

CHAMPMIG

320 CD (P) / 400 (P) / 500 (P)

DIGITAL INVERTER BASED PULSED MIG/MAG WELDING OUTFIT



- All advantages of Inverter base equipment High efficiency, High Power factor & lowest power consumption.
- Digitally Memorized, perfect weld parameter for steel, stainless steel & aluminum
- Selectable - Normal/Pulse MIG welding, SMA welding & DC Tig welding with liftarc facility.
- "Twin Pulse"- A standard Feature! The twin pulse systematically & separately controls melting and cooling giving ideal weld bead appearance like Tig welding.



ADOR WELDING LIMITED
Central Marketing Office

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TECHNICAL SPECIFICATIONS:

Sr. No.	Parameter	Unit	Value			
	Power Source	Model	ICVCCR 320 CD	ICVCCR 400	ICVCCR 500	
INPUT:						
1.	Input Supply Voltage	Volts	..... 415			
2.	Phase	Nos.	..... 3			
3.	Frequency	Hz	..... 50.....			
4.	Supply Voltage Range	Volts	..... 415 +/- 15%			
5.	Input KVA @ 100% / 60% Duty Cycle/Max. Current	KVA	10.7/12.6/15.1	14.3/16.1/19.4	19/26.1/26.1	
6.	Max. Input current@ 100% / 60% Duty Cycle/Max. Current	Amps.	15.5 / 18.2 /21.8	20.7/23.3/28.1	27.5/37.7/37.7	
7.	Power Factor @ Max. Current		..... 0.99			
8.	Mains Fuse Rating	Type	TP/25	TP/32	TP/50	
OUTPUT:						
9.	Output Characteristic	Type	..... CC/CV			
10.	Open Circuit Voltage	Volts DC	..... 80			
11.	Output Voltage (during welding)	Volts DC	15-30	15-34	15-39	
12.	Welding Current Range	Amps.	25-320	25-400	25-500	
13.	Output Welding Current @ 60% Duty Cycle	Amps.	250 /270	320 /350	400/500	
PROTECTIONS:						
A.	Thermal Overload		..... Provided			
B.	Under Voltage		..... Provided			
C.	Over Current		..... Provided			
GENERAL:						
15.	Cooling	Type	..... Forced air			
16.	Insulation	Class	..... F			
17.	Protection	Class	..... IP 23			
18.	Torch Cooling (inbuilt)	Type	Gas	Water	Water	
19.	Cooling Power	KW	N.A.	1.1	1.1	
20.	Maximum Pressure	Bar	N.A.	3.5	3.5	
21.	Overall Dimensions: (approx.) Length / Width / Height	mm	745 /340/500	1120/445/855	1120/445/855	
22.	Weight (approx.)	Kg.	35	106	116	
WIREFEEDER:		Model	In-Built	FEEDLITE 40 (LE)		
1.	Wire feed Speed	Mtr/Min	0.1 - 25			
2.	Wire diameter					
	Range Solid	mm	06 - 1.6	0.6 - 1.6		
	Flux Cored	mm	1.2 - 1.6	1.2 - 1.6		
	Aluminium	mm	1.0 - 1.6	1.0 - 1.6		
3.	Wire Drive system	Type	4 Roll Quick Release			
4.	Wirefeeder Motor	V	42 V DC			
5.	Overall Dia. (Approx.)		In-Built In power source			
	Length / Width / Height	mm	640/280/500			
	Weight	Kgs.	20			
TORCH:		Model	HI-PRO 300-3(LE)	HI-PRO 300-5(LE)	HI-PRO 500-3(LE)	HI-PRO 500-5(LE)
1.	Max.Current Under Co2 Under Argon	Amps Amps	300@60% 270@60%		500DC@100% 325 Pulse@100%	
2.	Cable Length	Mtr.	3	5	3	5
3.	Cable Type	Type	Co-axial			
4.	Cooling Type	Type	Gas		Water	
5.	Wire Diameter Solid / Flux Cored / Al	mm	0.8-1.2 /1.2 /1.2		0.8-1.6 /1.2-1.6 /1.2-1.6	
6.	Type of end Connector	Type	Euro			

OUTFIT COMBINATIONS:

