

PROTIG-315Di

Refined TIG welding for industrial applications



Quick Specs

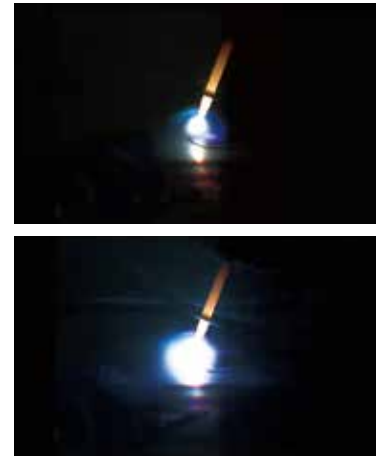
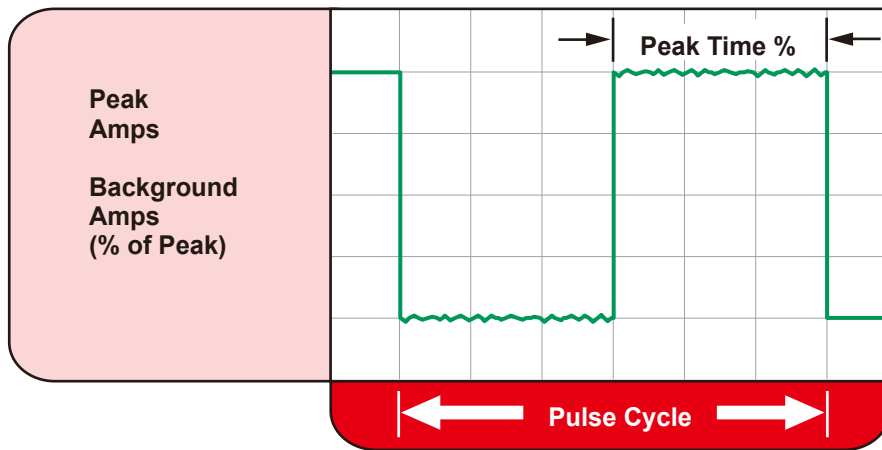
- ◆ **Processes:**
DC TIG
MMA(Stick)
- ◆ **Input Power:**
400V/3-PH/50-60Hz
- ◆ **Rated Output at 40°C (104°F):**
PROTIG-315Di:
315A at 22.6V @60% Duty Cycle
- ◆ **Applications:**
Installation and set-up
Repair and maintenance
Metal fabrication workshops
Chemical and process industry

TOP Features:

- ✓ **Pulse control:** Built in pulsing functions help minimize heat input on thin materials, and provide for a faster freezing weld puddle for uphill welding on curved surfaces such as process piping. The TIG pulse also helps moderate filler metal deposition for consistent bead appearance.
- ✓ **High-frequency TIG starting:** Makes it easy to establish an arc under a variety of conditions. Enhances quality by minimizing the potential for weld contamination created by tungsten inclusions in the weld.
- ✓ **Refined arc ignition from 5A (optional 3A).**
- ✓ **Hot Start Function** reliably ignites the electrode and melts perfectly to ensure the best quality even at the start of the seam.
- ✓ **Arc Force** makes it easier to weld large-drop melting electrode types at low current strengths with a short arc in particular.
- ✓ **Built-in water-cooling unit** offers a safe operation at high temperatures and during extended duty cycles.
- ✓ **Fast Spot Arc system** simply controls the spot arc parameter and offers a stable arc.
- ✓ **4T Trigger Hold** allows to hold the present current by user until press the trigger again.
- ✓ **Fast, precise, clean arc ignition and arc ending.**
- ✓ **10 channels memory capacity.**

