



RAINBOW HF



SINGLE PHASE TIG DC INVERTER WELDING EQUIPMENT

RAINBOW 182 HF PRO - 202 HF PRO and RAINBOW 201 HF represent the latest evolution of inverter technology DC welding machines for professional applications. Equipped with a digital control, these powerful 100 kHz power sources, based on the very latest IGBT technology and fitted with flat transformer, can be used for TIG welding of any metal, excluding aluminium and its alloys.

RAINBOW 182 HF PRO - 202 HF PRO and RAINBOW 201 HF, also very well performing in MMA welding, due to their lightness and portability, are the ideal solution for excellent quality welding in maintenance, assembly and light fabrication works.



CC



DC
+ -

DIGITAL
888



DESIGNER: SPREAFICO DESIGN - ITALY

- ▶ Digital control of all the welding parameters
- ▶ TIG arc striking by high frequency or "lift arc"
- ▶ High performance on thin metal sheets
- ▶ Low energy consumption and high efficiency
- ▶ Energy Saving function to operate the power source cooling fan when necessary only
- ▶ Control panel protected against accidental impact
- ▶ Sloping front control panel, easy to read and adjust and highly visible from any direction
- ▶ IP 23 protection class and dust-proof electronic components, thanks to the innovative "Tunnel" fan cooling system, allow their use in the toughest work environments
- ▶ Use of up/down TIG torches will enable to adjust directly from the torch the welding parameters



"EASY PULSE" - SYN

(RAINBOW 182 HF PRO - 202 HF PRO)

"EASY PULSE" feature, in function of the chosen peak current, in a simple and automatic way will synergically generate an adequate pulse frequency (between 0.5 and 500 Hz) and a base current, both readjustable in a synergic way. Pulse parameter values preselected in the control will save setting time, by ensuring the best possible pulse parameter combinations, ideal for less skilled welders.



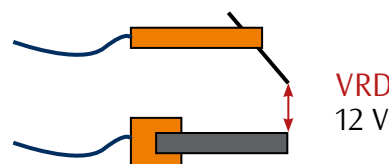
"CYCLE" FUNCTION

(RAINBOW 182 HF PRO - 202 HF PRO)

"CYCLE" function allows, by simply pressing the torch trigger, to continuously switch between two current values, previously preselected. This function is most suitable for welding different thickness profiles, requiring a continuous current adjustment change.

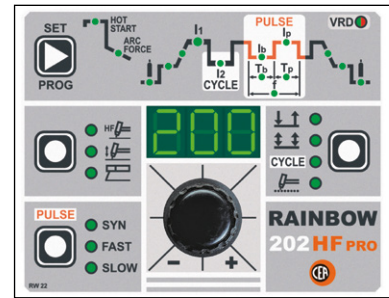
VRD - VOLTAGE REDUCTION DEVICE

VRD device reduces the open circuit voltage to values below 12 V, by enabling the use of the machine in highly hazardous environments for the operator's maximum safety.



RAINBOW 201 HF

- ▶ Digital control of all the welding parameters
- ▶ Welding process selector:
TIG DC • TIG DC “Lift” • MMA
- ▶ Welding Mode Selector:
2T/4T • Spotting
- ▶ Digital ammeter with welding current presetting and hold function of the last read welding parameter
- ▶ Digital display for presetting all the welding parameters



RAINBOW 182 HF PRO - 202 HF PRO

- ▶ Welding “Mode” CYCLE
- ▶ 3 Pulse mode TIG:
 - SYN: automatic pulse parameters setting in function of chosen peak current
 - FAST: up to 500 Hz in TIG DC
 - SLOW: to have both peak and base current time adjustments
- ▶ Storing and recalling up to 99 personalized welding programs
- ▶ Monitoring of all welding parameters.

| RAINBOW FUNCTION | 182 HF PRO | | 201 HF | | 202 HF PRO | |
|------------------------|------------|-----|--------|-----|------------|-----|
| | TIG DC | MMA | TIG DC | MMA | TIG DC | MMA |
| Pre Gas | • | | • | | • | |
| Initial current | • | | | | • | |
| Up Slope | • | | • | | • | |
| Welding current | • | • | • | • | • | • |
| 2nd welding current | “CYCLE” | | | | • | |
| Pulse cycle | “PULSE” | | | | • | |
| Down Slope | • | | • | | • | |
| Final current | • | | | | • | |
| Post gas | • | | • | | • | |
| Spot time | • | | • | | • | |
| Automatic Hot Start | | • | | • | | • |
| Automatic Arc Force | | • | | • | | • |
| Automatic Antisticking | | • | | • | | • |

| TECHNICAL DATA | | RAINBOW 182 HF PRO | | RAINBOW 201 HF | | RAINBOW 202 HF PRO | |
|----------------------------------|-------------------------------------|---|-----------|----------------|-----------|--------------------|-----------|
| | | TIG DC | MMA | TIG DC | MMA | TIG DC | MMA |
| Single phase input 50/60 Hz | V ^{+20%} / _{-20%} | 230 | 230 | 230 | 230 | 230 | 230 |
| Input Power @ I ₂ Max | kVA | 6,9 | 8,3 | 8,5 | 9 | 8,5 | 9 |
| Delayed Fuse (I _{eff}) | A | 16 | 16 | 20 | 20 | 20 | 20 |
| Power Factor / cos φ | | 0,67/ 0,99 | 0,67/0,99 | 0,67/0,99 | 0,67/0,99 | 0,67/ 0,99 | 0,67/0,99 |
| Efficiency Degree | | 0,82 | 0,84 | 0,82 | 0,84 | 0,82 | 0,84 |
| Open circuit voltage | V | 90 | 90 | 88 | 88 | 88 | 88 |
| Current range | A | 5 - 180 | 5 - 160 | 5 - 200 | 5 - 160 | 5 - 200 | 5 - 160 |
| Duty cycle at (40°C) | A 100% | 110 | 80 | 120 | 110 | 120 | 110 |
| | A 60% | 130 | 100 | 140 | 130 | 140 | 130 |
| | A X% | 180 (25%) | 160 (20%) | 200 (25%) | 160 (30%) | 200 (25%) | 160 (30%) |
| Standards | | EN 60974-1 • EN 60974-3 • EN 60974-10 • | | | | | |
| Protection Class | IP | 23 S | | 23 S | | 23 S | |
| Insulation Class | | H | | H | | H | |
| Dimensions | ↗ mm | 390 | | 390 | | 390 | |
| | → mm | 135 | | 135 | | 135 | |
| | ↑ mm | 300 | | 300 | | 300 | |
| Weight | kg | 7,5 | | 7,5 | | 7,5 | |



ACCESSORIES

- CD6 remote control
- PSR 7 foot remote control
- Up/Down torches
- Carrying belt

Other voltages available on request

These power sources are built for industrial environment use. EMC (CISPR 11): class A

