

# Dynasty® 200 Series

Issued July 2004 • Index No. AD/4.8

TIG/Stick Welding  
Power Source 

**Quick  
Specs**



## Heavy Industrial Applications

Petro/Chem Fabrication  
Aerospace  
Food/Beverage Industry  
Mechanical Contractors  
Shipboard Installation/Repair  
Dairy Industry

## Processes

TIG (GTAW)  
Pulsed TIG (GTAW-P) with DX Model  
Stick (SMAW)

**Input Power** Requires 3- or 1-Phase Power

**Amperage Range** 1–200 A

**Max. Open-Circuit Voltage** 80

**Weight** 45 lb (20.5 kg)

## The Power of Blue.®

**NEW! Low OCV Stick** is a simple design that reduces the open-circuit voltage to 12–16 volts when the welding power source is not in use. This built-in circuit design eliminates the need for add-on voltage reducers.

**Inverter-based, AC/DC power source** has state-of-the-art operator interface allowing the user extra set-up capabilities in a compact machine. Features more precise control of output parameters.

**Programmable HF start parameters** allows the operator to independently set HF starting conditions based upon process or application.

**HF start** for non-contact arc starting that eliminates tungsten or material contamination.

**Lift-Arc™** start for TIG arc starting without the use of high frequency.

**Superior arc performance** even on difficult to run electrodes like E6010.

**Portable** in the shop or at the job site — at 45 lb the Dynasty 200 is easily moved from location to location.

**Easy installation — Auto-Line™** provides state-of-the-art flexibility to the end user. The Auto-Line circuitry automatically connects to 120–460 VAC, single- or three-phase power without removing the covers to relink the power source. No longer is there a concern if you have the correct machine for shop or the job site.

**Advanced Squarewave arc** for improved weldability on aluminum and magnesium using low power. Continuous high-frequency is NOT needed because of the advanced Squarewave arc, and extended balance control allows you to fine-tune the duration of the electrode negative portion of the cycle from 30 to 90%. This provides precise cleaning control and prolonged tungsten life.



Dynasty 200 SD



Dynasty 200 DX

**New!**

### Available in Two Models:

**SD** — Provides the basic features that are required for most AC/DC TIG or Stick welding applications.

**DX** — When the job demands greater control the DX provides pulse on/off, pulse frequency, peak % time, background amperage, initial amperage, initial slope time, final slope time and final amperage control.

Extended **Balance Control** range (30–90% EN) allows precise cleaning control and prolonged tungsten life.

**AC frequency control range of 20–250 Hz** provides control for a focused arc, resulting in better directional control to help produce desired arc/weld bead characteristics.

**TRUE BLUE®**  
3YR. WARRANTY

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

MADE IN **USA**  
APPLETON, WI **USA**



**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



# Specifications (Subject to change without notice.)



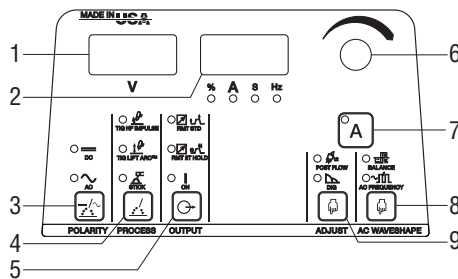
Welding Mode	Welding Amperage Range	Max. Open-Circuit Voltage	Input Power	Rated Output	Amps Input at Rated Load Output, 50/60 Hz						Dimensions	Net Weight						
					120 V	230 V	400 V	460 V	KVA	KW								
TIG (GTAW)	120 VAC 1–150 A  200–460 VAC 1–200 A	80 VDC 12–16**	3-Phase	200 A at 18 V, 20% Duty Cycle	—	13.7	8.7	6.9	5.5	5.2	H: 13-1/2 in (343 mm) W: 7-1/2 in (191 mm) D: 21-1/2 in (546 mm)	45 lb (20.5 kg)						
				150 A at 16 V, 60% Duty Cycle	—	0.16*	0.24*	0.25*	0.06*	0.03*								
			1-Phase	150 A at 16 V, 60% Duty Cycle	—	15.8	—	7.9	3.6	3.6			—	0.23*	—	0.25*	0.05*	0.02*
				140 A at 15.6 V, 40% Duty Cycle	31.0	—	—	—	3.6	3.5			—	—	—	0.05*	0.03*	
				100 A at 14 V, 100% Duty Cycle	20.7	—	—	—	2.3	2.3			—	—	—	0.05*	0.03*	
Stick (SMAW)	120 VAC 1–105 A  200–460 VAC 1–200 A	80 VDC 12–16**	3-Phase	200 A at 28 V, 20% Duty Cycle	—	20.8	13.0	10.2	8.1	7.8								
				130 A at 25.2 V, 60% Duty Cycle	—	0.16*	0.24*	0.25*	0.06*	0.03*								
			1-Phase	130 A at 25.2 V, 60% Duty Cycle	—	12.3	7.6	6.0	4.8	4.6			—	0.16*	0.24*	0.25*	0.06*	0.03*
				100 A at 24 V, 60% Duty Cycle	—	20.0	—	10.0	4.7	4.7			—	0.23*	—	0.25*	0.05*	0.03*
				90 A at 23.6 V, 100% Duty Cycle	31.3	—	—	—	3.6	3.6			—	—	—	0.05*	0.03*	