Outfit Model	Power source	Wire Feeder	Torch	Product Code
Champmig 320 CD (P)- A	ICVCCR-320 CD	In Built	HI-PRO-300-5 (LE)	3740126
Champmig 320 CD (P)- B	ICVCCR-320 CD	In Built	HI-PRO-300-3 (LE)	3740127
Champmig 400 (P)-A	ICVCCR-400	Feedlite 40 (LE)	HI-PRO-500-5 (LE)	3740122
Champmig 400 (P)- B	ICVCCR-400	Feedlite 40 (LE)	HI-PRO-500-3 (LE)	3740123
Champmig 400 (P)-C	ICVCCR-400	Feedlite 40 (LE)	HI-PRO-300-5 (LE)	3740124
Champmig 400 (P)-D	ICVCCR-400	Feedlite 40 (LE)	HI-RRO-300-3 (LE)	3740125
Champmig 500 (P)-A	ICVCCR-500	Feedlite 40 (LE)	HI-PRO-500-5 (LE)	3740120
Champmig 500 (P)-B	ICVCCR-500	Feedlite 40 (LE)	HI-PRO-500-3 (LE)	3740121

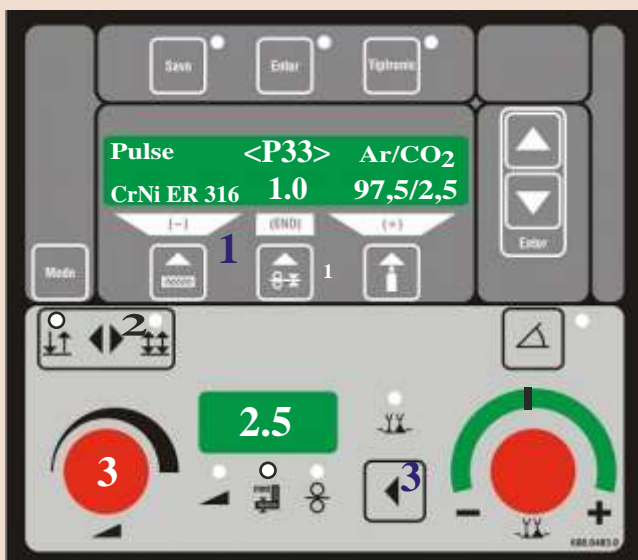
Machine Model	Product codes							
OPTIONAL ACCESSORIES	Champmig 320 CD (P)- A	Champmig 320 CD ((P)- B	Champmig 400 (P)-A	Champmig 400 (P)-B	Champmig 400 (P)-C	Champmig 400 (P)-D	Champmig 500 (P)-A	Champmig 500 (P)-B
Welding Accessories	6400118						6400119	
TIG Welding Accessories TIG 200-4 (L)	6440103							
Set of Tungsten electrode	3802102							
Aluminum Welding Accessories		6440104		6440106		6440104		6440106
Interconnection Cable (5 Meter)*			6440105				6440101	

* If ordered, A total of 10 mtrs. Interconnection cable will be provided.

VARIABLE PARAMETERS:

Parameter	Variable Value
Gas Prewflow	0-10 secs. Not in Electrode Mode
Start current	20% to 200 % of the welding Current
Start Current Time	0-10 Secs,Not in 4 Track mode
Twin Pulse Frequency	0.5 to 5 Hz, Only in Twin Pulse Mode
Welding Current	Adjustment depends upon Material-Wire-gas Combination selection
Downslope	10-990 A/sec,Not in electrode mode, Only when Downslope is "ON".
Final Current	10-200% of the welding Current, Not in Electrode mode, Only when slope=ON or in 4 Stroke
Final Current Time	0-10 Secs,Not in Electrode mode, Only when Slope-On
Wire Burnback time	20-300% of the Programmed Value, Not in Electrode mode.
Gas Postflow	20-200% of the Programmed Value, Not in electrode mode
Arc Length Correction	60-140% of the Programmed Value
Inductor Effect	20-200% of the Programmed Value, Only in Normal mode (Short Arc), +/- 40% in Manual Mode.
Arc Dyanmics	0-100% of the Programmed Value,Only in Electrode mode

THE DIGITAL EXPERIENCE:

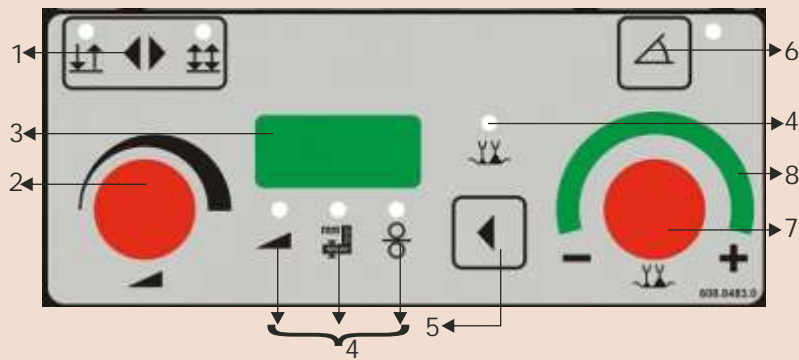


Extremely Simple Operation:

1. Choose Task: Material thickness, Wire diameter, Gas.
2. Choose mode 2/4 Track.
3. Power adjustment selectable by the displayed material thickness
"& WELD!!!"

