



CHAMPTIG 300 SP



Synergic DC TIG and DC Pulsed TIG Welder with Intelligent Control



TYPICAL APPLICATION

- Latest Inverter based technology.
- IGBT based operating at high frequency.
- Suitable for both DC TIG (Pulse & Normal) and MMA welding operation.
- Available with Synergic mode in TIG for pulse/normal mode. Also suitable for scratch start in TIG mode.
- Built in HF ignition for easy arc striking.
- User friendly front panel interface with LCD display and Multi-functional encoder.
- Anti-stick function to protect the machine from short circuit condition in MMA mode.
- Option of Remote control unit with digital display, for setting current remotely in MMA and TIG mode
- Option of Foot switch control regulator for setting current in TIG mode

SPECIFICATIONS

Technical Specifications	Unit	ICVR 250
Input		
Input Supply :		
Voltage	Volts, Ac	415, +15%, -10%
Phase		3
Frequency	HZ	50/ 60
Characteristics		CC - CV
Input KVA @ 100% duty cycle	KVA	MMA Mode-10.3, TIG Mode-7.1
Input KVA @ 60% duty cycle	KVA	MMA Mode-13.1, TIG Mode-9.5
Input KVA @ 35% duty cycle	KVA	MMA Mode-16.9, TIG Mode-11.9
Input Current 415V Supply @ 100% duty cycle	Amps, Ac	MMA Mode-14.4, TIG Mode-9.8
Input Current 415V Supply @ 60% duty cycle	Amps, Ac	MMA Mode-18.3, TIG Mode-13.2
Input Current 415V Supply @ 35% duty cycle	Amps, Ac	MMA Mode-23.5, TIG Mode-16.5
Power Factor		Up to 0.75
Efficiency	%	Up to 84
Output		
Open Circuit Voltage @415V Input Supply	Volts, DC	80 V DC (+/-5V)
Welding Current Range	Amps, DC	MMA Mode-50-300, TIG Mode-10-300
Welding Current (40°C 10 minutes cycle)		
@ 100% duty cycle	Amps, DC	200
@ 60% duty cycle	Amps, DC	250
@ 35% duty cycle	Amps, DC	300

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General	Unit	Value
Remote Controller	10 Meter	Provide as optional for Current Setting
Foot Switch Control	5 Meter	Provide as optional for Current Setting
Welding Electrode Size (MMA Mode)	Dia in mm	2.5,3,1.5,4
Protection		Over Voltage, Under Voltage, Single Phasing, Over Temperature
Front Panel Functions		<ol style="list-style-type: none"> 1. MMA/HF TIG/ LIFT ARC TIG selection switch 2. 2T/4T/Spot/Cycle Switch 3. Pulse/Normal Mode selection 4. Normal/Foot switch selection switch 5. Menu switch for selecting all functions for pulse - Gas pre flow, Gas post flow, pulse frequency, current unslope time current downslope time, welding current (peak current for pulsing mode), Background current (for pulsing mode), set current time - as per selected mode of operation 6. Mains on 'Green' color indication 7. Trip 'Red' color LED for indication of machine is under protection mode 8. Encoder for selection parameter Value Increment / Decrement 9. Auto key making synergic mode on/off 10. Para/Gas switch to set the parameters in synergic mode & to check gas in normal mode 11. Remote controller 12. Gas Out 13. Water/ Gas cooled selection switch 14. Torch switch connector 15. Foot switch connector 16. Cam look output connector 17. 10 sets of parameter setting can be saved & recalled

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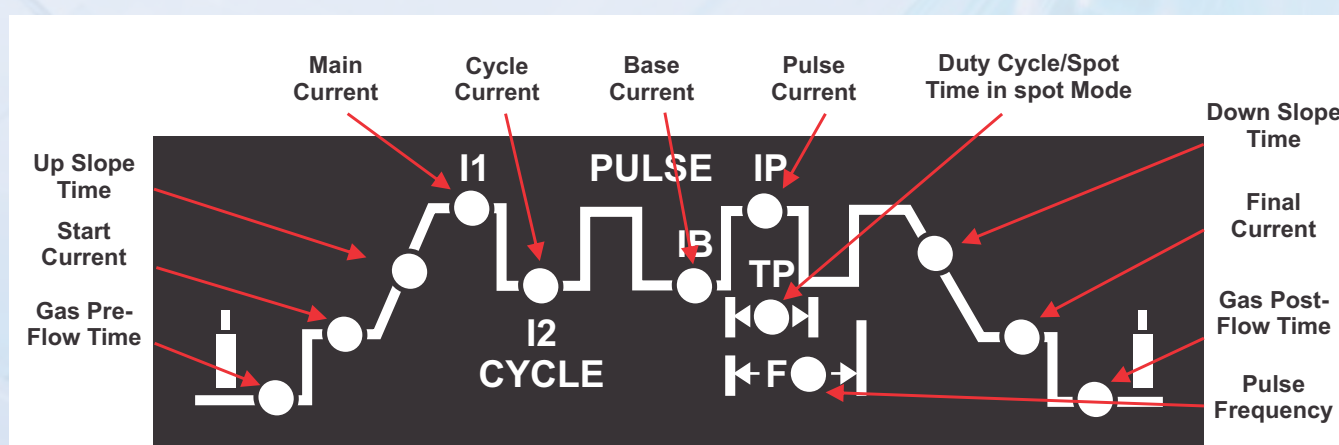
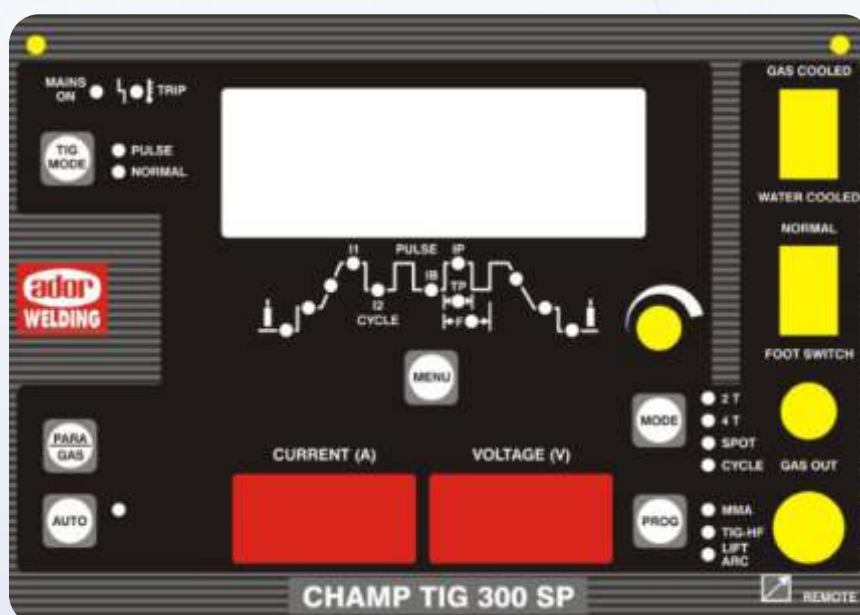


