



CC
CV

Inverter

DC
+ -

SYN

DIGITAL
888



SYNERGIC MULTIPROCESS INVERTER EQUIPMENT WITH SEPARATE WIRE FEEDER

QUBOX series multiprocessor equipment are characterized by a synergic digital control and inverter technology integrated into a sturdy and functional metallic structure, with a separate wire feeder. Technologically ahead, robust and easy-to-use, they allow high quality welding in MIG-MAG, MMA and TIG with "Lift" mode.

QUBOX equipment also allow less experienced operators to easily adjust all welding parameters in an intuitive way. Once the wished program is selected, the welding control automatically determines the best parameters based on the material type, wire diameter and

gas being used, fruit of CEA's know-how acquired in over 65 years' experience.

These power sources represent the best choice in all industrial fields for all qualified applications requiring high precision and repeatability of the welding results, such as medium and large fabrication work, shipyards and steel erection.

QUBOX W equipment are fitted with integrated water cooling unit.

FEATURES

- ▶ Multiprocess power sources: MMA - TIG LIFT - MIG/MAG Synergic & Manual
- ▶ Parameter control directly from the wire feeder
- ▶ Digital control of the welding parameters with synergic curves preset according to used type of material, gas and wire diameter
- ▶ Ability to store personalized welding parameters up to 99 JOBS
- ▶ Smart PROGRAM™ key for quickly selecting any program
- ▶ Feeding mechanism with 4 rolls of large diameter for a precise and constant wire driving
- ▶ Double groove rolls replaceable without any tool
- ▶ “Energy saving” function to operate the power source cooling fan and torch water cooling only when necessary
- ▶ Excellent arc striking always precise and efficient
- ▶ Ability to partially or totally lock the equipment with access key by password
- ▶ Reduced energy consumption
- ▶ Trouble shooting auto-diagnosis feature
- ▶ Great robustness due to solid metallic main structure
- ▶ Control rack protection cover on the wire feeder
- ▶ Initial and final crater control
- ▶ VRD – Voltage Reduction Device
- ▶ Water cooling equipment integrated into the power source (W version)



QF 4 AND QF 4W WIRE FEEDER

The digital control of all parameters, duly protected by a cover, is located directly on the QF4 (air cooled) and QF4W (water cooled).

- Professional wire feeding mechanism with 4 rolls of large diameter for a precise and constant wire driving
- Graduated knob to achieve the most correct value of the wire pressure, which remains unchanged also after any arm opening and closing
- Double groove rolls replaceable without any tool
- Lodging for wire spools up to 300 mm diameter maximum

QUBOX equipment in the air cooled version offer the possibility of utilizing up to 50 m long interconnecting cables from the power source to the feeder.

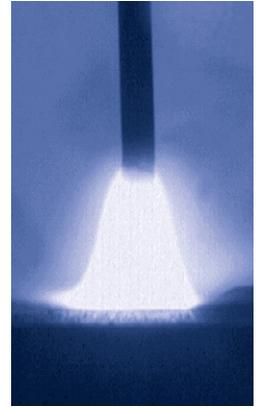




VISION.ARC

vision.ARC is the innovative welding arc control developed by CEA granting a short arc extremely stable and precise in spite of any change of the

external conditions. vision.ARC ensures outstanding performances, impossible to be obtained by traditional power sources.



OPEN TO THE FUTURE

QUBOX equipment are systems open to evolving technology: both control firmware and software are designed to be always updatable.

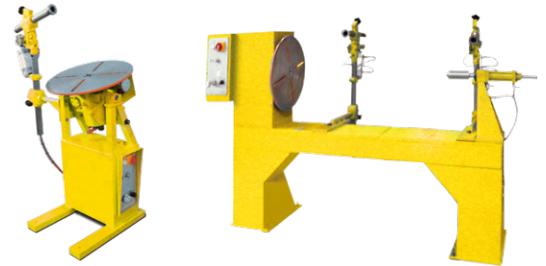
ETHERNET LAN

Possibility of having a special version fitted with an external Ethernet socket to interface the equipment to a remote device and support software



SIMPLE AUTOMATION

Standard equipped with analogic-digital I/O, QUBOX power sources can be easily integrated into automated welding equipment without any expensive and sophisticated external interfaces usually necessarily supplied for robotics.



WSC - WIRE START CONTROL

WSC wire start control prevents any possible wire sticking to the workpiece or torch nozzle, by always ensuring a precise and "soft" arc striking.

BURN BACK CONTROL

At the end of each weld, in any condition and with any metal, the digital control ensures a perfect wire cut thus avoiding the formation of the typical "wire globule" by ensuring the subsequent best arc striking.

UP/DOWN

Possibility of working by means of up/down torches to easily adjust main welding parameters at the work place.



SPECIAL PROCESSES (OPTIONAL)

vision.ARC2, available on QUBOX, is the software platform which enables to weld by means of the following special processes:



vision.PIPE for a more accurate welding in pipe first root pass



vision.ULTRASPEED for high speed welding



vision.COLD to weld thin thickness laminations with low heat transfer



vision.POWER for a more concentrated arc and deeper penetration on medium and thick thickness

ACCESSORIES

- Up/Down torches
- WK1 kit of standard wheels/WK2 kit of extra large wheels
- Adjustable torch support
- Wire feeder holding support
- Dust filter
- Remote control RC 178



WK1



WK2



TECHNICAL DATA		QUBOX		
		400	400W	500W
Three phase input 50/60 Hz	V $\begin{matrix} +20\% \\ -20\% \end{matrix}$	400	400	400
Input Power @ I ₂ Max	kVA	23	23,5	29,5
Delayed Fuse (I _{eff})	A	32	32	40
Power Factor / cos φ		0,7/0,99	0,7/0,99	0,75/0,99
Efficiency Degree		0,88	0,88	0,89
Open circuit voltage	V	62	62	62
Current range	A	10 - 400	10 - 400	10 - 500
Duty cycle at (40°C)	A 100%	330	330	400
	A 60%	360	360	460
	A X%	400 (50%)	400 (50%)	500 (50%)
Wires	∅ mm	0,6 - 1,6	0,6 - 1,6	0,6 - 1,6
Standards		EN 60974-1 • EN 60974-5 • EN 60974-10		
Protection Class	IP	23 S	23 S	23 S
Insulation Class		H	H	H
Dimensions	↗ mm	1030	1030	1030
	→ mm	950	950	950
	↑ mm	515	515	515
Weight	kg	62	75	80

Other voltages available on request

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



Technical features might change without notice