

# Sigma Weld - Alex - 400PT



Sigmaweld series welding machines are sophisticated IGBT based inverters with total digital control having wide current range. Sigmaweld is designed to meet varied requirement of the welding industry covering manual arc welding, TIG welding, high frequency TIG welding, pulse TIG welding. Advanced micro controller technology enables Sigmaweld to have upslope downslope and plusing even without the use of high frequency.

Significant energy saving vis-à-vis traditional welding equipments for all applications.

#### Features:

### 1. Constant Current Output Provided

The output of sigmaweld welding inverters are constant even if there is a power fluctuation in the mains of upto  $\pm\,15\%$ . The powersource equally works well on generator sets with balanced load.

### 2. Water Cooling Unit Interlocking

Sigmaweld WCS (Water Cooling System) can be easily counted below the Sigmaweld welding inverters making it one completely integrated unit. The Sigmaweld WCS contains stainless steel tank, radiator and forced air cooling interlocking of water cooling unit with the program ensures that the WCS is operational only in the GTAW code. No more torch burn out due to no water flow.

## 3. Smart Operations

If the operator runs the torch switch but does not start welding, the gas solenoid is switched off within 10 sec. Ensuring no wastage of shielding gas. In case the tungsten touches the job, the welding current and voltage are stopped immediately and helps to avoid tungsten inclusion defects.

## 4. Protections and Safety

Sigmaweld welding inverters are designed for safety of both operator and machines. It has inbuilt protections for overvoltage, undervoltage, output short, thermal overload and IGBT peak current locking. This ensures longer life of equipment.

#### 5. Foot Pedal With Current Control

Potentiometer based remotes or foot controlled remote or adjusting welding current during welding. This helps welder change current while welding as per the need without using a helper. Our latest foot switch comes with current control.

## **6.Welding Automation Accessories**

Sigmaweld GTAW machines can be interfaced with robots, welding SPM's and other systems with ease. Sigmaweld automation systems such as weaving units, AVC (Automatic Voltage Controllers), special purpose machines, cold wire feeders etc are specially designed to enhance productivity and quality of welding.

#### **Product Selector Guide**

SIGMA WELD MODEL	MATERIAL THICKNESS	AMPERE RANGE	INDUSTRY APPLICATION
SW ALEX- 400PT	0.7 to 25mm	5 to 400	Precision Metal Fabrication, Tube and Pipe Fabrication, Boiler, Pressure Vessels
SW ALEX - 600PT	1mm upwards	5 to 600	Precision Metal Fabrication, Tube and Pipe Fabrication, Boiler, Pressure Vessels, Railway Wagons

# Sigma Weld - Alex - 400PT

Specifications	SW ALEX- 400PT	SW ALEX - 600PT	
Rated Input Voltage	3 φ, 415 V, ± 15%, 50HZ	3 φ, 415 V, ± 15%, 50HZ	
Power (KVA) @ 100%	12KVA	18KVA	
Duty Cycle @ 40°C	100% @ 400 Amps	100% @ 600 Amps	
Open Circuit Voltage	65 Volts	65 Volts	
Output Current Range Amperes	8 – 400 Amps	8 – 600 Amps	
(W x D x H) mm	360 x 650 x 560	380 x 655 x 650	
Weight	45 Kgs	65 Kgs	



Protection, Safety Features				
1) Thermal Shutdown	Inbuilt (Over temperature Indication)			
2) Under Voltage	Inbuilt (Phase Failure Indication)			
3) Over Voltage	Inbuilt (Phase Failure Indication/MOV)			
4) IGBT Peak Current	Inbuilt			
5) VRD, Energy Saving	Inbuilt			
6) Cooling Type	Water Cooled			
7) Water Cooling Interlocking	Water Flow Switch (Optional)			
8) Output Short	In built (Output Short Indication)			

			ı
Parameter		MIN	MAX
1) Gas Pre Flow Time	Settable	0.1 Sec	25 Sec
2) Gas Post Flow Time	Settable	0.1 Sec	25 Sec
3) Peak Current Time	Settable	0.1 Sec	10.0 Sec
4) Base Current Time	Settable	0.1 Sec	10.0 Sec
5) Welding Mode		2T	4T
6) Hot Start Current	In Built	30% @ 300 ms	
7) Digital Ammeter & Voltmeter	In Built		
8) Process Memory Recall	In Built		

## **Ordering Information:**

**SW-ALEX** AAA Model SW: SigmaWeld | AAA: 400, 600 | Mode: UD, PW, HF, PT

### Models Available:





inverter using lift arc starts with settable

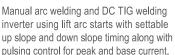
up slope & down slope timing.







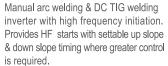










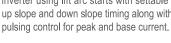














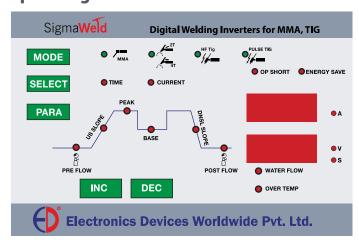






Manual arc welding and DC TIG welding inverter with high frequency. Provides HF starts with settable up slope and down slope timing along with pulsing control for peak and base current where greater control is required.

## **Operating Panel:**



<sup>\*</sup>Continual development can lead to change in specification









## Electronics Devices Worldwide Pvt. Ltd.

Head Office: 31, Mistry Industrial Complex, Cross Road 'A', M.I.D.C, Andheri [E], Mumbai 400093.INDIA. **Tel:** +91-22-45410600/601 **Service-Tel:** +91-22-45410625

E-mail: sigmaweld@edmail.in Web: www.electronicsdevices.com, www.sigmaweld.com

Sales & Marketing office: 608, 6th Floor, Windfall, Sahar Plaza, Next To Kohinoor Hotel, Jb Nagar, Metro Station, Andheri East **Sales-Tel:** +91 22 45410500