

Dynasty™ 200 Series

Issued March 2003 • 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 13 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.)



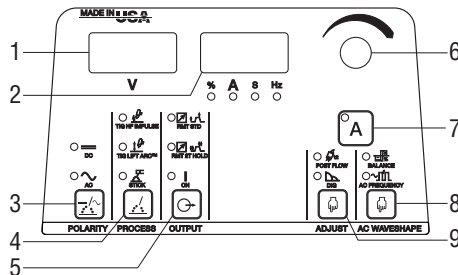
Welding Mode	Input Power	Rated Output	Welding Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Load Output, 50/60 Hz						Dimensions	Net Weight
					120 V	230 V	400 V	460 V	KVA	KW		
TIG (GTAW)	3-Phase	200 A at 18 V, 20% Duty Cycle	120 VAC 1–110 A	80 VDC 5–10**	—	13.7	8.7	6.9	5.5	5.2	H: 13-1/2 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	200–460 VAC 1–200 A		—	0.16*	0.24*	0.25*	0.06*	0.03*		
	1-Phase	150 A at 16 V, 60% Duty Cycle	—		9.4	6.0	4.7	3.8	3.6			
		140 A at 15.6 V, 40% Duty Cycle	—		0.16*	0.24*	0.25*	0.06*	0.03*			
		100 A at 14 V, 100% Duty Cycle	—		15.8	—	7.9	3.6	3.6			
—	0.23*	—	0.25*	0.05*	0.02*	31.0	—	—	—	3.6	3.5	
—	—	—	—	—	0.05*	0.03*	20.7	—	—	—	2.3	2.3
—	—	—	—	—	0.42*	—	—	—	—	0.05*	0.03*	—
Stick (SMAW)	3-Phase	200 A at 28 V, 20% Duty Cycle	120 VAC 1–90 A	80 VDC 5–10**	—	20.8	13.0	10.2	8.1	7.8		
		130 A at 25.2 V, 60% Duty Cycle	200–460 VAC 1–200 A		—	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			
		100 A at 24 V, 60% Duty Cycle	—		0.16*	0.24*	0.25*	0.06*	0.03*			
		90 A at 23.6 V, 100% Duty Cycle	—		20.0	—	10.0	4.7	4.7			
—	0.23*	—	0.25*	0.05*	0.03*	31.3	—	—	—	3.6	3.6	
—	—	—	—	—	0.42*	—	—	—	—	0.05*	0.03*	—
—	—	—	—	—	27.6	—	—	—	—	3.2	3.2	—
—	—	—	—	—	0.42*	—	—	—	—	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.

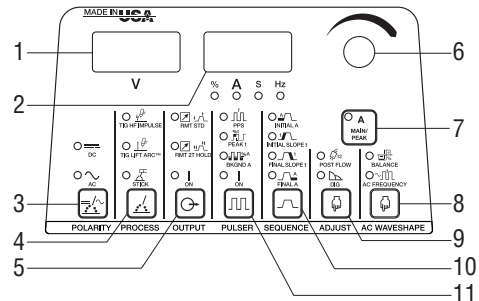
Control Panels

Dynasty 200 SD

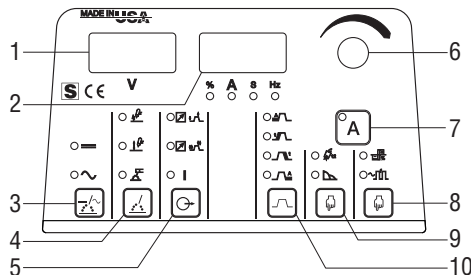


1. Voltmeter
2. Ammeter
3. Polarity Control
4. Process Control
5. Output Control
6. Encoder Control
7. Amperage Control
8. AC Waveshape Control
9. Adjust Control
10. Sequencer Controls
11. Pulser Control

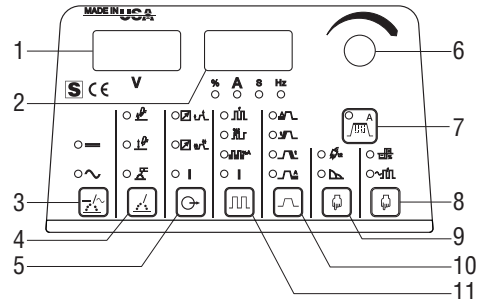
Dynasty 200 DX



Dynasty 200 SD (CE)



Dynasty 200 DX (CE)

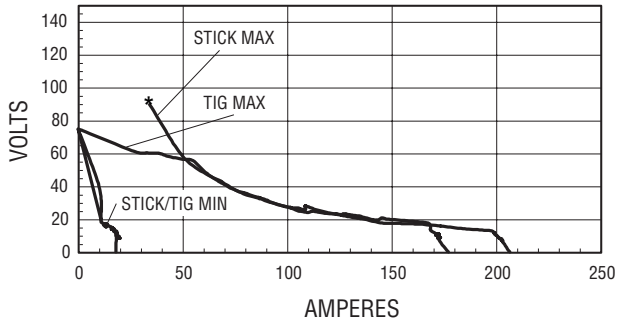


Control Panel Parameter Values

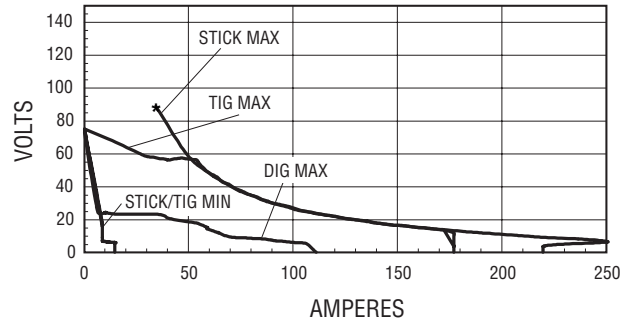
A. Preflow (s)	0.0–25	E. AC Frequency (Hz)	20–250	J. Final Slope Time (s)	0.0–25
B. Initial Amperage (A)	5–200	F. Balance Control (%EN)	50–90	K. Final Amperage (A)	5–200
C. Initial Slope Time (s)	0.0–25	G. Background Amperage (%)	0–100	L. Postflow Time (s)	0.0–50
D. Weld Amperage (A)	5–200	H. Pulse Frequency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

