



# ENGINE DRIVEN WELDER TS 200 BS/EL | BS/EL P

The images are for reference

#### **WELDING PROCESS**



Shielded Metal Arc welding SMAW (STICK)



#### **FEATURES**

- Arc welding source in D.C. welding
- Welds any type of electrode, including cellulosic
- The steel stretcher provides protection for the entire machine
- A.C. generator, single-phase and three-phase
- Aux power also available while welding
- · Ground fault interruptor
- · Engine shut-down (oil alert)
- Meets EC directives

#### DEFINITIONS

SMAW: Coated electrode welding is an arc welding with protected metal.

**GMAW**: welding is an arc process with metal under gas protection.

**FCAW (FLUX CORED)**: The process with cored wires is very similar to MIG / MAG welding. Continuous wire is not full but consists in a metal strip that wraps a powders core (flow).

GTAW: is a welding process that uses a tungsten electrode that cannot melt.







### ENGINE 3000 RPM

4 STROKE, OHV, NATURAL ASPIRATED		
Model	HONDA - GX 390	
* Stand-By net power	8.2 kWm (11.1 hp)	
* PRP net power	6.4 kWm (8.7 hp)	
* COP net power	/	
Cylinders / Displacement	1 / 389 cm <sup>3</sup> (0.39 lt.)	
Bore / Stroke	88 / 64 (mm)	
Compression ratio	8.2:1	
BMEP (Brake Mean Effective Pressure : LTP - PRP)	1	
Speed governor type	Mechanical	
FUEL CONSUMPTION		
110 % (Stand-by power)	3.5 lt./h	
100 % to PRP	3.2 lt./h	
75 % to PRP	2.4 lt./h	
50 % to PRP	1.6 lt./h	
COOLING SYSTEM	Aria	
Total system cap only engine	/	
Fan air flow	/	
LUBRICATION SYSTEM		
Total oil system capacity	/	
Oil capacity in sump	1.1 lt.	
Oil consumption at full load	/	

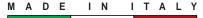
<sup>\*</sup> Output powers according to ISO 3046-1

EXHAUST SYSTEM	
Maximum exhaust gas flow	/
Max. exhaust gas temp.	/
Maximum back pressure	/
External diameter exhaust pipe	/
ELECTRICAL SYSTEM	/
Starter motor power	/
Battery charging alternator cap.	/
Cold start	/
With cold start aid	/
AIR FILTER	Dry
Combustion air flow	/
HEAT REJECTED AT FULL LOAD	
To exhaust system	/
To water and oil	/
Radiated to room	/
To charge cooler	/









# **WELDING AND GENERATION**

# C.C. WELDING

COSTANT CURRENT			
	TS 200 BS/EL	TS 200 BS/EL P	
Current range	20 ÷ 155A	20 ÷ 170A	
Type of regulation	continue		
Duty cycle	155 A - 60%   120 A - 100%	170 A - 60%   140 A - 100%	
Open circuit voltage	65	5 V	
Arc Force Regulation	N	lo	

## **GENERAL SPECIFICATIONS**

Fuel tank capacity	6.1
Starter Battery	2 l/h
Fuel consumption (welding 60%)	3 h

Running time (welding 60%)	/
IP protection degree	IP 23
Acoustic power LwA (pressure LpA)	98 dB(A) (73 dB(A) @ 7 m)

### A.C. GENERATION

ASYNCRONOUS THREE-PHASE, SELF-EXCITED, BRUSHLESS	
Insulation class	Н

### GENERAZIONE AUSILIARIA

OUTPUT 1				
	TS 200 BS/EL	TS 200 BS/EL P		
Type of source	Three-	Three-phase		
Frequency	50 Hz			
Apparent Power (Active Power)	6 kVA (4.8 kW)			
Cos φ	/			
Voltage	400V			
Current	8.7 A			

OUTPUT 2			
	TS 200 BS/EL	TS 200 BS/EL P	
Type of source	Single-phase		
Frequency	50	Hz	
Apparent Power (Active Power)	4 kVA (3.2 kW)		
Cos φ	/		
Voltage	230V		
Current	17.4 A		

