

**INDUSTRIAL
PORTABLE
GTAW / SMAW WELDER**



DISCOVER 400 TIG

GTAW/TIG/Arc/Stick/SMAW Welding

TECHNICAL SPECIFICATION

Input Specifications

Input Supply: 330-500VAC , 3Ph , 50/60Hz
 Input @ 400A / 36V : 17.8KVA / 22.7HP , 25A@415V
 Input @ 300A / 32V: 11.8KVA / 15.1HP , 16.5A@415V
 Input @ 250A / 30V: 9.3KVA / 11.8HP , 13A@415V

Mechanical Specifications

Dimensions (LxWxH): 650X345X545mm
 (Power source with wheels)
 Weight: 48kg
 Dimensions (LxWxH): 1090X400X1050mm
 (Power source + cooling unit + trolley)
 Weight: 95.8kg

Functional Specifications

Preflow Gas Time: 0-10secs
 Postflow Gas Time: 0-10secs
 Upslope Time: 0-10secs
 Downslope Time: 0-10secs
 Arc Force: 0-100%
 Hot Start: 0-100%

Output Specifications

Output Current Range: 10A to 400A
 Duty Cycle @ 60%: 400A / 36V
 Duty Cycle @ 100%: 300A / 32V
 Open Circuit Voltage (OCV): 75V-95V DC

Protection Features

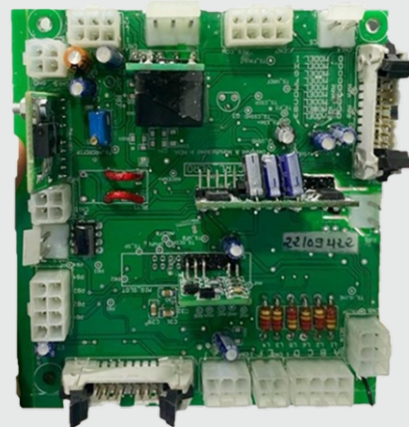
OT-Over Temperature (when internal temperature more than 70oC).
SP-Phase loss protection (when any phase is not present).
UV/OV-Input supply protection (when supply is <330V or >500VAC).
OC-Over Current (when over current flows through IGBT)
FL-External Fault (for connecting PLC/Torch cooling unit).

FUNCTIONAL FEATURES

- ARC Force** for smooth and crisp welds.
- Hot Start** Helps in rusted and dirty welds.
- Preflow/Postflow Gas** Time ensuring weld quality and complete gas coverage.
- Upslope/Downslope** for smooth current transitions.
- Gas Test** for testing Gas flow rate prior to welding.
- FL Protection** external / cooling unit fault.
- 2T/4T** trigger settings for welder comfort during long seams.

OTHER FEATURES

- Fan-On-Demand** feature reduces power consumption and dust ingress.
- VRD Safety** reduces Open Circuit Voltage to ensure welder safety.
- Remote** Feature for controlling welding current using a hand held remote or foot peddl.
- IP65 Panel** parts dust and water protected front panel switches & buttons.
- IP21 Rated** chassis suitable for outdoor as well as indoor use.
- Steel Body** for long life and rugged usage.
- Terminals** Lug type heavy duty rated.



A four step process is follows to make every single PCB use in the machine, moisture and dust proof. This increase the of PCB and also increases the reliability. It also ensures proper functioning of each by preventing current.



- 1. PROTECTION INDICATORS
- 2. LOCAL/REMOTE
- 3. STICK / TIG SWITCH
- 4. PREFLOW GAS
- 5. UPSLOPE/ARC FORCE
- 6. CURRENT SETTING
- 7. POSITIVE TERMINAL
- 8. TORCH TRIGGER
- 9. GAS OUTLET
- 10. VOLTAGE/CURRENT DISPLAY
- 11. 2T / 4T SWITCH
- 12. FOD ON/OFF
- 13. GAS TEST
- 14. POSTFLOW GAS
- 15. DOWN SLOPE/HOT START
- 16. REMOTE
- 17. NEGATIVE TERMINAL





A) Discover 400 TIG power source

Order Code : APS - D400TIG



B) Discover 400 TIG power source with Cooling Unit Trolley

Order Code : APS - D400TIG - WC50

Order Code : APS - D400TIG - WC50FS

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1) Electrode Holder 400A with 3 meter 35sqmm cable

Order Code: AEH400A3M35SQ
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2) Earthing Clamp 400A with 3 meter 35sqmm cable

Order Code: AEH400A3M35SQ
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3) TIG Welding Torch Gas Cooled 200Amp

Order Code: AGC2004M (4mtr) / AGC2008M (8mtr)
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4) TIG Welding Torch Gas Cooled 300Amp

Order Code: AGC3004M (4mtr) / AGC3008M (8mtr)
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5) TIG Welding Torch Water/Liquid Cooled 400Amp

Order Code: AWC4004M (4mtr) / AWC4008M (8mtr)

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6) Argon Regulator Single Stage Double guage

Order Code: AREGSSDG-ARG
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7) Gas Flow Meter

Order Code: AGASFLOWMTR
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8) TIG Torch Cooling unit WC50 - with Cast Iron Pump

Order Code: APS-WC50
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9) TIG Torch Cooling unit WC50FS Stainless steel Pump, Inbuilt Flow-switch with indication and Fault output for TIG torch protection

Order Code: APS-WC50FS

AUTHORISED DEALER :



ADVANCED POWER SOURCES LIMITED

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ISO 9001
 BUREAU VERITAS
 Certification

