

# LIGHT DUTY AC/DC TIG MACHINES

## Tradestig AC220 & AC220a



**Designed for the craftsman welder, the Murex Tradestig AC220 and AC220a offer the complete solution for a wide range of TIG welding applications.**

These compact units with their impact resistant polymer cases are light and easy to carry, yet robust enough for use in the toughest of industrial environments. Just as important is the fact that the compact design does not compromise cooling. Large heat sinks provide a cool running machine and the carefully thought out internal design helps to protect the sensitive internal components from dust and dirt to give a longer working life.

Compliance with IP23 gives you the assurance that these Tradestigs can be used out of doors – even in the rain.

- Designed for quality TIG welding with all types of material
- QWave™ for high arc stability and low noise levels in AC
- Pulse TIG, AC Balance and AC Frequency controls on the AC220a
- True MMA welding characteristics in AC and DC modes – Hot start, Arc Force and polarity switch (DC)
- Two program function, allowing pre program and program change during welding
- Electrode preheating for excellent weld starts and extended electrode life

The control panels of both Tradestigs have all the necessary functions for DC and AC/DC TIG and MMA welding. With the Tradestig AC220, all you need to do is set the plate thickness on the control panel and the machine will do the rest, however you can still control the welding current, slope down and post-gas manually.

The AC220a control panel has several advanced functions including Pulse TIG, AC Balance, to control arc cleaning and penetration and AC Frequency, to control arc width. You are also able to control electrode preheating, for different electrode profiles and improved starts.

In both DC and AC modes these units provide excellent arc strike and a consistent, stable arc. All types of material and thickness up to 5mm can be welded.

## Technical Specification

| Tradestig AC220 and AC220a   |   |
|--|---|
| <b>Mains Voltage</b>   | 230V ± 10%, 1~50/60Hz                       |
| <b>Mains Supply</b>  | Zmax 0.28 ohm                               |
| <b>Primary current</b>   |   |
| Imax TIG   | 27A   |
| Imax MMA   | 25A   |
| <b>No-load power</b> demand when in the energy saving mode, 6.5min after welding | 40W   |
| <b>Setting range</b>   |   |
| TIG AC*/DC   | 3 - 220A                                    |
| MMA  | 4 - 160A                                    |
| <b>Ignition Voltage</b>  | 11.5kV                                      |
| <b>Permissible load at TIG AC/DC</b>   |   |
| 100% duty cycle  | 140A/15.6V                                  |
| 60% duty cycle   | 150A/16V                                    |
| 20% duty cycle   | 220A/18.8V                                  |
| <b>Permissible load at MMA</b>   |   |
| 100% duty cycle  | 110A/24V                                    |
| 60% duty cycle   | 120A/24.8V                                  |
| 30% duty cycle   | 160A/26.4V                                  |
| <b>Power factor at maximum current</b>   |   |
| TIG  | 0.99  |
| MMA  | 0.99  |
| <b>Efficiency at maximum current</b>   |   |
| TIG  | 66%   |
| MMA  | 74%   |
| <b>Open circuit voltage TIG</b>  | 55-60V                                      |
| <b>Open circuit voltage MMA</b><br>with VRD                                      | 55-60V<br>< 35V                             |
| <b>Operating temperature</b>   | -10 to +40°C                                |
| <b>Transportation temperature</b>  | -20 to +55°C                                |
| <b>Constant sound pressure in open circuit</b>                                   | < 70 dB(A)                                  |
| <b>Dimensions L x W x H</b>  | 418 x 188 x 345mm                           |
| <b>Weight</b>  | 16kg  |
| <b>Shielding gas</b><br>max pressure   | All types intended for TIG welding<br>5 bar |
| <b>Insulation class transformer</b>  | H   |
| <b>Enclosure class</b>   | IP23  |
| <b>Application class</b>   | S   |

\* The minimum current during AC welding depends on the alloy used for the aluminium plates and their surface cleanliness



## Ordering Information

| Description                      | Part No           |
|----------------------------------|-------------------|
| <b>Tradestig AC 220 Package</b>  | <b>0479100230</b> |
| <b>Comprises:-</b>               |                   |
| Tradestig AC220 Power Source     | 0460750880        |
| TG 203 TIG torch 3.8m leads      | 0701415022        |
| TG 203 torch accessory kit       | 0701410207        |
| Adaptor 1/4 - 1/8 BSP TIG torch  | 0701415248        |
| Vantage flowmeter 14L/min        | 0701300021        |
| Saffire 300 series 1ec Ar2       |                   |
| TIG regulator                    | 0701282689        |
| Instruction manual               |                   |
| <b>Tradestig AC 220a Package</b> | <b>0479100231</b> |
| <b>Comprises:-</b>               |                   |
| Tradestig AC 220a Power Source   | 0460750881        |
| TG 203 TIG torch 3.8m leads      | 0701415022        |
| TG 203 torch accessory kit       | 0701410207        |
| Adaptor 1/4 - 1/8 BSP TIG torch  | 0701415248        |
| Vantage flowmeter 14L/min        | 0701300021        |
| Saffire 300 series 1ec Ar2       |                   |
| TIG regulator                    | 0701282689        |
| Instruction manual               |                   |

## Optional Extras

| Description                       | Part No    |
|-----------------------------------|------------|
| 5m weld lead and electrode holder | 0701403213 |

## Typical areas of application

Repair & maintenance, garages, body shops, aerospace, sheet metalwork and process engineering.