

TIG/STICK WELDING POWER SOURCE



P/N: MR907816003

# DYNASTY<sup>®</sup> 210

# Delivers superior arc performance and high precision welds every time.

- State-of-the-art LCD interface.
- Advanced capabilities.
- Premium results.











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### INDUSTRIAL APPLICATIONS

Aerospace	Heavy Fabrication	Precision Fabrication	Aluminum Ship Repair	Pipe and Tube Fabrication
Anodized Alun	ninum Fabrication			

### PROCESSES

AC/DC TIG (GTAW)

Pulsed TIG (GTAW-P) Stick (SMAW)

### **PRODUCT SPECIFICATIONS**

Welding Mode	Input Power	Welding Amperage Range	Rated Output at 60% Duty Cycle	Amps 120V	•	Rated 240V		Output 480V	50/60 KVA	Hz KW	Max. Open Circuit Voltage
TIG (GTAW)	3 - phase 1 - phase	2-210A (AC) 1-210A (DC)	210A at 18.4V 210A at 18.4V	-	16 28	14 23	8 14	7 12	5.7 5.8	5.2 5.6	80 VDC (30 VDC*)
	1 - phase (120V)	2-150A (AC) 1-150A (DC)	125A at 15V	26	-	-	-	-	2.8	2.7	
Stick	3 - phase 1 - phase	5-210A	160A at 26.4V 160A at 26.4V	-	16 28	11 24	9 14	8 12	6.0 6.4	5.8 5.5	
(SMAW)	1 - phase (120V)	5-100A	90A at 23.6V	27	-	-	_	-	2.9	2.8	

Dimensions	Net Weight		
H: 352mm W: 216mm	21.3kg 22.7kg		
D: 555mm	with CPS		

\*Low VRD sense voltage for Stick and Lift-Arc ™ TIG. IP23 rating – This equipment is designed for outdoor use. It may be stored, but is not intended to be used outside during precipitation unless sheltered. Operating temperature range is -10 to 40° C. Storage temperature range is -30 to 65° C. Portions of the preceding text are contained in EN 60974-1: "Welding power sources for arc welding equipment."

### PERFORMANCE DATA

Input Power	TIG (GTAW) Duty Cycle	Stick (SMAW) Duty Cycle	AC TIG Material Thickness	DC TIG Material Thickness	Stick Electrode Max. Diameter	Generator Requirement
208-480V	310A, 60% 175A, 100%	210A, 30% 160A, 60% 125A, 100%	0.3-6.4mm	0.05-6.4mm	4.8mm 4.0mm 4.0mm	9 kW
120V	150A, 40% 125A, 60% 100A, 100%	100A, 40% 90A, 60% 75A, 100%				





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#### EASY-TO-UNDERSTAND INTERFACE WITH 114MM LCD DISPLAY

- Ensures proper machine setup and parameter selection.
- Informative on-screen explanations and dynamic images enhance the parameter selection process.

#### **PROGRAM MEMORY**

Allows easy naming, saving and recalling of favorite weld settings.

- Deliver more productivity by eliminating the need to manually set the parameters.
- Deliver consistent quality by welders of all skills.

#### **PRO-SET**<sup>™</sup>

Eliminates the guesswork when setting weld parameters.

#### LOCKS AND LIMITS

Provides control of weld parameter ranges minimising deviation from the welding procedure specification (WPS).

#### QUIETPULSE™

Activate QuietPulse by selecting sine or triangular waveshape to reduce audible noise.

#### **AUTO-LINE<sup>™</sup>TECHNOLOGY**

Allows for any input voltage hookup (120-480 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

#### **BLUE LIGHTNING**<sup>™</sup>

Provides more consistent high-frequency (HF) arc starts and greater reliability compared to traditional arc starters.

#### LIFT-ARC<sup>™</sup>

Provides AC or DC arc initiation without the use of high frequency.

#### USB

Front panel port provides the ability to easily update software, back-up settings and transfer saved weld programs from one unit to the next.

## COOLER POWER SUPPLY (CPS)

An integrated 120-volt dedicated-use receptacle for the Coolmate™ 1.3.

#### **COOLER-ON-DEMAND**<sup>™</sup>

Operates the auxiliary cooling system only when needed, reducing noise, energy use, and airborne contaminants pulled through the cooler.

#### WELD PROCESS FEATURES

#### **AC TIG**

**Balance** control provides adjustable oxide removal which is essential for creating the highest quality aluminum welds.

**Frequency** controls the width of the arc cone and can improve directional control of the arc.

#### **AC Waveforms**

- Advanced square provides a fast freezing puddle, deep penetration and fast travel speeds.
- Soft square for a soft buttery arc with maximum puddle control and good wetting action.
- Sine for customers that like a traditional arc. Quiet with good wetting.
- ✓ Triangular reduces the heat input and is good on thin aluminum. Fast travel speeds.

#### Independent amplitude/

**amperage** control allows EP and EN amperages to be set independently to precisely control heat input to the work and electrode.

#### **DC TIG**

**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.

#### **Pulse Waveforms**

- **Square** provides a fast freezing puddle for ultimate arc control.
- ✓ Sine produces a reduced audible sound and provides a more fluid puddle that is good for overlaying applications.
- Triangular provides a quick-forming puddle while further reducing heat for thin materials.

QuietPulse<sup>™</sup>. Activate QuietPulse by selecting sine or triangular waveshape to reduce audible noise.

#### AC/DC STICK

**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<sup>™</sup> adaptive control provides positive arc starts without sticking.

**AC frequency** control adds stability for smoother welds when AC stick welding.

**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.





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### **ORDERING INFORMATION - AVAILABLE BASE PACKAGES**

AIR-COOLED SET UP	Part No.
Power Source	
Dynasty® 210(CPS), CE	MR907816003
Required Accessories	
Air-Cooled TIG Kit	KIT0006
Torch Accessory Kit	WGAK3
Stick Welding Addition	
MMAW Lead Kit	AA73-1/5
NATER-COOLED SET UP	
Power Source	
Dynasty® 210(CPS), CE	MR907816003
Required Accessories	
Coolmate 1.3	MR301616
Coolant	MR043810
Water-cooled TIG kit	KIT0008
Torch accessory kit	WGAK3
Stick Welding Addition	





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Optional Accessories	
TIG Torch Water-Cooled (Note: Not required if ordering KIT0008)	TIG005
TIG Torch Air-Cooled (Note: Not required if ordering KIT0006)	TIG006
Argon regulator & flow gauge (Note: Not required if ordering KIT0006 or KIT0008)	HA801AR
RMS-14 momentary push button 8m (Note: Not required if ordering KIT0006)	MR187208
RCC-14 TIG remote fingertip current control (Note: Not required if ordering KIT0006)	MR151086
Water-cooled torch dinse adaptor (Note: Not required if ordering KIT0008)	MR195377
RHC-14 Remote Hand Current control 6m	MR242211020
Wireless hand control & 14 pin receiver	MR301582
Wireless foot control & 14 pin receiver	MR301580
Small Runner™ cart to suit Dynasty/Maxstar 210 & 300	MR301615