
Petro chemical  
Aerospace  
Food/beverage industry  
Dairy  
Shipboard

### Processes

DC TIG (GTAW)  
Pulsed TIG (GTAW-P)  
Stick (SMAW)  
Air carbon arc (CAC-A)

**Input Power** 208–575 V, 1- or 3-phase power

**Amperage Range** 1–280 A (DC)

**Rated Output** 200 A at 28 V, 60% duty cycle

**Net Weight** 22.7 kg (50 lb.)

**Upgradeable and expandable.** Front panel memory card data port provides the ability to easily upgrade software and expand product features.

**Pro-Set™** eliminates the guesswork when setting weld parameters. Use Pro-Set when you want the speed, convenience and confidence of preset controls. Simply select the feature and adjust until Pro-Set appears on the display.

**Sleep timer** conserves electricity by powering down the machine if it sits idle for a specific time.

**Auto-Line™ power management technology** allows for any input voltage hookup (208–575 V) with no manual linking.

**Cooler Power Supply (CPS).** An integrated 120-volt dedicated-use receptacle to power the Coolmate™ 1.3. The power switch on the Maxstar also activates the receptacle to help prevent torch failure.

**Cooler-On-Demand™** feature operates the auxiliary cooling system only when needed, reducing noise, energy use, and airborne contaminants pulled through the cooler.

**Blue Lightning™** high-frequency (HF) arc starter for non-contact arc initiation. Provides more consistent arc starts and greater reliability compared to traditional HF arc starters.

**Wind Tunnel Technology™** protects internal electrical components from airborne contaminants, extending the product life.



See page 2 for package contents

### DC TIG Features

**Exceptionally smooth** and precise arc for welding exotic materials.

**Pulse.** Pulsing can increase puddle agitation, arc stability and travel speeds while reducing heat input and distortion.

### DC Stick Features

**DIG** control allows the arc characteristics to be changed for specific applications and electrodes. Lower the DIG setting for smooth running electrodes like E7018 and increase the DIG setting for stiffer, more penetrating electrodes like E6010.

**Hot Start™** adaptive control provides positive arc starts without sticking.

**Stick-Stuck** detects if the electrode is stuck to the part and turns the welding output off to safely and easily remove the electrode. Menu selectable.

**Meter calibration** allows digital meters to be calibrated for certification.

**Fan-On-Demand™** power source cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through the machine.





Power source is warranted for three years, parts and labour.

## Specifications (Subject to change without notice.)



Welding Mode	Input Power	Welding Amperage Range	Rated Output	IP Rating	Amps Input at Rated Load Output, 50/60 Hz						Max. Open-Circuit Voltage	Dimensions	Net Weight	
					208 V	230 V	400 V	460 V	575 V	KVA				KW
TIG (GTAW)	3-phase	1–280 A	235 A at 19.4 V, 60% duty cycle	IP23	17	15	9	7	6	6.2	6.0	60 VDC (11 VDC**)	H: 346 mm (13.6 in.) W: 219 mm (8.6 in.) D: 569 mm (22.5 in.)	22.7 kg (50 lb.)
	1-phase	1–280 A	235 A at 19.4 V, 60% duty cycle		28	26	15	13	10	6.0	6.0			
Stick (SMAW)	3-phase	5–280 A	200 A at 28 V, 60% duty cycle		20	18	10	9	7	7.2	7.0			
	1-phase	5–280 A	180 A at 27.2 V, 60% duty cycle*		30	27	15	13	10	6.2	6.2			

\* Refer to owner's manual for 208 V output ratings and duty cycle. \*\* Low OCV sense voltage for stick and Lift-Arc™ TIG.

 Certified by Canadian Standards Association to both the Canadian and U.S. Standards.  All CE models conform to the applicable parts of the IEC 60974 series of standards.



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## Genuine Miller® Accessories



### Small Runner™ Cart 301318

Designed for Maxstar 210/280, Dynasty 210/280, STH 270 and STi 270, with or without cooler. Cart features single cylinder rack, cable holder and foot pedal holder.



