

language

## **GENERATING SET** GE 15 YSX

The images are for reference



POWER RATINGS	
* Stand-By three-phase power	15 kVA (12 kW) / 400V / 21.6 A
* PRP three-phase power	14 kVA (11.2 kW) / 400V / 20.2 A
* PRP single-phase power	6.5 kVA / 230V / 28.3A
* COP single-phase power	1
Frequency	50 Hz
Cos φ	0.8

\* Output powers according to ISO 8528-1

#### FEATURES

- Combined system voltage regulation: electronic AVR + Compound
- The rounded edges of the canopy designed for rainwater drainage awayBunded base suitable to contain any liquids leakage from engine
- avoiding environmental pollution
- External caps for oil and water drain
- Large doors for better and easy maintenance (air, oil, fuel filters replacement)
- Central lifting eye
- Forklift pockets
- Supersilenced
- Ready for connection to automatic transfer unit EAS (AMF + ATS)
- · Meets EC directives for noise and safety



#### DEFINITION

Valid declared powers up to the followings environmental conditions: temperature  $25^{\circ}$ C, altitude 100 meters above sea level

**LTP power: stand-by power:** Maximum available power for use with variable loads for a yearly number of hours limited at 500 h. No overload is admitted.

**PRP power:** continue power with variable loads. Maximum power for use with variable loads for a yearly illimited nubers of hours.

**COP power**: continuous power with constant load. Maximum power for use with constant loads for a yearly unlimited numbers of hours.

### ENGINE 1500 RPM

4 STROKE, DIRE	CT INJECTION, NATURAL ASPIRATED
Model	YANMAR 3TNV88
* Stand-By net power	13.6 kW (18.5 hp)
* PRP net power	12.3 kW (16.7 hp)
* COP net power	/
Cylinders / Displacement	3/ 1.6 lit.
Bore / Stroke	88 / 90 (mm)
Compression ratio	20:1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	/
Speed governor type	Mechanical
FUEL CONSUMPTION	
110 % (Stand-by power)	3.8 lit./h
100 % to PRP	3.4 lit./h
75 % to PRP	2.6 lit./h
50 % to PRP	1.9 lit./h
COOLING SYSTEM	
Total system cap only engine	6 lit 2 lit.
Fan air flow	41 m <sup>3</sup> /min
LUBRICATION SYSTEM	
Total oil system capacity	/
Oil capacity in sump	2.8 lit. (min) - 6.7 lit. (max)
Oil consumption at full load	/
Output powers according to ISO 3046-1	

EXHAUST SYSTEM	
Maximum exhaust gas flow	/
Max. exhaust gas temp.	540 °C
Maximum back pressure	12.75 kPa (0.275 bar)
External diameter exhaust pipe	1
ELECTRICAL SYSTEM	12 Vdc
Starter motor power	1.2 kW
Battery charging alternator cap.	40 A
Cold start	- 15 °C
With cold start aid	/
AIR FILTER	Dry
Combustion air flow	1.1 m <sup>3</sup> /min
HEAT REJECTED AT FULL LOAD	
To exhaust system	/
To water and oil	/
Radiated to room	/
To charge cooler	1





### ALTERNATOR

SYNCHRONOUS, THREE-PHASE,	SELF-EXCITED, SELF-REGULATED, BRUSHLESS
Continuos power	16 kVA
Stand-by power	17.5 kVA
Three phase voltage	380-415 Vac
Frequency	50 Hz
Cos φ	0.8
Model A.V.R.	HVR-10 KE
Voltage regulation acc.	± 1.0 %
Sustained short circuit current	3 In
Transient dip (100% load)	17 %
Recovery time	1
Efficiency at 100% load	86 % (400V - Cos φ 0,8)
Insulation	Class H
Connection - Terminals	Star - N°6
Electromagnetic compatibility ( R.F.I. suppr.)	/
Waveform distorsion - THD	< 4 %
Thelephone interference - THF	/

REACTANCES (16 kVA - 400V)	
Direct axis synchronuos - Xd	260 %
Direct axis transient - X'd	20 %
Subdirect axis transient - X"d	7.7 %
Quadrature axis synchronuos - Xq	140 %
Quadr. axis subtransient - X"q	1
Negative sequence - X2	/
Zero sequence - X0	1
TIME CONSTANTS	
Transient - T'd	0.031 sec
Subtransient - T"d	0.006 sec
Open circuit - T'do	0.402 sec
Armature - Ta	/
Short-circuit ratio Kcc	0.76
Cooling air flow	09 m <sup>3</sup> /sec.
Coupling   Bearing	Direct SAE 4 -7 1/2 - N°1