Performance Data

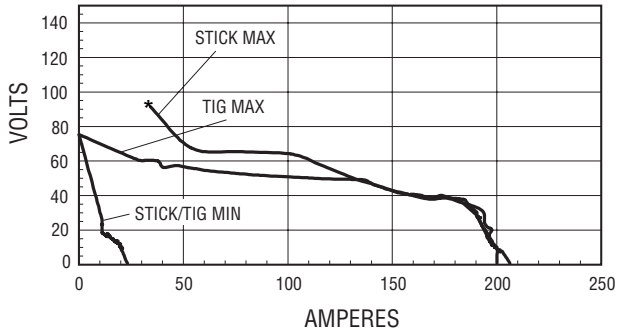
115 VAC INPUT / AC OUTPUT



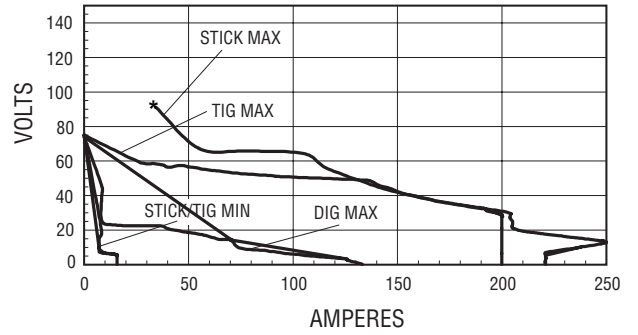
115 VAC INPUT / DC OUTPUT



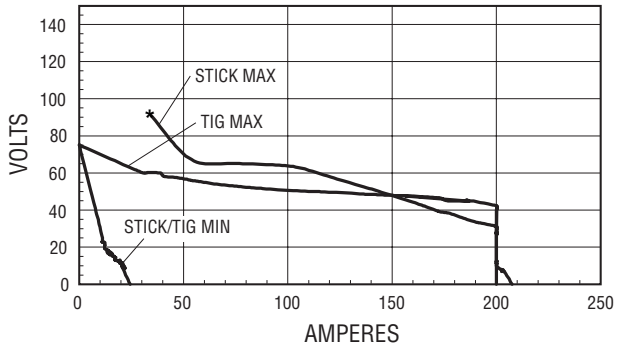
230 VAC SINGLE-PHASE INPUT / AC OUTPUT



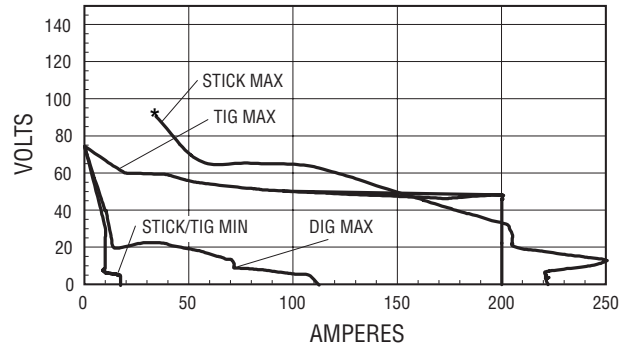
230 VAC SINGLE-PHASE INPUT / DC OUTPUT



3-PHASE VOLTAGE INPUT / AC OUTPUT

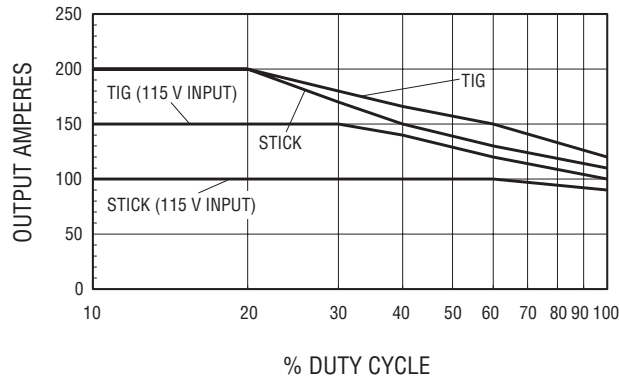


3-PHASE VOLTAGE INPUT / DC OUTPUT



**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) DA1820L 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
Power Source				
Dynasty™ 200 SD	#907 099 #907 100	Basic controls for TIG/Stick, 120–460 VAC Basic controls for TIG/Stick, 120–460 VAC, CE		
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, CE		
TIG Accessories				
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				
Stick Accessories				
Stick Electrodes				
Remote Controls				
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		
Educational Resources				
Gas Tungsten Arc (TIG) Welding Book	#170 555			
TIG Fundamentals Welding CD	#196 567			
Coolant Systems				
Coolmate™ 3	#043 007 #043 007-01-2 #043 008 #043 008-01-2	115 VAC 115 VAC, CE 230 VAC 230 VAC, CE		
Coolmate™ V3	#043 009 #043 009-01-2	115 VAC 115 VAC, CE		
Coolmate™ 4	#042 288 #042 288-01-5	115 VAC 115 VAC, CE		
Aluminum-Protecting Coolant	#043 809			
Low-Conductivity Coolant	#043 810			
Cooling System Hoses				
International-Style Connectors				
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		

Date:

Total Quoted Price:

Distributed by:

