EN II SERIES

Full Digital High-Precision Control Double Pulse MIG/MAG (CC/CV) Welding Machine

► Carbon steel ► Stainless steel ► Copper alloy ► Flux-cored Wires► Aluminum alloy

YMIG-350/500DP EN-II

MMA
Manual metal -arc welding

CAC-A
Gouging

MIG/MAG
Constant voltage

MIG/MAG
Pulse

⎓ TIG
Constant current DC

Functions:

Pulse MIG/MAG, general MIG/MAG, manual metal-arc welding, lifting arc striking TIG and gouging.

Application industry:

High speed train, pressure vessel, automobile repacking, yacht, high-voltage switch and space division.

Features:

- CPU+DSP full digital high-precision control system precisely controls the waveform and realizes the perfect transition of one droplet per pulse, with the stable arc of welding, the lower spatter, good appearance of weld and high welding quality;
- The built-in welding expert database includes the precised parameters of welding waveform control, the parameters in the welding process and the arc striking and suppression parameters. It's convenient to adjust parameters and automatically match with the optimal parameters;
- The full digital CPU control high-precision control system of wire feeding and the two-drive and two-driven full digital control device of the wire feeding with the encoder ensure the stable wire feeding when the load of wire feeding changes or the net voltage fluctuates in the process of welding;
- The unified/separate adjustment is convenient to meet different using habits;
- It has four operation modes of two-step, four-step, special four-step and spot welding. In the welding of large specification long welding seams, the four-step or special four-step function reduces the labor strength of welders and improves the quality of welding joint;
- It rapidly meets the users' needs for special welding process. The full digital control technique can flexibly meet the special needs via modifying and upgrading of the software, without modifying the hardware;
- Users can store the self-defined parameters of welding process and manage the welding process and provide convenience for the varied welding of the same station through memorizing and using the parameters of the welding process;
- Protection functions: It includes short-circuit protection, overheating protection, protection of power grid, wire plugging protection and starting protection. The reasons of warning is recognized through the fault code, in order to guarantee the reliability of the welder and the safety of operator.

IGBT
Insulated Gate Bipolar Transistor

GREAT-YUVA
Welding Expert

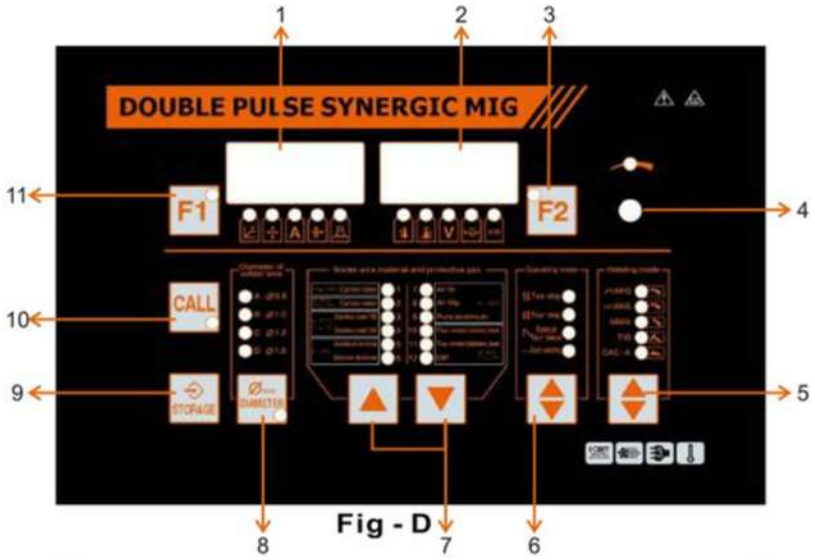

Fig - D

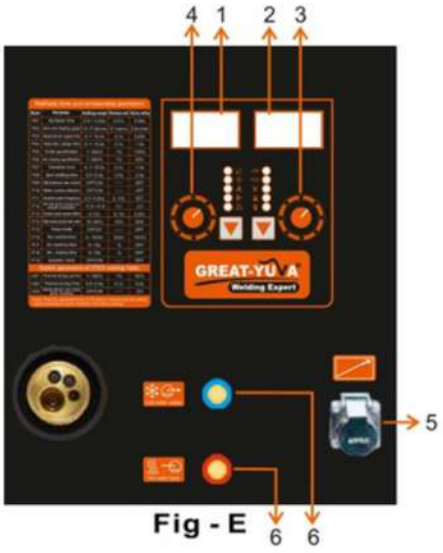

Fig - E

Annexure of Figure - D

Re.No.	Description
1	Display of Welding Angle, Base metal thickness, Welding current, Wire feed speed, Inductance
2	Display of In-Machine temperature, Arc length correction, Welding Voltage, Welding travel speed(cm/min), Job Number
3	Parameter selection button: Arc length correction, Welding Voltage, Job number
4	Call button: call pre-stored parameters
5	Welding Mode selection: P-MIG, DC MIG, MMA, TIG, Carbon arc air Gouging
6	Gas check
7	Welding wire material and shielding gas selection
8	Wire dia selection
9	Storage button: to enter settings button or store parameters
10	Call button: to call pre-stored parameters
11	Parameter Selection key: Adjust wire feeding speed, welding current , inductance(arc stiffness)

Annexure of Figure - E

Re.No.	Description
1	Display of Welding Angle, Base metal thickness, Welding current, Wire feed speed, Inductance
2	Display of In-Machine temperature, Arc length correction, Welding Voltage, Welding travel speed(cm/min), Job Number
3	Parameter adjustment : In-Machine temperature, Arc length correction, Welding Voltage, Welding travel speed(cm/min), Job Number
4	Parameter adjustment: Welding Angle, Base metal thickness, Welding current, Wire feed speed, Inductance
5	Peripheral control socket
6	Hot water input
7	Cold water output
8	Welding torch interface

Torch Options-

1) Push Pull MIG Torch (especially developed for Aluminium) with second motorized wire feeder in the torch. The main wire feeder pushes the wire through the torch and the torch pulls it through from the other end.

2) MIG Torch with controls : Welding angle, Base metal thickness, Welding Current, Wire Feed Speed , Inductance(arc stiffness), Welding travel speed, Welding Voltage, Arc length correction and display of In-Machine temp.

Main Technical Parameters :

	YMIG-350DP EN-II	YMIG-500DP EN-II
Rated input voltage / frequency	Three-Phase 415V(+/-)10% 50Hz	Three-Phase 415V(+/-)10% 50Hz
Rated input capacity (KVA)	17.1	27.6
Rated input current (A)	26	42
Rated output voltage (V)	31.5	39
Rated load sustainability (%)	MIG100/MMA60	MIG100/MMA60
Output no-load voltage (V)	85	85
Output current range (A)	20~350	20~500
Output voltage range (V)	14~40	14~50
Welding wire diameter (mm)	0.8-1-1.2	0.8-1.0-1.2-1.6
Welding wire type — Pulse characteristics	Solid carbon steel/carbon steel flux-core, stainless steel solid/stainless steel flux-core, Al-Mg alloy, pure aluminum and Al-Si alloy, copper and copper alloy	
Welding wire type — Constant voltage characteristic	Co_2 Carbon Steel, Carbon Steel, Carbon Steel Flux-Core	
Wire feeding type	Push/Push-pull	
Gas flow (L/min)	15~20	
Hand arc welding — Welding current (A)	60~350	60~500
Welding torch cooling mode	Water cooling / Air cooling	
Shell protection grade	IP23	
Insulation grade	H	