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Product Brochure For W176

TIG WELDER - RAZOR™ 320 AC/DC TIG WELDER

#KUMJRRW320ACDC

10-320 Amps Welding Current Range



ORDER CODE:	W176
Type:	TIG WELDER
MODEL:	RAZOR™ 320 AC/DC
Part Number:	#KUMJRRW320ACDC
Voltage / Amperage (V / amp):	415 / 10
Recommended Plug (amp):	10
Input Frequency (Hz) (Hz):	50-100
Input Current (amp):	19
Imax (A) (amp):	~
Ieff Current (amp):	15
Power Rating (kVA):	9
Rated Output Current (amp / V):	~
Range of Output Current (amp):	10 - 320
Arc Force (amp):	~
No Load Voltage (V):	73
Pre-Flow (S) (sec):	0.5-10
Clean Width (%) (%):	~
Slope-Down Time (S) (sec):	0 - 15
Post-Flow Time (sec):	0.5-15
Base Current (%):	~
Pulse Frequency (Hz):	0.5 - 200
Pulse Duty Cycle (%):	~
TIG Welding Thickness Range (mm):	~
MMA Welding Thickness Range (mm):	~
MMA Electrode Range (mm):	~
Duty Cycle 40 Deg C - TIG (% @ amp):	30 @ 315
Duty Cycle 40 Deg C - MMA (% @ amp):	30 @ 270
Duty Cycle 40 Deg C - Plasma (% @ amp):	~
Plasma Severance Cut Capacity Carbon Steel (mm):	~
Plasma Production Cut Capacity Carbon Steel (mm):	~
Plasma Production Cut Capacity Aluminium (mm):	~
Dinse Connector:	~
Protection Class:	IP21S
Insulation Class:	~
Standard:	~
Remote Control (Yes / ~):	~
Recommended Generator (kVA):	~
Efficency (%):	~
Power Factor:	~
Dimensions (mm):	566 x 223 x 405
Nett Weight (kg):	25.5

Description

The RAZOR 320 AC/DC is a new generation inverter welder with a primary function of AC/DC TIG. AC TIG: Featuring multiple AC output waveforms of Square, Trapezoidal and Sine, combined with AC Balance and AC Frequency control you have the ultimate tool in AC TIG Welding mode to suit all your AC TIG welding requirements. DC TIG: Latest 43KHz inverter frequency technology provides the ultimate in smooth and stable arc condition for DC TIG welding mode, coupled with the Digital Weld Sequence Program provides complete and professional DC TIG Welding function. MIX ARC: This function of MIX AC/DC makes it possible to modulate the welding current, alternating a period of TIG AC with a period of TIG DC-. This means that the efficiency of AC TIG welding can be combined with the high penetration of DC TIG welding, obtaining higher welding speeds and establishing the weld puddle quicker on cold work-pieces. The operator adjustable parameter is the percentage of AC waveform compared to DC- waveform over the entire period, which can be varied from 5~95%. MMA: Full attention is given to MMA welding, providing both DC and AC output modes. Ignition AMP and Ignition Time provide for an operator-controlled Hot Start of the weld by applying extra current to the set weld current over a preset time. Arc force allows adjustment of the arc transfer from a digging action through to a softer layering effect.

The complete and professional MMA function allows you to set the ideal arc condition no matter what the electrode and welding situation. Weld Sequence Control: The Digital Weld Sequence Program and intelligent MCU software provide full TIG functionality in AC, DC and MIX modes. Adjustable pre-sets include Pre-Gas time, Start Current, Up Slope, Down Slope, Finish Current level and Post-Gas time. Digital Pulse parameter presets include Peak & Base current; Pulse Frequency & Pulse Width. HF and Lift Arc Ignition. Torch Mode: Multiple torch trigger selections of 2T, 2S, 4T, 4S provide complete flexibility and operator control over the weld sequence from start to ?nish. Remote Control: The Remote Interface allows connection of either Torch Remote or Foot Pedal for remote control of amperage output. Job Memory: Job memory function allows you to enter and store weld parameter settings under job numbers. The job number can be recalled to reveal and use the weld parameters stored, and weld parameters can be further adjusted and stored as required. A total of 50 Jobs can be memorised and stored for recall. Water Cooler Control: Activating the water cooler control allows for the water cooler to operate when welding current is available during welding and will switch off automatically after 5 minutes of no welding current. The RAZOR 320 AC/DC is a complete and professional TIG /MMA welding machine that is ideal for all high-end aluminium, stainless steel fabrication, marine and industrial engineering welding situations. Designed and built to our speci?cation and manufactured in compliance with AS/ NZ60974-1.

Features

- AC TIG
- DC TIG
- MIX ARC TIG
- STICK
- WELD SEQUENCE CONTROL
- 2T/2S/4T/4S Torch Mode
- Foot Control Ready
- Water Cooler Ready

- AC TIG: Featuring multiple AC output waveforms of Square, Trapezoidal and Sine, combined with AC Balance and AC Frequency control you have the ultimate tool in AC TIG Welding mode to suit all your AC TIG welding requirements.

- DC TIG: Latest 43KHz inverter frequency technology provides the ultimate in smooth and stable arc condition for DC TIG welding mode, coupled with the Digital Weld Sequence Program provides complete and professional DC TIG Welding function.

- MIX ARC: This function of MIX AC/DC makes it possible to modulate the welding current, alternating a period of TIG AC with a period of TIG DC-. This means that the e?ciency of AC TIG welding can be combined with the high penetration of DC TIG welding, obtaining higher welding speeds and establishing the weld puddle quicker on cold work-pieces. The operator adjustable parameter is the percentage of AC waveform compared to DC- waveform over the entire period, which can be varied from 5-95%.