### **GENERAL SPECIFICATIONS**

Fuel tank capacity	55 lt.
Running time (75% to PRP)	21 h
Starter battery	12 Vdc -62Ah
IP protection degree	IP 44

## CONTROL PANEL

- Controller EP6
- Fuel level gauge
- Siren
- Emergency stop buttom
- Local-Remote Start switch
- EAS plug
- TCM 35 remote control plug
- Voltmeter switch 0 RS ST TR
- Four pole circuit breaker
- ELCB-GFI (Ground Fault Interruptor) 30 mA
- Output sockets: 1x 400V 32A 3P+N+T CEE
  - 1x 400V 16A 3P+N+T CEE 1x 230V 16A 2P+T CEE
  - 1x 230V 16A 2P+T SCHUKO
- Circuit breakers for 230V 16A sockets
- Earth terminal (PE)

* Measured acoustic power LwA (pressure LpA)	85 dB(A) (60 dB(A) @ 7m)
* Guaranteed acoustic power LwA (pressure LpA)	86 dB(A) (61 dB(A) @ 7m)
Performance class (ISO 8528)	G2
* Assuration assurantions to European Direction 000	0/14/05

\* Acoustic power according to European Directive 2000/14/CE

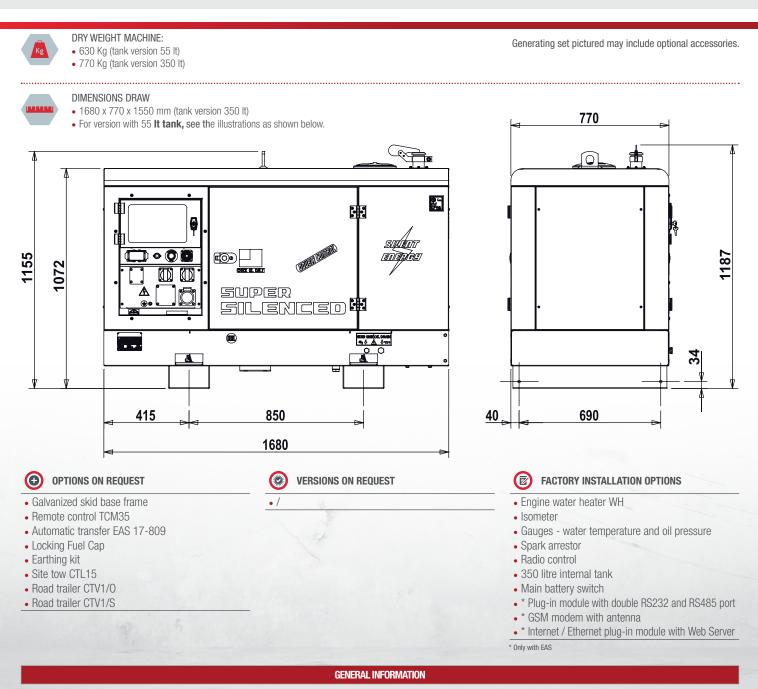
language

EP6	CONTROLLER CHARACTERISTICS
perating mode	OFF - MAN AUTO
isplay	4-digits display
EDs	Engine is running AUTO mode
uttons/controls	Starter key AUTO button N° 5 buttons for controller programming
leasures	Generator voltage Generator current Frequency Engine speed Battery voltage Charger battery voltage Hoursmeter
larms	Low oil pressure High temperature Belt break Low level fuel Emergency stop button Starting failure Over-under generator voltage Over-under frequency Over-under speed Hight-low battery voltage Overload generator Internal memory failure
unctions	Remote starting (only to AUTO) Cold start aid Automatic periodic test (only to AUTO) Generator contactor control



# **WEIGHT - DIMENSIONS AND ACCESSORIES**

language



**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 9001:2008 - 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. © MOSA - Viale Europa, 59 - 20090 Cusago (Milano) - Italy -phone +39-0290352.1 - fax + 39-0290390466 E-mail: info@mosa.it Web site: www.mosa.it

