

language

GENERATING SET GE 35 YSC

The images are for reference



POWER RATINGS

50 Hz

0.8

33 kVA (26.4 kW) / 400V / 47.6 A

30 kVA (24 kW) / 400V / 43.3 A

11 kVA / 230V / 47.8 A

FEATURES

- 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
- Engine cowling side, can be completely opened, which facilitates all maintenance operations
- Central lifting eye
- Control panel with digital control unit
- The forklifts handling is possible from all sides
- Complies with regulation 2016/1628/EU FOR STATIONARY USE ONLY



DEFINITION

Valid declared powers up to the followings environmental conditions: temperature 25°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

* Stand-By three-phase power

* PRP three-phase power

* PRP single-phase power

* COP three-phase power

* Output powers according to ISO 8528-1

Frequency

 $\cos \phi$

4 STROKE, DIREC	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 m ³ /min	
LUBRICATION SYSTEM		
Total oil system capacity	/	
Oil capacity in sump	5.5 lit. (min) - 10.5 lit. (max)	
Oil consumption at full load	/	
* 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 m ³ /min
HEAT REJECTED AT FULL LOAD	
To exhaust system	/
To water and oil	1
Radiated to room	/
To charge cooler	/





ALTERNATOR

SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS	
Continuos power	30 kVA
Stand-by power	33 kVA
Three phase voltage	380-415 Vac
Frequency	50 Hz
Cos φ	0.8
Model A.V.R.	HVR-11
Voltage regulation acc.	± 1.0 %
Sustained short circuit current	2.5 In
Transient dip (100% load)	10 %
Recovery time	≤ 3 sec.
Efficiency at 100% load	87.1 % (400V - Cos φ 0.8)
Insulation	Class H
Connection - Terminals	Star - N°12
Electromagnetic compatibility (R.F.I. suppr.)	EN 55011
Waveform distorsion - THD	< 3 %
Thelephone interference - THF	/

REACTANCES (30 kVA - 400V)	
Direct axis synchronuos - Xd	243 %
Direct axis transient - X'd	19 %
Subdirect axis transient - X"d	8 %
Quadrature axis synchronuos - Xq	135 %
Quadr. axis subtransient - X"q	1
Negative sequence - X2	/
Zero sequence - X0	1
TIME CONSTANTS	
Transient - T'd	0.01 sec
Subtransient - T"d	0.005 sec
Open circuit - T'do	0.125 sec
Armature - Ta	/
Short-circuit ratio Kcc	0.58
Cooling air flow	0.115 m ³ /sec.
Coupling Bearing	Direct SAE 3 -11.5 1/2 - N°1

GENERAL SPECIFICATIONS

Fuel tank capacity	100 lt.
Running time (75% to PRP)	9 h
Starter battery	12 Vdc -80Ah
IP protection degree	IP 23

* Measured acoustic power LwA (pressure LpA)	94 dB(A) (69 dB(A) @ 7m)
* Guaranteed acoustic power LwA (pressure LpA)	96 dB(A) (71 dB(A) @ 7m)
Performance class (ISO 8528)	G2

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

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AUTOMATIC CONTROL PANEL

- Controller InteliNano Plus
- Controller supply switch
- Battery charge warning light fault
- Emergency stop buttom
- TCM 35 remote control plug
- Connection terminal-board PAC (ATS) (Automatic control panel only)
- Battery charger (Automatic control panel only)
- Circuit breaker ELCB-GFI (Ground Fault Interruptor)
- Circuit breaker
- Power terminal-board
- Earth terminal (PE)

INTELINANO PLUS	S CONTROLLER CHARACTERISTICS
Operating mode	• MAN AUTO
Display	• Graphic back-light LCD display 128x64 pixels
LEDs	 Engine operation AUTO operating mode Alarm
Buttons	 START button STOP button AUTO button N° 2 buttons for controller programming
Generator Measures	 Voltage : L1-L2/L2-L3/L3-L1/N-L1/N-L2/N-L3 Voltage : L1-L2 (Automatic control panel only) Current : I1 Powers : kVA Frequency
Engine Measures	 Water temperature (optional) Oil pressure (optional) Fuel level Rpm meter Battery voltage Maintance Hours meter
Generator Protections	 Short circuit Over-Udervoltage Over-Uderfrequency Phase sequence (Automatic control panel only)
Engine Protections	 Overspeed High water temperature alarm High water temperature warning Low oil pressure warning Low fuel level warning Under battery voltage Battery charge alternator failure Start failure Stop failure Emergency stop

AMF functions (Automatic control panel only)	 Measure mains voltage : L1-L2 / L2-L3 / L3- L1 - N-L1 / N-L2 / N-L3 Measure mains frequency Three phase detection Over-Under mains voltage Over-Under mains frequency Phase sequence
Features	 Event log and alarms (10 events) Operator interface with icons, no text Remote Start and Stop Pre-heating Fully programmable from the panel or from PC Direct connection to engines with ECU via Can bus J1939 Manual operation (MRS) with remote start IP65 protection Operation temperature: -20°C / +70°C
Communication	 Setup USB port CAN BUS interface (J1939 only)

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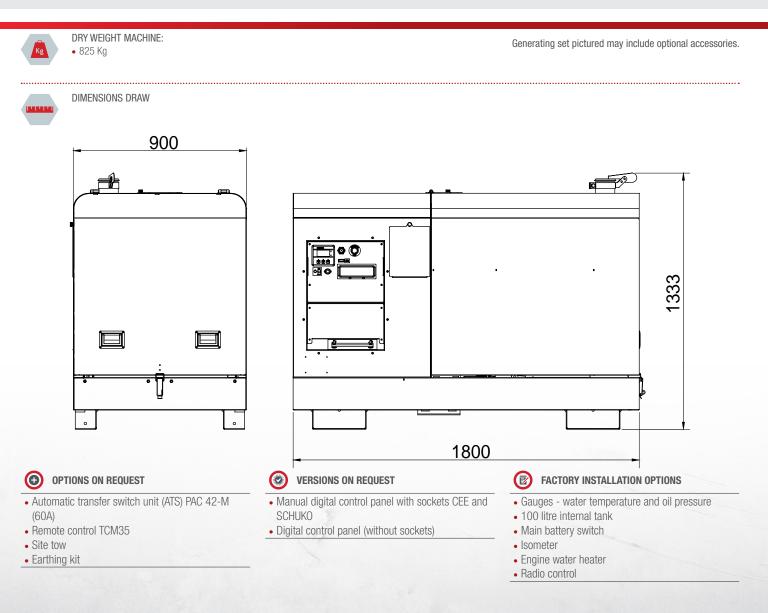
CONTROL PANEL VERSION WITH OUTPUT SOCKETS	
SOCKETS Every socket is protected by its own circuit breaker	1x 400V 63A 3P+N+T CEE 1x 400V 32A 3P+N+T CEE 1x 400V 16A 3P+N+T CEE 1x 230V 16A 2P+T CEE 1x 230V 16A 2P+T CEE 1x 230V 16A 2P+T SCHUKO





WEIGHT - DIMENSIONS AND ACCESSORIES

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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) 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.

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