All controls on Front Panel of Wire feeder:

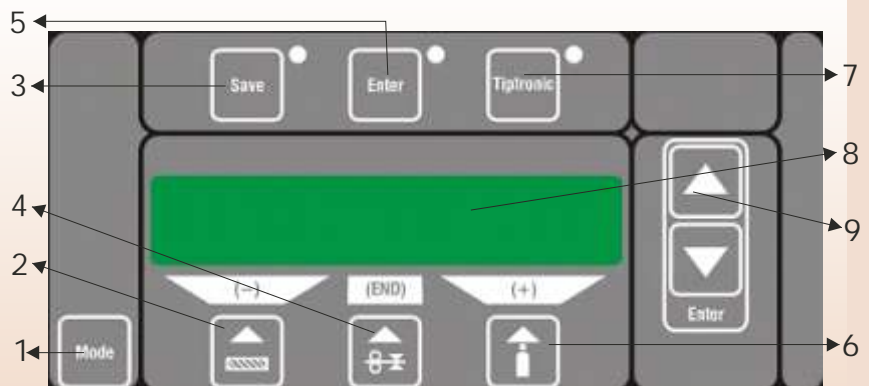
The Primary Operation:



1. 2/4 Track Function
2. Rotary pulse encoder for adjustment of welding current/material thickness
3. Digital multifunction display: For indication of welding current, material thickness, wire feed speed or arc length correction.
4. Primary Parameter LED: These show which primary parameter is currently indicated in the multifunction display.
5. For switching between welding current, material thickness, wire feed speed and arc length,
6. Downslope push-button
7. Arc length / wire speed correction" rotary pulse encoder
8. Arc length / wire speed correction" LED indication indicates the degree of the correction.

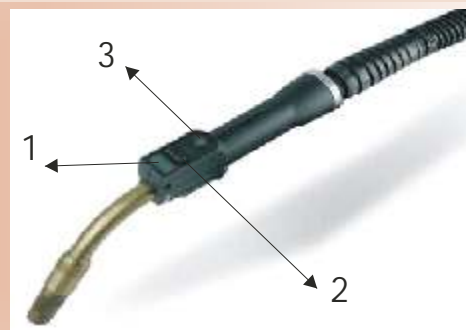
The Secondary Operation:

1. Mode Push Button to switch between operations i.e. Normal, Pulse, Twin Pulse, SMA & DC TIG
2. Material Push Button to select the material to be welded.
3. TT Save" push-button to store Jobs
4. Welding wire diameter for diameter of wire selection
5. For acknowledgement while saving a job
6. For selection of the gas to be used,
7. For Tiptronic mode on/off Function
8. For indication of all parameter values and messages
9. For switching between the individual parameters.



CONTROLS FROM TORCH:

1. Torch Display: - Indicates the current welding power, material thickness, wire feed speed or arc length correction.
2. For Changing the welding power, material thickness or arc length. In Tiptronic mode, the rocker can be used to switch between the active jobs or job sets.
3. Torch Push button: Has the same function as the primary parameter push button no. 5.



SALIENT FEATURES:

1. Spatter free ignition: - Parameter Adjustments occurs in seconds. A complete Digital Experience.
2. Perfect Pulsing: - Inbuilt digital software knowledge, which guarantees the matching pulsing process for each material.
3. Digital Arc length Control:- The function keeps the arch length steady at all times. Deviations are detected within fraction of seconds and will be adjusted precisely.
4. Tiptronic 100 Memory settings, directly selectable from torch, Complex tasks can be performed fast and productively!!! No compromise!!!!
5. In Built program for various material/gas combination
6. No End Craters: Towards the end of the welding seam the outfit reduces the welding energy automatically. End craters will be therefore seems to be history!!!
7. Parameter setting:- user controls on torch power and wire feed speed can be controlled from torch
8. Efficient water-cooling Unit: - A 1.1 KW power, Unit measures the amount of water not the water pressure. Which ensures efficient cooling of torch. Gas test and cooling test is possible to preset gas flow as well as check cooling circuit function.
9. Standby Control: Colling will start only if really necessary. Less energy consumption. Noise and dirt in the unit.
10. In Built Selectable lock function to prevent control operator interference.
11. In case of malfunction an error code & error descriptions will occur on the display. Making easy diagnosis/error correction.

Contact Authorised Distributor:



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