



# **CHAMPMIG 400**



The world class Inverter based MIG Welder







### **INTRODUCTION**

CHAMP MIG 400 is IGBT inverter based welding outfit suitable for GMAW applications. The IGBT Power module, ferrite core and fast recovery diode are used as key device for power conversion and transmission to assure better efficiency and performance.

The complete system consists of power source, wire feeder, MIG torch and interconnecting cables.

### **DETAILS OF COMPLETE SYSTEM**

Sr. No.	Description	CHAMPMIG 400	CHAMPMIG 400
1	Power Source	ICVR 400	ICVR 400
2	Wire feeder	FEEDLITE 40 (NEMRC)	FEEDLITE 40 (NEMRC)
3	Torch	ADOR HIPRO 403 (E)	ADOR MTG 400 (E)

### **SALIENT FEATURES**

- Inverter based digitally controlled GMAW outfit
- Digital Panel for adjusting the welding parameters
- 25% more Energy efficient than conventional machines
- Maximum Power factor is 0.94
- Excellent dynamic response enables superior arc characteristics
- 2T, 4T operating modes

- Welding dynamic adjustment for better arc control
- Crater voltage and Crater current adjustment through digital panel
- Unique feature of Fresh Tip Transfer (FTT) to avoid globule formation
- Automatic "Weld Stop" facility

### **PROTECTION**

### The equipment is provided with following protections.

- a) **Under Voltage and Over Voltage:** Error message is displayed and the equipment shuts down if the supply voltage exceeds the positive or negative limits specified in the Technical Specifications
- **b) Over Temperature:** Error message is displayed and the equipment shuts down if the temperature of the main power components exceeds the safe limits
- c) Single Phasing Protection: Error message is displayed and the equipment shuts down if any one of the three phase supply line is absent (single-phasing prevention / protection)



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# **SPECIFICATIONS**

Technical Specifications	Unit	ICVR 400	
Input			
Input Supply :		V. T.	
Voltage	Volt	415 , +15%, -10%	
Phase	No	3 Ø	
Frequency	Hz	50/ 60	
Input KVA			
@ 100% duty cycle	KVA	12	
@ No Load	KVA	0.24	
Output			
Open Circuit Voltage	Volts +/-5%	65	
Welding Current Range AMP₽	Amp	50-400	
Welding Current (40°C 10 minutes cycle)	·		
@ 60% duty cycle	Amp	400	
@ 100% duty cycle	Amp	310	
Welding Voltage Range	Volt	16-39	
Crater Current Range	Amp	50-400	
Crater Voltage Range	Volt	16-39	
Mode of operation		2 track, 4 track, Gas check, OCV check facility	
Remote Control		For setting voltage & current	
Power Factor		Max 0.93	
Efficiency	%	87% @ 100% duty cycle	
General			
Compatibility to International standard		As per Std. EN60974-1	
Wire feed speed	m/min	1.5-18	
Suitable Welding Wire Diameter	mm	Aluminum 1.2 – 1.6 Steel 0.8,1.0,1.2 & 1.6	
Ingress Protection	Class	IP23	
Cooling	Туре	Forced Air	
Dimensions (Approx.)		/// / / / / / / / / / / / / / / / / / /	
Length	mm	700	
Width	mm	450	
Height	mm	600	
Weight		44	
Audio Noise Emission	dB	70	

Cont.



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Technical Specifications	Unit	FEEDLITE 40 (NEMRC)
Suitable for wire Ø	mm	0.8,1,1.2,1.6
Wirefeed speed	mtr/min	1.5 to 18
Wire roll drive	-	Four
Wire drive motor	Туре	Permanent Magnet DC
Wire feeder Motor voltage	V	42
Wire feeder fitted with rollers	- \\	1.2/1.6 for sold wire 2 no
Suitable for Wire Spool capacity	Kg	15
Dimensions		
Length	mm	563
Width	mm	230
Height	mm	410
Weight (without spool)	Kg	16 (Approx)

### **TORCH SPECIFICATION**

Technical Specifications	Unit	ADOR HIPRO 403 (E)	ADOR MTG 400 (E)
Rating	А	400A @ 60% Duty cycle for CO <sub>2</sub>	400A @ 60% Duty cycle for CO2
End Connection to Torch	Type	Euro	Euro
Suitable for Wire Ø	mm	0.8, 1.0, 1.2, 1.6	0.8, 1.0, 1.2, 1.6
Torch Length	meter	3	3

- **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.