\* While idling. \*\* Sense voltage for Stick and Lift-Arc™ TIG. Note: Duty cycle limitations on units with 115 V input power are due to the input power cord supplied with the unit.

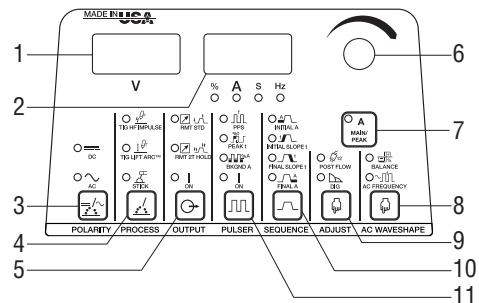
Certified by Canadian Standards Association to both Canadian and U.S. Standards. Conforms to European standards.

## Control Panels

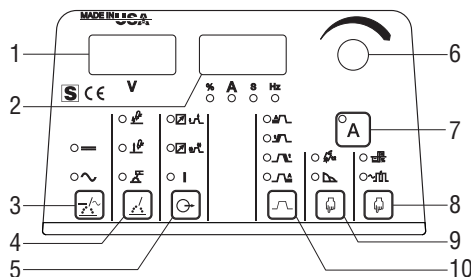
Dynasty 200 SD



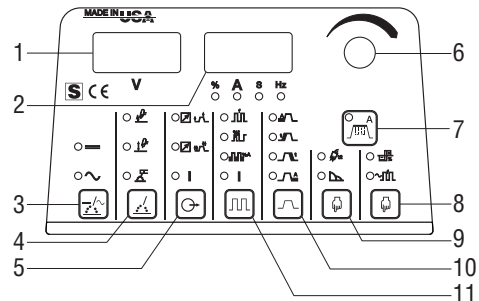
Dynasty 200 DX



Dynasty 200 SD (CE)



Dynasty 200 DX (CE)

