



## **GENERATING SET GE 35 YSX SINGLE-PHASE**

The images are for reference



POWER RATINGS	
* Stand-By single-phase power	31 kVA (kW) / 230V - 115V / 134.8 A - 269.6A
* PRP single-phase power	28 kVA (kW) / 230V - 115V / 121.7 A - 243.5A
* COP power	/
Frequency	50 Hz
Cos φ	0.8

<sup>\*</sup> Output powers according to ISO 8528-1

#### **FEATURES**

- Stage 3A compliant engine
- · Automatic voltage regulation AVR
- · The rounded edges of the canopy designed for rainwater drainage away
- Bunded 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
- Ready for connection to automatic transfer unit EAS (AMF + ATS)
- · Meets EC directives for noise and safety



cooled









DEFINITION

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

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

**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, DIRECT INJECTION, NATURAL ASPIRATED	
Model	YANMAR 4TNV98
* Stand-By net power	34.1 kW (46.4 hp)
* PRP net power	30.7 kW (41.7 hp)
* COP net power	/
Cylinders / Displacement	4/ 3.3. lit.
Bore / Stroke	98 / 110 (mm)
Compression ratio	18.5 : 1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	/
Speed governor type	Mechanical
FUEL CONSUMPTION	
110 % (Stand-by power)	9 lit./h
100 % to PRP	8.1 lit./h
75 % to PRP	6.1 lit./h
50 % to PRP	4.2 lit./h
COOLING SYSTEM	
Total system cap only engine	9 lit 4.2 lit.
Fan air flow	70 m³/min
LUBRICATION SYSTEM	
Total oil system capacity	/
Oil capacity in sump	5.5 lit. (min) - 10.5 lit. (max)
Oil consumption at full load	/

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

EXHAUST SYSTEM	
Maximum exhaust gas flow	/
Max. exhaust gas temp.	630 °C
Maximum back pressure	9.8 kPa (0.1 bar)
External diameter exhaust pipe	/
ELECTRICAL SYSTEM	12 Vdc
Starter motor power	2.3 kW
Battery charging alternator cap.	40 A
Cold start	- 15 °C
With cold start aid	/
AIR FILTER	Dry
Combustion air flow	2.2 m³/min
HEAT REJECTED AT FULL LOAD	
To exhaust system	/
To water and oil	/
Radiated to room	
To charge cooler	/





## **A**LTERNATOR

SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS	
Continuos power	28 kVA
Stand-by power	31 kVA
Three phase voltage	220-240V / 110-120V
Frequency	50 Hz
Cos φ	0.8
Model A.V.R.	HVR-30
Voltage regulation acc.	± 1.0 %
Sustained short circuit current	3 ln
Transient dip (100% load)	10 %
Recovery time	≤ 3 sec.
Efficiency at 100% load	89.3 % (230V - Cos φ 0.8)
Insulation	Class H
Connection - Terminals	ZIG ZAG - N°12
Electromagnetic compatibility (R.F.I. suppr.)	EN 55011
Waveform distorsion - THD	< 3 %
Thelephone interference - THF	< 2 %

REACTANCES (20 kVA - 400V)	
Direct axis synchronuos - Xd	240 %
Direct axis transient - X'd	18 %
Subdirect axis transient - X"d	7 %
Quadrature axis synchronuos - Xq	133 %
Quadr. axis subtransient - X"q	1
Negative sequence - X2	/
Zero sequence - X0	/
TIME CONSTANTS	
Transient - T'd	0.01 sec
Subtransient - T"d	0.006 sec
Open circuit - T'do	0.147 sec
Armature - Ta	/
Short-circuit ratio Kcc	0.58
Cooling air flow	0.13 m <sup>3</sup> /sec.
Coupling   Bearing	Diretto SAE 3 -11.5 ½ - N°1

## GENERAL SPECIFICATIONS

Fuel tank capacity	100 lt.
Running time (75% to PRP)	16.5 h
Starter battery	12 Vdc -80Ah
IP protection degree	IP 44

* Measured acoustic power LwA (pressure LpA)	91 dB(A) (66 dB(A) @ 7m)
* Guaranteed acoustic power LwA (pressure LpA)	91 dB(A) (66 dB(A) @ 7m)
Performance class (ISO 8528)	G2

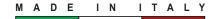
<sup>\*</sup> Acoustic power according to European Directive 2000/14/CE

## CONTROL PANEL

- Controller EP6
- Fuel level gauge
- Siren
- Emergency stop buttom
- Local-Remote Start switch
- EAS plug
- TCM 35 remote control plug
- Four pole circuit breaker
- Terminal output with bus bar
- Circuit breakers
- Earth terminal (PE)

EP6 CONTROLLER CHARACTERISTICS	
Operating mode	OFF - MAN AUTO
Display	4-digits display
LEDs	Engine is running AUTO mode
Buttons/controls	Starter key AUTO button N° 5 buttons for controller programming
Measures	Generator voltage Generator current Frequency Engine speed Battery voltage Charger battery voltage Hoursmeter
Alarms	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
Functions	Remote starting (only to AUTO) Cold start aid Automatic periodic test (only to AUTO) Generator contactor control





# WEIGHT - DIMENSIONS AND ACCESSORIES

GE 35 YSX SINGLE-PHASE



#### DRY WEIGHT MACHINE:

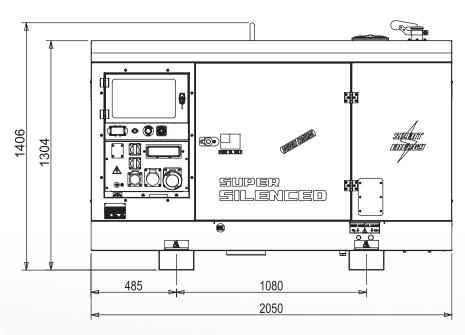
- 960 Kg (tank version 100 lt)
- 1150 Kg (tank version 350 lt)

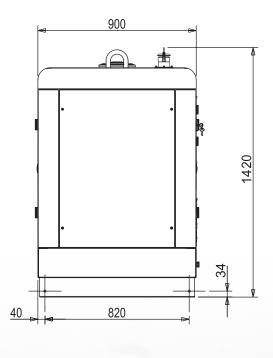
Generating set pictured may include optional accessories.



#### DIMENSIONS DRAW

- 2050 x 900 x 1730 mm (tank version 350 lt)
- For version with 100 It tank, see the illustrations as shown below.







#### OPTIONS ON REQUEST

- Automatic transfer unit EAS 42 809 (60 A)
- Remote control TCM35
- Site tow CTL20
- Road trailer CTV1/0
- · Road trailer CTV1/S
- · Earthing kit
- · Galvanized skid base frame



#### VERSIONS ON REQUEST

• /



#### FACTORY INSTALLATION OPTIONS

- Engine heater
- · Gauges water temperature and oil pressure
- Spark arrestor
- 3-way valve fuel system with quick connection for external fuel tank supply
- 350 litre internal tank
- Main battery switch
- · Electronic leakage relay
- Isometer
- Radio control

#### 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 9001:2008 - 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