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Auxiliary power supply for water cooling unit	VAC, W	240V, 300W
Cooling	Type	Forced Air
Ambient Temperature rating	°C	40
Class of Insulation	-	H
Degree of Protection	-	IP23S
Dimensions (L x W x H)	mm	600 x 215 x 470
Weight (approx.)	Kg.	27

DIGITAL PANEL DETAILS FOR MODEL: CHAMPTIG 300SP



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Key	Legend	Description
MMA/TIG HF/LIFT ARC Selection Key	 <ul style="list-style-type: none"> ○ MMA ○ TIG-HF ○ LIFT ARC 	Prog key can be used to select MMA / TIG (With HF & Without HF) Process. Visual indications are provide for the same
Encoder		With the help of Encoder we can set the welding current 'A' in MMA TIG mode & also the different parameters in TIG mode. (Encoder rotation clockwise = +, I.E. Increment Encoder Rotation anticlockwise = -, I.E. Decrement
Pulse / Normal Selection	 <ul style="list-style-type: none"> ○ PULSE ○ NORMAL 	This can be used TIG mode only. In TIG mode, with the help of this button can toggle between Pulse / Normal TIG mode. Visual indication are provide for the same
2T / 4T / Spot / Cycle Selection Key	 <ul style="list-style-type: none"> ○ 2T ○ 4T ○ SPOT ○ CYCLE 	This key can be used in TIG mode to select the mode 2T / 4T / Spot / Cycle. Visual indications are provided for the same. This key is inactive in MMA mode.
Para / Gas Selection Key		This key can be used in TIG mode to select different parameters when synergic mode is on. This same key can be used to check Gas in TIG mode when synergic mode is off.
Auto Switch		This key can be used to enabled or disable the synegetic TIG mode. Visual indiction is also provided.
Gas Cooled / Water Cooled Selection Switch		This key is enabled in TIG mode only to select the cooling way depending upon the TIG Torch to be used.
TIG Parameter Selection Switch		Menu Key Is Used to Set the Different Parameters In MMA Mode & TIG Mode of Operation in Different Combinations Of 2T, 4T, Spot, Cycle with pulse & normal. Visual indiction is also provided for all TIG parameters

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Key	Legend	Description
LED Display		7 - SEG LED Display shows actual Welding & Current
Mains on Indication		This Green LED Indicates that Machine is ready for use.
Trip Indication		This Red LED Indicates that Machine is under one of the protection mode via. under Voltage / Over Voltage / Single Phase
Normal Foot Switch		Mini Rocker switch is provided for Normal / Foot switch selection
Remote		This is 4 pin connector provided for interfacing Remote
Gas Out		Gas Nippal is Provided on panel to interface the Gas connection of torch in TIG mode.
LED Display	LED Display shows the selected parameter value which can be set	

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SPECIFICATION OF WATER COOLING UNIT

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Parameter	Unit	Value
Supply Voltage, Phase, Frequency	Volts, Ac	230 V, 1 Phase, 50 / 60 HZ
Cooling Capacity	W	750 - 1000
Max Motor Power	W	220
Max Pump Pressure	BAR	2.5
Max Pump Flow Rate	L	10
Tank Capacity	Min	8
Connector Size	In / Out	1/4" BSP, 19TPI
Dimensions (L X W X H)	mm	580 X 215 X 270
Weight (Approx.)	Kg.	14

- **Warranty** : One year from the date of commissioning. ADOR WELDING LIMITED warrants that all new equipment sold from Plant/Area Offices / Authorised Distributors are free from defects in materials and workmanship and will perform in full accordance with applicable specifications.
- In view of continuous development, ADOR WELDING LIMITED reserves the right to modify/change the design and/or the specifications without any prior notice.
- Backed by dedicated customer care package.