- MMA: Full attention is given to MMA welding, providing both DC and AC output modes. Ignition AMP and Ignition Time provide for an operator-controlled Hot Start of the weld by applying extra current to the set weld current over a preset time. Arc force allows adjustment of the arc transfer from a digging action through to a softer layering effect. The complete and professional MMA function allows you to set the ideal arc condition no matter what the electrode and welding situation.

- Weld Sequence Control: The Digital Weld Sequence Program and intelligent MCU software provide full TIG functionality in AC, DC and MIX modes. Adjustable pre-sets include Pre-Gas time, Start Current, Up Slope, Down Slope, Finish Current level and Post-Gas time. Digital Pulse parameter presets include Peak & Base current; Pulse Frequency & Pulse Width. HF and Lift Arc Ignition.

- Torch Mode: Multiple torch trigger selections of 2T, 2S, 4T, 4S provide complete ?exibility and operator control over the weld sequence from start to ?nish.

- Remote Control: The Remote Interface allows connection of either Torch Remote or Foot Pedal for remote control of amperage output. Job Memory: Job memory function allows you to enter and store weld parameter settings under job numbers. The job number can be recalled to reveal and use the weld parameters stored, and weld parameters can be further adjusted and stored as required. A total of 50 Jobs can be memorised and stored for recall.

- Water Cooler Control: Activating the water cooler control allows for the water cooler to operate when welding current is available during welding and will switch off automatically after 5 minutes of no welding current.

- AC Wave Forms:

- AC Square Wave: Allows the current to change from electrode (+ positive) to electrode (- negative) very quickly. This produces high voltage as the current switches polarities allowing the arc to restart
- easily. The arc can be maintained without the use of high-frequency and the fast transitions provide for responsive, dynamic and focused arc for better directional control.

- AC Triangle Wave: Characterised by a particularly soft and concentrated arc combining the effect of peak amperage while reducing overall heat input. Leads to quick puddle formation and, because
- of lowered heat input, reduced weld distortion, especially on thin material. This waveform is ideal for very precise welding of thin Aluminium plate.

- AC Sine Wave: It is the standard waveform, characterised by low noise and excellent arc control, it also gives the soft-arc feel of a conventional power source, while using square transitions to
- eliminate the need for continuous HF.

- AC MIX ARC: This function of MIX AC/DC makes it possible to modulate the welding current, alternating a period of TIG AC with a period of TIG DC-. This means that the efficiency of AC TIG
- welding can be combined with the high penetration of DC TIG welding, obtaining higher welding speeds and establishing the weld puddle quicker on cold work-pieces. The operator adjustable
- parameter is the percentage of AC waveform compared to DC- waveform over the entire period, which can be varied from 5~95%. Ideal for welding heavier gauge material with less current than
- AC welding.

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Includes

- RAZOR TIG 320 AC/DC Power Source
- 4m High Performance T3 TIG Torch (including consumables)
- 4m Twist Lock Electrode Holder
- 500 Amp Earth Clamp & Lead
- Argon Flowmeter Regulator
- 2m Gas Hose Complete with fittings
- Operating Manual

Optional Accessories

- Standard Trolley - (W176B)
- Water Cooling System, Trolley & Torch - (W176K)
- Foot Control - (W176A)

Specific Features



W176



Right View



Front View

Recommended Accessories

W505A
T3 Tig Torch Consumable Pack



W10361
Magnetic TIG Torch Rest



W6000
Ceramic Nozzle



W6002
1.6mm Collet Body



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Product Brochure For W176

W6003
2.4mm Collet Body



W6005
Head Gasket



W6006
Heat Isolator



W6007
Short Back Cap



W6008
Long Back Cap



W119
Anti-Spatter Spray



O0185
CO2/Ar - 86% Argon & 14% Carbon Dioxide Disposable Cylinder



O300
Gas Refillable Cylinder



O304
Gas Refillable Cylinder



O3045
Gas Refillable Cylinder



O302
Gas Refillable Cylinder



O306
Gas Refillable Cylinder



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Product Brochure For W176

O3065
Gas Refillable Cylinder



O0171
Argon Gas Regulator



W161
Argon Gas Regulator-Bobbin Flowmeter



W160A
Argon Gas Regulator-Twin Gauge



W590
1.6mm Tig Tungsten Electrode - Zirconiated White



W596
2.4mm Tig Tungsten Electrode - Zirconiated White



W597
1.6mm Tig Tungsten Electrode - Ceriated Grey



W598
2.4mm Tig Tungsten Electrode - Ceriated Grey



W002
Auto Darken Welding Helmet - 9~13 Shade



W1000A
Promax HV5 Welding Jacket



W1001A
Promax Blue FR Welding Jacket



W1002A
Professional Promax BL7 Welding Jacket



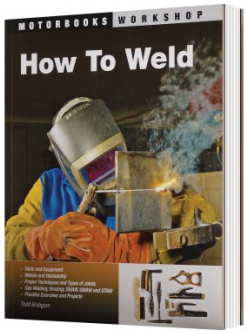
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Product Brochure For W176

W100
ROGUE™ Heavy Duty Welding Gloves - 400mm



L3456
How to Weld Book



W225
Welding Curtain



W125
Ø1.6mm TIG Filler Rod - Mild Steel



W126
Ø2.4mm TIG Filler Rod - Mild Steel



W127
Ø1.6mm TIG Filler Rod - Stainless Steel



W128
Ø2.4mm TIG Filler Rod - Stainless Steel

