

# Maxstar® 280 DX

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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-phase 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

**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. This programmable feature will power 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.

**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.

**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.



### 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.



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



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# Specifications (Subject to change without notice.)



## Maxstar® 280 DX

Welding Mode	Input Power	Welding Amperage Range	Rated Output at 60% Duty Cycle	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 W: 219 mm D: 569 mm	22.2 kg
	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

CE All CE models conform to the applicable parts of the IEC 60974 series of standards.

## Genuine Miller® Accessories



### Small Runner™ Cart 058035010

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.



### 2 Wheel Trolley Running Gear 058035012

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.

## Memory Cards

### Memory Card Expansion

**301151** 14-Pin Automation Expansion

**301152** 14-Pin Modbus® Expansion

**301328** Hot Wire Power Supply Expansion

### Memory Card (Blank) 301080

Blank memory card for transferring data from computer to machine.

## Remote Controls and Switches



### Wireless Remote Foot Control 301580

For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller® machine. 27.4 m operating range.



### 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. Foot pedal provides remote current and contactor control. Includes 6 m cord and 14-pin plug.



### 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

**058040020** 10 m

**058040021** 20 m

Single-hand control for current only.



### Wireless Remote Hand Control 301582

For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller® machine. 91.4 m operating range.



### RHC-14 Hand Control 242211020

Miniature hand control for remote current and contactor control. Dimensions: 102 x 102 x 83 mm Includes 6 m cord and 14-pin plug.

## TIG Torch Kits and Connectors

The Miller® TIG torches have been designed to perfectly match and to ensure that the welder can fully benefit from the superior arc quality of the Miller® TIG equipment. The material has been carefully selected to prevent ageing and leakage in the hoses and cables. Miller® uses more copper in the power cable to minimize the heat losses and maximize the output.

The TIG torches can be configured with a standard torch head or a flexible alternative. The ergonomic handle can also be fitted with a remote control for adjustment of the weld current at the point of welding.

Miller® recommends Miller®|Weldcraft® 2% lanthanated tungsten electrode. The blue electrode ensures a stable arc in both AC and DC processes, with greater longevity than conventional tungsten electrodes, the ability to use a smaller-diameter electrode for the same job, use of a higher current for a similar-sized electrode, and less tungsten spitting.



*\*Remote current control from the thumb wheel, available as an option on all models*

Torch	Stock No.	Technical description	DC current	AC current
EuroTorch A-200, 4 meter	<b>058022013</b>	50 mm <sup>2</sup> Dinse, 5/8" gas, 14 pin control	200A @ 60%	150A @ 60%
EuroTorch A-200F, 4 meter	<b>058022014</b>	50 mm <sup>2</sup> Dinse, 5/8" gas, 14 pin control	200A @ 60%	150A @ 60%
EuroTorch A-200, 8 meter	<b>058022015</b>	50 mm <sup>2</sup> Dinse, 5/8" gas, 14 pin control	200A @ 60%	150A @ 60%
EuroTorch A-200F, 8 meter	<b>058022016</b>	50 mm <sup>2</sup> Dinse, 5/8" gas, 14 pin control	200A @ 60%	150A @ 60%
EuroTorch A-200R, 4 meter	<b>058022017</b>	50 mm <sup>2</sup> Dinse, 5/8" gas, 14 pin control	200A @ 60%	150A @ 60%
EuroTorch A-200FR, 4 meter	<b>058022018</b>	50 mm <sup>2</sup> Dinse, 5/8" gas, 14 pin control	200A @ 60%	150A @ 60%
EuroTorch A-200R, 8 meter	<b>058022019</b>	50 mm <sup>2</sup> Dinse, 5/8" gas, 14 pin control	200A @ 60%	150A @ 60%
EuroTorch A-200FR, 8 meter	<b>058022020</b>	50 mm <sup>2</sup> Dinse, 5/8" gas, 14 pin control	200A @ 60%	150A @ 60%

R - Remote control

F - Flex neck

A - Air cooled

## Tungsten

Tungsten	Amp Range	2% Ceriated (AC/DC)	2% Lanthanated (AC/DC)
1.6 mm	70-150 A	<b>WC116X7</b>	<b>WL2116X7</b>
2.4 mm	140-250 A	<b>WC332X7</b>	<b>WL2332X7</b>
3.2 mm	225-400 A	<b>WC018X7</b>	<b>WL2018X7</b>
4.0 mm	300-500 A	<b>WC532X7</b>	<b>WL2532X7</b>

## Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
<b>Maxstar® 280 DX</b>	<b>907684001</b>	Includes 2.4 m power cord and gas connection kit		
<b>Torches</b>		See page 3		
<b>Accessories</b>				
4-wheel Small Running Gear	<b>058035010</b>	Four-wheeled cart with cylinder rack		
2-wheel Trolley	<b>058035012</b>	Two-wheeled cart with cylinder rack		
Memory Card Expansion	<b>301151</b> <b>301152</b> <b>301328</b>	14-pin automation expansion 14-pin Modbus® expansion Hot wire power supply expansion		
Memory Card (Blank)	<b>301080</b>			
Stick Welding Cable Kit	<b>057014351</b>	Electrode holder kit 200 A, 35 mm <sup>2</sup> , 5 m		
Work Cable with Clamp	<b>057014331</b>	Return cable kit 200 A, 35 mm <sup>2</sup> , 5 m		
<b>Remote Controls</b>				
Wireless remote foot pedal	<b>301580</b>	Wireless foot pedal (range: 27 m)		
Wireless Remote Hand Control	<b>301582</b>	Wireless hand control (range: 90 m)		
RFCS-14 Heavy duty remote foot pedal	<b>194744</b>	Wired foot pedal (range: 6 m)		
RHC-14	<b>242211020</b>	Wired hand control (range: 6 m)		
SRHC-14	<b>058040019</b> <b>058040020</b> <b>058040021</b>	Single-hand remote control for current only, 5 m Single-hand remote control for current only, 10 m Single-hand remote control for current only, 20 m		
RMS-14	<b>187208</b>	Momentary-contact switch for contactor control, 8 m		
RCC-14	<b>151086</b>	Remote current/contactor side-to-side rotary control, 8 m		
RCCS-14	<b>043688</b>	Remote current/contactor up-and-down rotary control, 8 m		

Date:

Total Quoted Price:

Miller recommends *Elega* consumables

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