



# CONVEX BASIC



## MULTIFUNCTION INVERTER POWER SOURCES FOR MIG/MAG, MMA AND TIG WELDING

Latest generation inverter technology with digital control is the main feature of the multifunction CONVEX BASIC series. Innovative, technologically ahead, robust and easy-to-use, they offer premium quality welding in MIG/MAG, MMA and TIG with “Lift” mode and represent the best solution for the most qualified welding applications in any industrial field requiring high precision and repeatability of the achieved results.

CONVEX BASIC's are ideal for anybody looking for an innovative, modern and, at the same time, user friendly equipment, more similar in the adjustments of the parameters to a traditional power source. CONVEX BASIC 330, 400 e 500 are supplied with a separate wire feeder, whilst CONVEX BASIC 320 is designed with a built-in one.

### WHY TO CHOOSE CONVEX BASIC?

- ▶ Excellent welding quality
- ▶ Welding process always under control thanks to the digital adjustment of all parameters
- ▶ Multiprocess equipment with exceptional welding characteristics in MIG/MAG, MMA and TIG.
- ▶ Excellent arc striking always precise and efficient
- ▶ User friendly and easy-to-use selection and recalling of the parameters and welding programs
- ▶ Ability to store personalized welding parameters up to 99 JOBS
- ▶ Ability of presetting welding parameters
- ▶ Initial and final crater control
- ▶ Monitoring and repeatability of the welding parameters
- ▶ Low energy consumption
- ▶ “Energy Saving” function to operate the power source cooling fan and torch water cooling only when necessary
- ▶ Mains voltage fluctuation automatic compensation within +20% -20%



- ▶ Metallic main structure with shockproof fibre compound front frames.
- ▶ Control rack protection cover.
- ▶ Easy to read and adjust sloping front control panel, highly visible from any direction.
- ▶ IP 23 S protection class and dust-proof electronic components, thanks to the innovative "Tunnel" fan cooling system, allow operation in the toughest work environments.



## POWER SOURCE

- ▶ Digital adjustments of all the welding parameters
- ▶ Digital Voltmeter and Ammeter with Hold Function of the last parameter and presetting of the welding current
- ▶ Digital display to preset and read the welding parameters
- ▶ Selector: Current • Wire speed
- ▶ Selector: Voltage • Electronic inductance
- ▶ Welding "Process" selector:
  - MIG/MAG
  - MMA
  - TIG DC
  - JOB
- ▶ Welding "Cycle" selector:
  - 2T/4T
  - "Initial & Crater"
  - Spot timer
  - Stitch timer
- ▶ Arc voltage and electronic inductance adjustment
- ▶ Gas purge and wire inch
- ▶ Special function key

## MMA WELDING

- ▶ Adjustable Arc Force to select the best welding arc dynamic characteristic
- ▶ Adjustable Hot Start to improve the arc striking with the most difficult electrodes
- ▶ Electrode Antisticking function

## TIG WELDING

- ▶ DC TIG welding by "Lift" mode striking to minimize tungsten inclusion





CONVEX BASIC 330, 400 and 500 equipment offer the possibility of using interconnecting cables up to 50 m in order to control the parameters directly from the feeder.

#### HS 5 WIRE FEEDER

- ▶ Wire speed adjustment
- ▶ Welding voltage adjustment
- ▶ Gas purge and wire inch



- ▶ 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 Ø maximum

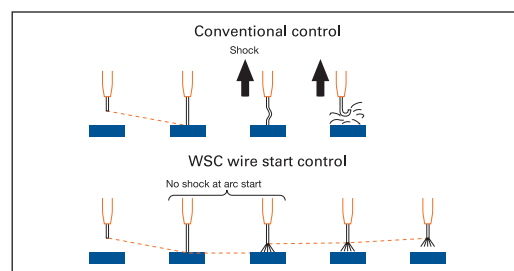


#### SHS AND MINI SHS STRONG FEEDERS

These wire feeders, fitted with a robust polypropylene suitcase, are the ideal solution for site jobs and harshest environments. Developed for use with solid and flux cored wires, SHS can lodge spools up to 300 mm Ø, whilst more compact and lighter mini SHS (8 kg only) can only take spools up to 200 mm Ø. V/Ameter available on request only with a special equipment version.

#### WSC - WIRE START CONTROL

This new arc striking control device prevents any possible wire sticking to the workpiece or torch nozzle, by ensuring a prompt and precise arc striking.



#### BURN BACK CONTROL

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



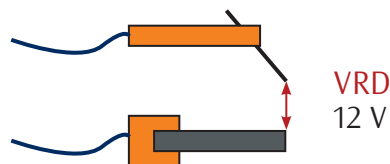
#### OPEN TO THE FUTURE

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



## VRD - VOLTAGE REDUCTION DEVICE

VRD device reduces open circuit voltage below 12V and grants additional safety protection for the operator in all highly hazardous environments.



## ACCESSORIES

- Water cooling and gas cylinder trolley
- Wire feeder castors kit
- RC 176 remote control
- HR 30 water cooling equipment
- Autotransformer
- Water cooling trolley suitable for two gas cylinders and /or autotransformer



TECHNICAL DATA		CONVEX BASIC			
		320	330	400	500
Three phase input 50/60 Hz	V $\begin{smallmatrix} +20\% \\ -20\% \end{smallmatrix}$	400	400	400	400
Input Power @ I <sub>2</sub> Max	kVA	14,3	15	18,6	25,6
Delayed Fuse (I <sub>2</sub> @ 60%)	A	20	20	25	35
Power Factor / cos $\varphi$		0,86/0,99	0,86/0,99	0,90/0,99	0,94/0,99
Efficiency Degree		0,85	0,84	0,88	0,89
Open circuit voltage	V	63	63	70	70
Current range	A	10 - 320	10 - 330	10 - 400	10 - 500
Duty cycle at (40°C)	A 100%	240	280	310	380
	A 60%	270	300	370	460
	A X%	320 (40%)	330 (40%)	400 (50%)	500 (50%)
Wires	Ø mm	0,6 - 1,2	0,6 - 1,2	0,6 - 1,6	0,6 - 2,0
Standards		EN 60974-1 • EN 60974-5 • EN 60974-10			
		S			
Protection Class	IP	23 S	23 S	23 S	23 S
Insulation Class		H	H	H	H
Dimensions	↗ mm	660	660	660	660
	→ mm	290	290	290	290
	↑ mm	515	515	515	515
Weight	kg	39	35	39	43

Other voltages available on request

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

