



# ENGINE DRIVEN WELDER TS 200 DES/EL

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 tubular steel frame provides protection for the complete machine
- A.C. generator, single-phase and three-phase
- 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.



air cooled



diesel



electric starter

## ENGINE 3000 RPM

4-TEMPI, OHV	
Model	YANMAR L 100 V
* Stand-by net power	6.3 kWm (8.5 hp)
* PRP net power	5.5 kWm (7.5 hp)
* COP net power	/
Cylinder / Displacement	1 / 435 cm <sup>3</sup> (0.27 lt.)
Bore / Stroke	86 / 75 (mm)
Compression ratio	20 : 1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	/
Speed governor type	Mechanical
<b>FUEL CONSUMPTION</b>	
110 % (Stand-by power)	1.5 lt./h
100 % of PRP	1.3 lt./h
75 % of PRP	1 lt./h
50 % of PRP	0.8 lt./h
25% of PRP	Air
<b>COOLING SYSTEM</b>	
Total system cap. - only engine	/
Fan air flow	/

\* Potenze dichiarate in accordo a ISO 3046-1

<b>LUBRIFICATION SYSTEM</b>	/
Total oil system capacity	1.6 lt.
Oil capacity in sump	/
Oil consumption at full load	/
<b>EXHAUST SYSTEM</b>	
Maximum exhaust gas flow	/
Max. exhaust gas temp.	4.3 kPa (0,043 bar - 430 mmH <sub>2</sub> O)
Maximum back pressure	/
External diameter exhaust pipe	/
<b>ELECTRICAL SYSTEM</b>	
Starter motor power	/
Battery charging alternator cap.	0°C
Cold start	/
<b>AIR FILTER</b>	Dry
Combustion air flow	/
<b>HEAT REJECTED AT FULL LOAD</b>	
To exhaust system	/
To water and oil	/
Radiated to room	/
To charge cooler	/



# CHARACTERISTICS OF WELDING AND GENERATION

TS 200 DES/EL

## C.C. WELDING

### CONSTANT CURRENT

Welding Process	SMAW (STIK - Shielded Metal Arc welding)
Current range	20 ÷ 170A
Type of regulation	continuous
Duty cycle	170A 60% - 130A 100%
Open circuit voltage	65 V
Arc force control	No

## GENERAL SPECIFICATIONS

Fuel tank capacity	5.5 l
Fuel consumption (welding 60%)	1 l/h
Running time (welding 60%)	5.5 h

Battery Starter	12 Vdc -37Ah
IP protection degree	IP 23
Acoustic power LwA (pressure LpA)	99 dB(A) (74 dB(A) @ 7 m)

## A.C. GENERATION

### ASYNCHRONOUS THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS

Insulation class	H
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## AUXILIARY GENERATION

### OUTPUT 1

Type of source	Three-phase
Frequency	50 Hz
Power kVA (Power kW) Max	6 kVA (4.8 kW)
Cos φ	0.8
Voltage	400V
Current	8.7 A

### OUTPUT 2

Type of source	Single-phase
Frequency	50 Hz
Power kVA (Power kW) Max	5 kVA (4 kW)
Cos φ	0.8
Voltage	230V
Current	21.7 A

### OUTPUT 3

Type of source	Single-phase
Frequency	50 Hz
Power kVA (Power kW) Max	2 kW
Cos φ	1
Voltage	48V
Current	41.6 A

## COMBINATIONS AVAILABLE SOCKETS

	VERSION	
	STANDARD	SCHUKO
1x400V 16A 3P+N+T	•	•
1x230V 16A 2P+T	•	•
1x48V 32A 2P	•	
1x230V 16A 2P+T Schuko		•

## CONTROL PANEL

- Starter key
- Low oil pressure warning light
- Battery charge warning light fault
- Hoursmeter
- Knob stepless of welding current
- Remote control switch
- Remote control socket
- Welding socket (400A)
- ELCB-GFI (Ground Fault Interruptor)
- Indicator for power on the sockets
- Thermal circuit breakers for sockets
- Earth terminal (PE)

## SIMULTANEOUS UTILIZATION FACTORS

WELDING CURRENT	>100 A	80 A	50 A	0
THREE-PHASE POWER 400V	0	1 kVA	2.5 kVA	6 kVA
SINGLE-PHASE POWER 230V	0	0.8 kVA	2 kVA	5 kVA

The use of the auxiliary generation is recommended for welding tools (grinding wheels, electric hammers, lights, etc.)

# WEIGHT - DIMENSIONS ACCESSORIES

TS 200 DES/EL



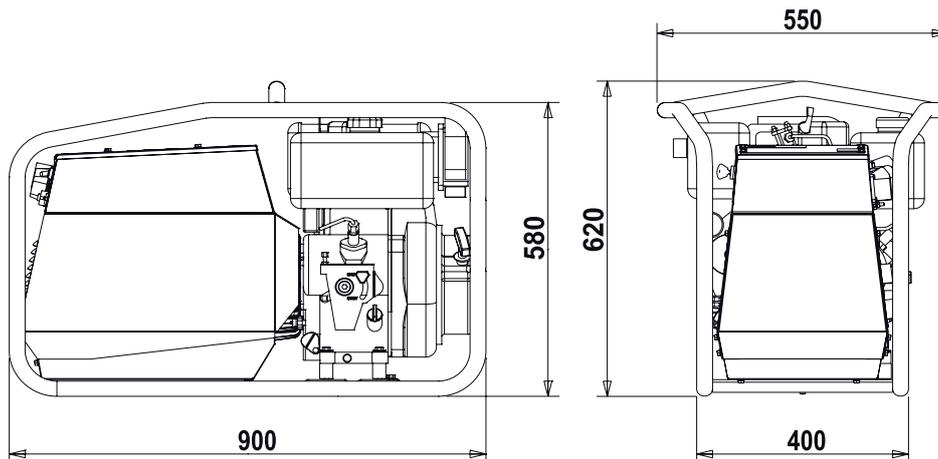
### DRY WEIGHT:

- 133 Kg

The welding machine pictured may include optional accessories.



### DIMENSION PICTURE



### OPTIONS ON REQUEST

- Remote control: TC2 (cable 20m)  
TC2/50 (cable 50m)
- Welding cables: K190 (10+8m, 35mm<sup>2</sup>)  
K 200 (20+15m, 35mm<sup>2</sup>)
- Welding kit (mask, gloves, etc.)
- Manual trolley CTM6/2
- Earthing kit



### VERSION ON REQUEST

- SCHUKO version



### 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.

The company reserves the right to change this specification without notice. For further information please contact the sales department.

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