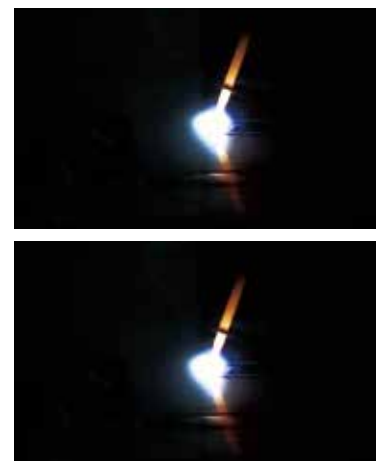
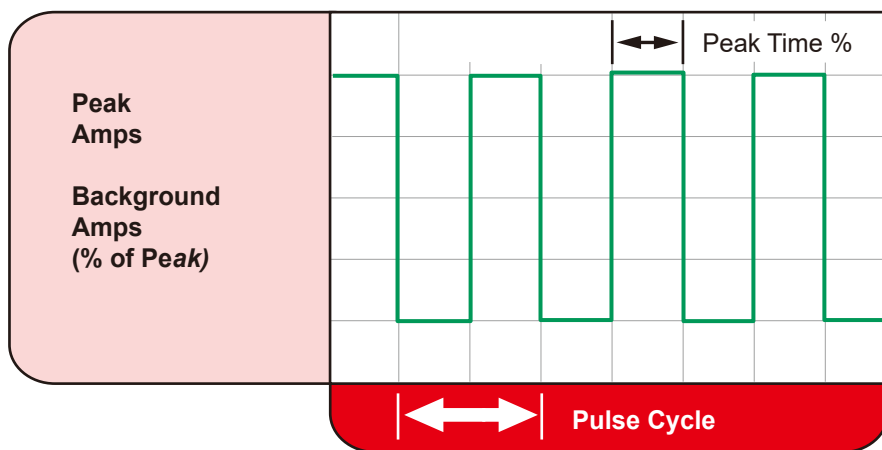
Pulse TIG

◆ Conventional Pulsed TIG



Typically from 0.2 to 10 PPS. Provides a heating and cooling effect on the weld puddle and can reduce distortion by lowering the average amperage. This heating and cooling effect also produces a distinct ripple pattern in the weld bead. The relationship between pulse frequency and travel speed determines the distance between the ripples. Slow pulsing can also be coordinated with filler metal addition and can increase overall control of the weld puddle.

◆ High Speed Pulsed TIG



In excess of 40 PPS, Pulsed TIG becomes more audible than visible—causing increased puddle agitation for a better as-welded microstructure. Pulsing the weld current at high speeds — between a high Peak and a low Background amperage — can also constrict and focus the arc. This results in maximum arc stability, increased penetration and increased travel speeds.

Technical Specifications

Item No	PROTIG-315Di	
Rated Input Voltage	3PH ~ 380V ±15%	
Max. Load Power Capacity	TIG: 9.85KVA	
	MMA: 10.38 KVA	
Rated Duty Cycle(40°C) 60%	TIG: 315A/22.6V	
	MMA: 250A/30V	
100%	TIG: 250A/20V	
	MMA: 200A/28V	
Welding Current/Voltage Range	TIG:3A/10.1V~315A/22.6V	
	MMA: 20A/20.8V~250A/30V	
Open Circuit Voltage	70V~80V	
Power Factor	0.85	
Efficiency	85%	
TIG	Peak Current	0.2Hz~200Hz
	Pulse Frequency	1%~100%
	Arc-starting Current	5A~315A
	Crater-filling Current	5A~315A
	Current Up-slope Time	0.1S~15S
	Current Down-slop Time	0.1S~15S
	Pre-Gas Time	0.1S~15S
	Flow-Gas Time	0.1S~15S
	Spot Arc Time	0.1S~10S
	MMA	Arc Force
Hot Start Time		0.1~3S
Hot Start Current		10A~250A
Dimension (LxWxH)	540x240x480mm	
Weight (KG)	35KG	

Water-cooling Unit: WC-100

Operating Voltage	230V 50/60Hz
Rated Power	260W
Cooling Power	1.5KW(1L/MIN)
Maximum Pressure	0.3MPA/60HZ
Recommended Cooling Liquid	20%~40% ethanol/water
Tank Volume	6.5L

Accessories

Standard accessories



TIG-12



Technical data (EN 60 974-7):	
Type of cooling:	Water Cooled
Rating:	350A DC
	250A AC
Duty cycle:	100%
Tungsten electrodes:	Ø 1.6–4.0 mm

Consumables:

-  Back cap
-  Collet
-  Insulating ring/Adaptor
-  Collet body
-  Gas nozzle, ceramic


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-  Electrode holder with cable 2M
 -  Earth clamp with cable 2M


Optional accessories


BINZEL ABITIG® GRIP 18



Technical data (EN 60 974-7):	
Type of cooling:	liquid cooled
Rating:	350A DC
	250A AC
Duty cycle:	100%
Tungsten electrodes:	Ø 1.6–4.0 mm

-  Argon gas regular

-  Trolley:WT-100

-  Water-cooling unit: WC-100

-  Foot Pedal