

# CHAMP PULSE 500

500 AMP CAPACITY MIG / FCAW / PULSED MIG / MMA / TIG WELDER



## Key Attributes

- Fine ARC length control in Pulse MIG and MIG welding mode for different types of welding application.
- Excellent ARC force and hot start control in MMA mode for low current application.
- Digital pulse feedback from feeding motor for accurate control of wire speed.
- Graphical-LCD for displaying machine settings along with dual 7 segment LED display for actual current and voltage display.
- Wire feeder with digital console for remote parameter setting.
- Facility to store 100 welding programs (weld parameter) for easy save and recall operation.
- Addition of synergic program externally for a particular wire and gas application using USB facility.

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## TECHNICAL SPECIFICATIONS

POWER SOURCE	CHAMP PULSE 500	MODEL
PARAMETER	VALUE	UNIT
SUPPLY VOLTAGE, PHASE, FREQUENCY	415 V +15%, -10%, 3.50 / 60	VOLTS AC, NO., HZ
MAX. INPUT KVA @ 415 V SUPPLY	@ 100% DUTY CYCLE: MMA / TIG / PULSED MIG MODES - 20, MIG MODE - 17.5; @ 60% DUTY CYCLE: MMA / TIG / PULSED MIG MODES - 30, MIG MODE - 25.5	KVA
INPUT CURRENT @ 415 V SUPPLY	@ 100% DUTY CYCLE: MMA / TIG / PULSED MIG MODES - 28, MIG MODE - 24; @ 60% DUTY CYCLE: MMA / TIG / PULSED MIG MODES - 41, MIG MODE - 35	AMPS, AC
POWER FACTOR	0.9 MAXIMUM	λ
EFFICIENCY	UPTO 85	%
OPEN CIRCUIT VOLTAGE @ 415V INPUT SUPPLY	72 (+/- 5V)	VOLT, DC
WELDING CURRENT RANGE	MMA / TIG: 15 - 500, MIG / PULSED MIG: 30 - 500	AMP, DC
WELDING CURRENT AT 40 °C, 10 MINUTE CYCLE	387 AMPS @ 100% DUTY CYCLE, 500 AMPS @ 60% DUTY CYCLE	AMPS, DC
PROGRAM STORAGE FACILITY	100 JOBS ALONG WITH PARAMETER LOCKING FACILITY	-
AUXILIARY POWER SUPPLY FOR WCU	240 V, 300 VA	VAC, VA
COOLING	FORCED AIR	TYPE
AMBIENT TEMPERATURE RATING	40	°C
CLASS OF INSULATION	H	-
DEGREE OF PROTECTION	IP 23 S	-
COMPATIBILITY TO INTERNATIONAL STANDARDS	AS PER EN 60974 - 1	-
DIMENSIONS (L X W X H) WATER Cooled	1147 X 574 X 1202	MM
WEIGHT	117	KG

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PARAMETER	VALUE				UNIT
	MMA WELDING	TIG WELDING	MIG WELDING	PULSED MIG WELDING - ADDITIONAL	
WELDING CURRENT	15 - 500	15 - 500	(1)	(1)	AMP, DC
ARC FORCE	0 - 100	NA	NA	NA	%
HOT START	0 - 100	NA	NA	NA	%
GAS PRE-FLOW TIME	NA	NA	0 - 10	0 - 10	SEC.
INDUCTANCE	NA	NA	0 - 40	0 - 40	%
WELDING / CRATER CURRENT (1)	NA	NA	30 - 500	30 - 500	AMP, DC
WELDING / CRATER VOLTAGE	NA	NA	10.0 - 44.0	10.0 - 44.0	VOLT, DC
BURN - BACK TIME	NA	NA	0.01 - 5.0	0.01 - 5.0	SEC.
GAS POST FLOW TIME	NA	NA	0 - 10	0 - 10	SEC.
ARC LENGTH	NA	NA	NA	- 40 TO + 40	%
TWIN PULSE FREQUENCY	NA	NA	NA	1.0 - 10.0	HZ
TWIN PULSE DUTY CYCLE	NA	NA	NA	10 - 90	%
TWIN PULSE CURRENT RATIO	NA	NA	NA	0 - 200	%

## TECHNICAL SPECIFICATIONS – WIRE FEEDER

PARAMETER	VALUE	MODEL
MODEL	PULSEFEED 40 SFG / 40 SFW	
NOMINAL INPUT SUPPLY VOLTAGE	44 V	V AC
WIRE FEEDER MOTOR VOLTAGE	42 V DC	VOLT DC
WIRE DRIVE MOTOR	PERMANENT MAGNET DC TYPE WITH ENCODER FEEDBACK	VOLT DC
RATED POWER	80	WATTS
WIRE ROLL DRIVE	FOUR	NO
SUITABLE FOR WIRE SPOOL CAPACITY	15 KG	KG
WIRE FEED SPEED	1 - 24	METERS / MINUTE
SUITABLE FOR WIRE SIZES	SOLID WIRE (MS/SS) & ALUMINIUM - 0.8, 1, 1.2, 1.6; FCW - 1.2, 1.6	MM

## TECHNICAL SPECIFICATIONS – WIRE FEEDER

TORCH END ADAPTER	EURO	TYPE
FRONT PANEL	DUAL 7-SEGMENT DISPLAY & ENCODER FOR SETTING PARAMETERS	-
DIMENSIONS (L X W X H)	697 X 285 X 511	MM
WEIGHT (APPROX., WITHOUT SPOOL AND INTERCONNECTION CABLE ASSEMBLY)	19 (APPROX.)	KG

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## TECHNICAL SPECIFICATIONS – WATER COOLING UNIT (FOR WATER COOLED SYSTEMS)

PARAMETER	VALUE	MODEL: WCU - 302
MODEL	UNIT	
SUPPLY VOLTAGE, PHASE, FREQUENCY	VOLT, AC	230 V, 1 PHASE, 50 / 60 HZ
MAX MOTOR POWER	W	220
MAX PUMP PRESSURE	BAR	2.5
MAX PUMP FLOW RATE	L / MIN	10
TANK CAPACITY	L	12
CONNECTOR SIZE	IN / OUT	1/4" BSP, 19 TPI
DIMENSIONS (L X W X H)	MM	695 X 310 X 280
WEIGHT (APPROX.)	KG.	18 (APPROX.)

## TECHNICAL SPECIFICATIONS – MIG WELDING TORCHES

PARAMETER	VALUE		UNIT
MODEL	ADOR HIPRO MIG 502 C E- GAS COOLED	ADOR HIPRO MIG 502 (W) - WATER COOLED	
MAXIMUM CURRENT @ 60% DUTY CYCLE	500 (WITH CO2 GAS), 450 (WITH MIXED GAS)	500 (WITH CO2 GAS), 450 (WITH MIXED GAS)	AMP
TORCH CABLE LENGTH	4	4	METERS
TORCH CABLE TYPE	CO - AXIAL	CO - AXIAL	-
TORCH ADAPTER	EURO	EURO	TYPE
TORCH COOLING	GAS COOLED	WATER	TYPE
SUITABLE FOR WIRE SIZE DIAMETER	0.8, 1.0, 1.2, 1.6	0.8, 1.0, 1.2, 1.6	MM