### MH Running Gear 018035026

Designed for Maxstar 210/280, Dynasty 210/280, STH 270 and STi 270, with or without cooler. Easy-to-manuever two-wheel cart with single cylinder rack, cable holder and storage area.



### Coolmate™ 1.3 300972

Designed to integrate with Maxstar 280 and Dynasty 210/280. For use with water-cooled torches rated up to 280 amps. 4.9 L (1.3 gal.) capacity.

## Remote Controls and Switches



### Wireless Remote Foot Control 300429

For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine.



### RFCS-14 HD Foot Control 194744

Maximum flexibility is accomplished with a reconfigurable cord that can exit the front, back or either side of the pedal. Provides remote current and contactor control.



### RCC-14 Remote Contactor and Current Control 151086

14-pin plug  
Side-to-side rotary-motion fingertip control fastens to TIG torch using two hook-and-loop straps.



### SHRC-14 Remote Control 058040019

5 m (16.4 ft.)

058040020 10 m (32.8 ft.)

058040021 20 m (65.6 ft.)

Single-hand control for current only.



### Wireless Remote Hand Control 300430

For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine.

## Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Maxstar® 280 DX	907539002	Includes 2.4 m (8 ft.) power cord and gas connection kit		
Maxstar® 280 DX, 4 m Water-Cooled Weld Ready Package	029083156	Includes 2.4 m (8 ft.) power cord, 5 m (16.4 ft.) work cable with clamp, 4 m (13.1 ft.) Miller® WP-280S4AAFD 280 A TIG torch, 3 m (10 ft.) gas hose, 5 m (16.4 ft.) electrode cable with holder, Small Runner™ Cart, Coolmate™ 1.3 with coolant, torch accessory kit, and USB with owner's manuals		
Maxstar® 280 DX, 8 m Water-Cooled Weld Ready Package	029083241	Includes 2.4 m (8 ft.) power cord, 5 m (16.4 ft.) work cable with clamp, 8 m (26.2 ft.) Miller® WP-280S4AAFD 280 A TIG torch, 3 m (10 ft.) gas hose, 5 m (16.4 ft.) electrode cable with holder, Small Runner™ Cart, Coolmate™ 1.3 with coolant, torch accessory kit, and USB with owner's manuals		
<b>Accessories</b>				
Small Runner™ Cart	301318			
MH Running Gear	018035026	MH two-wheeled cart with cylinder rack		
Coolmate™ 1.3	300972	115 V, 60 Hz, <b>CE</b> . <i>Requires coolant</i>		
Adapter Cord	255814	Supplies power to 115 V cooler ( <i>not required for Coolmate 1.3</i> )		
Industrial Coolant	043810	3.78-liter plastic bottle ( <i>must be ordered in quantities of 4</i> )		
Memory Card Expansion	301151 301152 301328	14-pin automation expansion 14-pin Modbus® expansion Hot wire power supply expansion		
Memory Card (Blank)	301080			
Stick Welding Cable Kit	057014351	200 A, 35 mmq, 5 m (16.4 ft.)		
Work Cable with Clamp	057014331	200 A, 35 mmq, 5 m (16.4 ft.)		
<b>Remote Controls</b>				
Wireless Remote Foot Control	300429	Foot control with wireless 27.4 m (90 ft.) operating range		
RFCS-14 HD	194744	6 m (20 ft.), heavy-duty foot control		
RCC-14	151086	8 m (26.5 ft.), remote current/contactor side-to-side rotary control		
RCCS-14	043688	8 m (26.5 ft.), remote current/contactor up-and-down rotary control		
SRHC-14		See above for more information		
RHC-14	242211020	6 m (20 ft.), remote current/contactor hand control		
Wireless Remote Hand Control	300430	Hand control with wireless 91.4 m (300 ft.) operating range		
RMS-14	187208	8 m (26.5 ft.), momentary-contact switch for contactor control		

Date:

Total Quoted Price:

Miller recommends  consumables

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