OUTPUT 3				
	TS 200 BS/EL	TS 200 BS/EL P		
Type of source	Single-phase	/		
Frequency	50 Hz	/		
Apparent Power (Active Power)	2 kVA (1.6 kW)	/		
Cos φ	/	/		
Voltage	48V	/		
Current	41.6 A	/		

OUTPUT 4				
	TS 200 BS/EL	TS 200 BS/EL P		
Type of source	Single	Single-phase		
Frequency	50 Hz			
Apparent Power (Active Power)	2 kVA (1.6 kW)			
Cos φ	0.8			
Voltage	110V (CTE)			
Current	18.2 A			

The use of the Auxiliary Generation is recommended for tools related to welding (wheels, electric hammers, lights, etc ...)







# **CONTROL PANEL**

S 200 BS/EL P

# ENGINE

- 12Vdc 24Vdc engine starter output
- AUX generation voltmeter
- Differential switch
- Overcurrent protections for AUX sockets
- · AUX socket voltage indicator lights
- Earth terminal (PE)

# STARTER FOR ENGINE

	TS 200 BS/EL	TS 200 BS/EL P
Battery 12 Vdc	•	•
Battery 24 Vdc	•	

#### WELDING

- · Welding (-) socket
- (+) Soldering socket
- · Welding current regulator
- · Welding remote control connector
- Welding remote control enabling switch



### SIMULTANEOUS UTILIZATION FACTORS

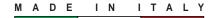
WELDING CURRENT	>155 A	120 A	70 A	0
THREE-PHASE POWER 400V	0	1.8 kVA	4 kVA	6 kVA

## COMBINATIONS AVAILABLE SOCKETS

	VERSION		
	TS 200 BS/EL 400V/230V	TS 200 BS/EL P	
		SCHUKO	230V/110V
1x400V 16A 3P+N+T CEE	•	•	
1x230V 16A 2P+T CEE	•	•	•
1x230V 16A 2P+T SCHUKO		•	
1x48V 32A 2P	•		
1x110V 32A 2P+T			•
1x110V 16A 2P+T			•







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# **WEIGHT - DIMENSIONS ACCESSORIES**



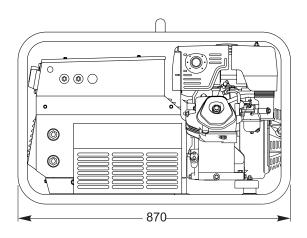
DRY WEIGHT:

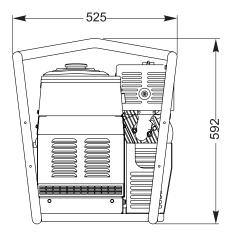
• 106 Ka

The welding machine pictured may include optional accessories.



**DIMENSION PICTURE** 





#### OPTIONS ON REQUEST

- Exhaust extension
- Remote control: TC2 (cable 20m) TC2/50 (cable 50m)
- Welding cables: K190 (10+8m, 35mm²) K 200 (20+15m, 35mm<sup>2</sup>)
- Welding kit (mask, gloves, etc.)
- Manual trolley CTM 200
- · Earthing kit



#### **VERSION ON REQUEST**

- 230V / 110V version (BS / EL P Vers. Only)
- SCHUKO version (BS / EL P Vers. Only)



**FACTORY INSTALLATION OPTIONS** 

#### GENERAL INFORMATION

#### **COMPLIANCE GENERATING SETS WITH EC DIRECTIVES AND STANDARDS**

2006/42 / EC (Machines Directive)

2014/35 / EU (Low Voltage Directive)

2014/30 / EU (EMC Directive)

2000/14 / EC (Directive Acoustic Emission for machines for use outdoors)

ISO 8528 (Reciprocating internal combustion engine driven alternating current generating sets )



ISO 9001:2015 - Cert. 0192

#### WARRANTY

All devices are covered by the manufacturer's warranty.