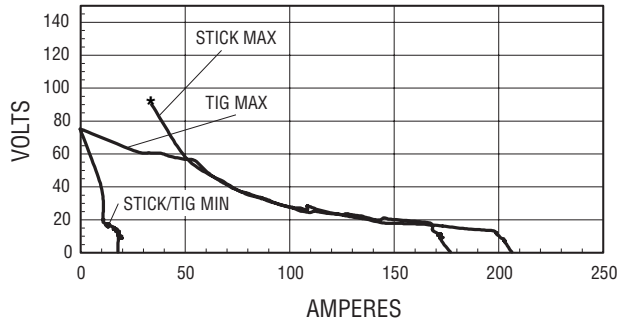


## Control Panel Parameter Values

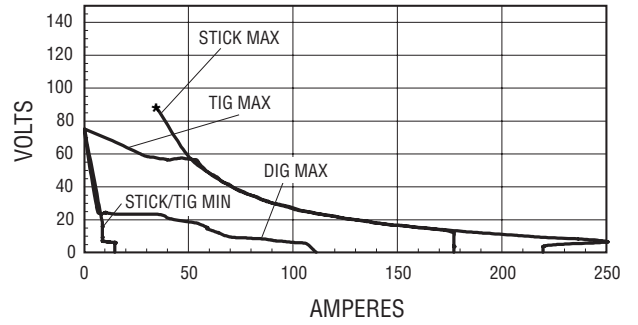
A. Preflow (s)	0.0–25	E. AC Frequency (Hz)	20–250	J. Final Slope Time (s)	0.0–25
B. Initial Amperage (A)	5–200	F. Balance Control (%EN)	50–90	K. Final Amperage (A)	5–200
C. Initial Slope Time (s)	0.0–25	G. Background Amperage (%)	0–100	L. Postflow Time (s)	0.0–50
D. Weld Amperage (A)	5–200	H. Pulse Frequency (Hz)	0.1–500	M. Dig (%)	0–100
		I. Peak Percent Time (%)	5–95		

# Performance Data

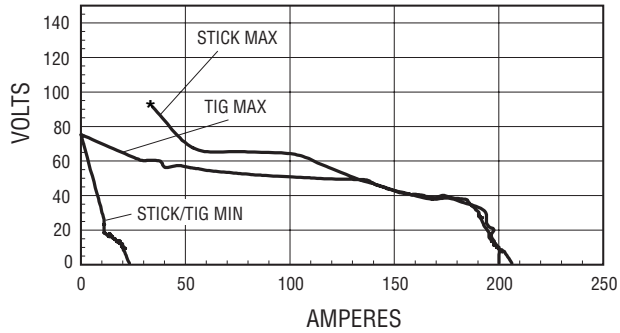
**115 VAC INPUT / AC OUTPUT**



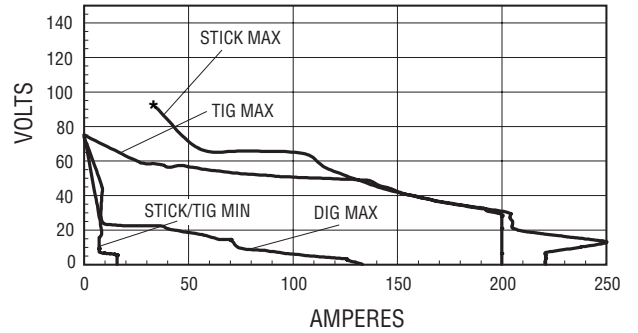
**115 VAC INPUT / DC OUTPUT**



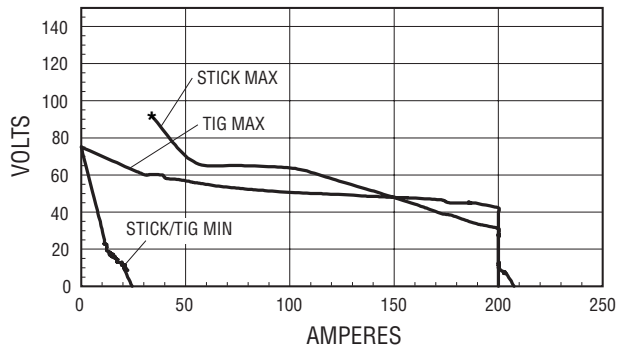
**230 VAC SINGLE-PHASE INPUT / AC OUTPUT**



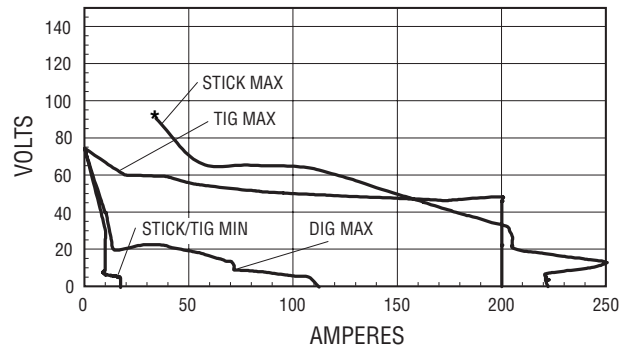
**230 VAC SINGLE-PHASE INPUT / DC OUTPUT**



