



## CHAMP MIG 600

The world class Inverter based MIG Welder



### INTRODUCTION

CHAMP MIG 600 is an IGBT inverter based welding power source, suitable for GMAW applications. The IGBT Power module, high frequency transformer 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, water cooled or gas cooled torch, water cooling unit (for water cooled systems) and interconnecting cables.

### DETAILS OF COMPLETE SYSTEM

| Sr. No. | Description  | CHAMP MIG 600 A      | CHAMP MIG 600 E      |
|---------|--------------|----------------------|----------------------|
| 1       | Power Source | ICVR 600             | ICVR 600             |
| 2       | Wire feeder  | FEEDLITE 40 (NEH-RC) | FEEDLITE 40 (NEH-RC) |
| 3       | Torch        | ADOR-MTG 600 E.      | ADOR TW 502 (E)      |

### SALIENT FEATURES

- Inverter based digitally controlled GMAW outfit
- Auto "Weld Stop" when welding torch is taken away from weld job
- Digital Panel for adjusting the welding
- 25% more Energy efficient than conventional machines.
- Maximum Power factor is 0.95
- Excellent dynamic response enables superior arc characteristics. 2T, 4T operating modes
- Dynamic Inductance adjustment for better arc control
- Crater voltage and Crater current adjustment through digital panel. Unique feature of Pinch off pulse to avoid globule formation.
- Automatic "Weld Stop" facility.
- Normal/ Creep feeding selection available on front panel.

### PROTECTION

The equipment is provided with following protections.









- Under Voltage and Over Voltage:** If supply voltage goes lower or higher than set limit, error message is displayed on Display
- Over Temperature:** If the temperature of the main power elements is more than safety limits, error message is displayed
- Single Phasing Protection:** If any one of the three phases (R, Y, and B) is absent, welding will stop. Welding current would not be available in this condition)

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### SPECIFICATIONS

| Technical Specifications   | Unit        | ICVR 600  |
|--|-------------|---|
| <b>Input</b>   |             |   |
| Input Supply :   |             |   |
| Voltage                 | Volt        | 415, +15%, -10%                                 |
| Phase  | No          | 3 Ø   |
| Frequency  | Hz          | 50/ 60  |
| Max Input KVA           |             |   |
| @ 100% duty cycle  | KVA         | 21.5  |
| @ No Load  | KVA         | 0.31  |
| <b>Output</b>  |             |   |
| Open Circuit Voltage    | Volts +/-5% | 65  |
| Welding Current Range   | Amp         | 65-600  |
| Welding Current (40°C 10 minutes cycle)  |             |   |
| @ 60% duty cycle      | Amp         | 600   |
| @ 100% duty cycle  | Amp         | 465   |
| Welding Voltage Range  | Volt        | 16-45   |
| Crater Current Range   | Amp         | 65-600  |
| Crater Voltage Range   | Volt        | 16-45   |
| Mode of operation  |             | 2 track, 4 track, Gas check, OCV check facility |
| Remote Control   |             | For setting voltage & current                   |
| Power Factor   |             | Max 0.94  |
| Efficiency   | %           | 89% @ 100% duty cycle                           |
| <b>General</b>   |             |   |
| 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<br>Steel 0.8,1.0,1.2 & 1.6   |
| Ingress Protection   | Class       | IP23  |
| Cooling               | Type        | Forced Air                                      |
| Dimensions (Approx.)  |             |   |
| Length   | mm          | 670   |
| Width  | mm          | 450   |
| Height   | mm          | 620   |
| Weight                | Kg          | 56  |
| Audio Noise Emission   | dB          | 70  |

Cont.

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| Technical Specifications         | Unit    | Feedlite 40 (NEHR)C        |
|----------------------------------|---------|----------------------------|
| Suitable for wire Ø              | mm      | 0.8,1,1.2,1.6 mm           |
| Wirefeed speed                   | mtr/min | 1.5 to 18 mtr/min          |
| Wire roll drive                  | -       | Four                       |
| Wire drive motor                 | Type    | 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)                |

- **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.