EXTIG210AC

TIG welder AC / DC EXPERT TIG 210 AC / DC PFC inverter, for aluminum, 5.7kW, 230V, maximum current: 210A, MMA method; EXPERT series

Length:**430 [mm]**
Welding electrode diameter:**1.6-4.0**
Model:**EXPERT TIG 210 AC / DC PFC**
Width:**160 [mm]**
Power:**5.7 [kW]**
Height:**300 [mm]**
Name:**TIG AC / DC welder**
Maximum current:**210 [A]**
Welding current adjustment range:**3-210**
Application:**for aluminum**
Power:**230 [V]**
Weight:**11.5 [kg]**
Mains protection:**16 [A]**
Inverter:**Yes**
Idle Voltage:**60 [V]**
Current at work 60%:**210 [A]**
Current drawn from the network (max):**26 [A]**

EXPERT TIG 210 AC / DC PFC is a professional inverter welder for TIG welding of all metals, including aluminum and stainless steel. The device enables TIG and TIG PULSE welding with alternating current (AC), direct (DC), mixed (MIX) and MMA.

CHARACTERISTIC:

- EXPERT TIG 210 AC / DC PFC is a portable power source, made in the IGBT technology, intended for TIG and TIG PULS welding with alternating current (AC), direct (DC), mixed current (MIX) and the MMA method with a coated electrode.
- The small size and weight make the device perfect for both workshop and field work.
- The device has welding modes: TIG AC, TIG AC PULS, TIG DC, TIG DC PULS, TIG MIX, TIG POINT, TIG 2-LEVEL, MMA.
- The TIG AC and TIG AC PULS functions are used for welding aluminum steels.
- The TIG DC and TIG DC PULS function is used for welding stainless steel, carbon and low-alloy steel, copper and titanium. Welding takes place in an inert gas shield.
- TIG MIX function: this special method of TIG welding, which consists in combining direct and alternating current, enables full penetration and effective cleaning when welding aluminum.
- TIG POINT function: allows for tacking thin materials.
- TIG 2-LEVEL function: "2-level" current control enables switching between the higher and lower current level by pressing the button on the torch repeatedly.
- By adjusting the TIG PULS pulse welding parameters, we have an influence on the shape of the weld and the focus of the arc.
- Pulse welding also allows you to reduce the amount of heat supplied to the material and is used when welding thin materials.

- The arc ignition takes place in the non-contact (HF) or touch (LIFT) mode. The LIFT function is used during welding in an environment with a high risk of the influence of electromagnetic disturbances on the environment.
- Both with HF contactless ignition and LIFT touch ignition, we have the option to select the button function in the TIG torch between 2-step or 4-step operation (button lock for long welds).
- The legible and easy-to-use digital control panel enables precise adjustment of the device, ensures stable parameters and high quality welding.
- The welder also has functions that facilitate the MMA welding process with a coated electrode:
- ARC FORCE: short circuit current regulation - facilitates the transfer of the molten electrode drop to the welded material, preventing the arc extinction when the electrode drop contacts the weld pool
- HOT START: hot start regulation - it facilitates ignition of the electrode by providing a higher welding current with each arc ignition.
- ANTI STICK: short-circuit protection - automatically switches off the welding voltage if the electrode sticks to the welded material, which makes it easier to detach and prevents accidental formation of the welding arc
- VRD (Voltage Reduction Device) function - reduces the open-circuit open-circuit voltage at the electrode to a safe value. Provides anti-shock safety when working in a humid environment.

The digital display facilitates the adjustment of the following parameters of the welding machine:

- initial flow of shielding gas
- starting current
- up-slope time
- welding current
- base current
- down-slope time
- final current
- shielding gas end flow
- pulse length
- heart rate frequency
- frequency in AC
- HOT START value
- ARC FORCE value
- gas test

Advanced settings mode allows you to manage additional functions of the device:

- selection of the adjustment place: device panel or remote adjustment with the foot control
- TIG mode: continuous, point, 2-level
- saving and reading 10 welding programs
- Ignition type selection for TIG DC: normal polarity or reverse polarity
- VRD function: on or off
- time adjustment for the HOT START function

- TIG spot welding time control
- factory reset

PHYSICAL PARAMETERS	
Level of security	IP23S
Weight	11.5 kg
Overall dimensions length x width x height	430x160x300 mm
TECHNICAL PARAMETERS	
Up-slope time (s)	0 - 10 sec
Down-slope time (s)	0 - 15 sec
Pulse frequency Hz	0.2 - 500 Hz
Pulse length (%)	5 - 95%
Gas after (s)	0.1 - 60 s
Gas before (s)	0.01 - 9.99 sec
Power	5.7 kW
Idle voltage	60V TIG / 13.2V MMA (VRD)
Final current	10 - 210 A.
Maximum current	210 A - 30% @ 40 degrees C
Current at work 100%	115 A @ 40st. C
Current at work 60%	148 A @ 40st. C
Starting current	3 - 210 A.
Welding electrode diameter	1.6 - 4.0 mm
Welding current adjustment range	3 - 210 A (TIG DC) / 5 - 210 A (TIG AC) / 10 - 170 A (MMA)
POWER PARAMETERS	
Power supply network protection	16 A "C"
Rated supply voltage	230 V; 50Hz (1ph)