**3-PHASE VOLTAGE INPUT / AC OUTPUT**

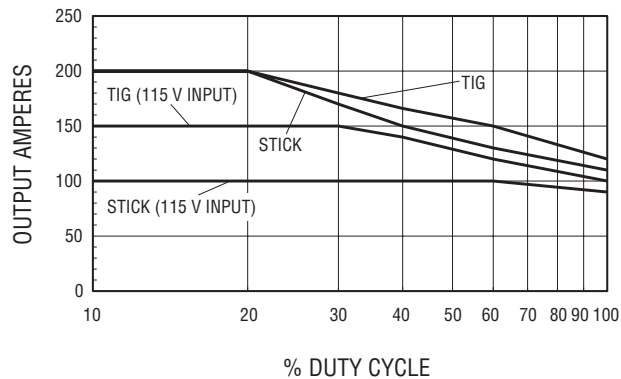


**3-PHASE VOLTAGE INPUT / DC OUTPUT**



*\*DIG setting must be reduced to obtain currents less than those shown in Volt-Ampere curves.*

**DUTY CYCLE CHART**



## Included Accessories

### Non-CE SD/DX Models Include:

- (1) DA-917F air-cooled torch adapter
- (2) International-style connectors 35/50

### CE SD/DX Models Include:

- (2) International-style connectors 35/50
- (1) 14-pin amphenol with clamp
- (1) 3/8 in - 19 BSPP gas fitting

## Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
<b>Power Source</b>				
Dynasty® 200 SD	#907 099 #907 100	Basic controls for TIG/Stick, 120–460 VAC Basic controls for TIG/Stick, 120–460 VAC, <b>CE</b>		
Dynasty® 200 DX	#907 099-01-1 #907 100-01-1	Full feature controls for TIG/Stick, 120–460 VAC Full feature controls for TIG/Stick, 120–460 VAC, <b>CE</b>		
<b>TIG Accessories</b>				
TIG Torch Adapters	#194 720 #190 219 #194 724	DA-917F DA-1820L DA-26R		
Contractor Kits	#195 055 #195 054	150 A TIG/Stick with RCCS-14 fingertip control 150 A TIG/Stick with RFCS-14 HD foot control		
Diamondback™ TIG Torches		See Diamondback TIG Torch Selector Guide		
Consumables, Tungsten		See Parts Guide		
Gas Cylinder, Gas Hose and Fittings				
<b>Stick Accessories</b>				
Stick Electrodes				
<b>Remote Controls</b>				
RFCS-14 HD	#194 744	Heavy-duty foot control		
RFCS-14	#043 554	Foot control		
RCCS-14	#043 688	North/south fingertip control		
RCC-14	#151 086	Side-to-side fingertip control		
RMLS-14	#129 337	Momentary/maintained rocker control		
RMS-14	#187 208	Momentary rubber dome switch		
<b>Educational Resources</b>				
Gas Tungsten Arc (TIG) Welding Book	#170 555			
TIG Fundamentals Welding CD	#196 567			
<b>Coolant Systems</b>				
Coolmate™ 3	#043 007 #043 007-01-2 #043 008 #043 008-01-2	115 VAC 115 VAC, <b>CE</b> 230 VAC 230 VAC, <b>CE</b>		
Coolmate™ V3	#043 009 #043 009-01-2	115 VAC 115 VAC, <b>CE</b>		
Coolmate™ 4	#042 288 #042 288-01-5	115 VAC 115 VAC, <b>CE</b>		
Low-Conductivity Coolant	#043 810	Recommended for TIG welding and HF applications		
Cooling System Hoses				
<b>International-Style Connectors</b>				
International-Style Connector Kit	#042 418	50 mm		
Extension Kit for International-Style	#042 419	50 mm		
International/Tweco® Adapter	#042 465	A one-piece adapter with International-style male plug		
International/Cam-Lok Adapter	#042 466	A one-piece adapter with International-style male plug		
<b>Additional Accessories</b>				
Machine Cover	#195 322	Water and mildew-resistant. Protects machine finish		

Date:

Total Quoted Price:

Distributed by:

