GENERATING SET
GE 20 PSX

The images are for reference

FEATURES

- Automatic voltage regulation "AVR" with three-phase sensing
- Engine cowling side, can be completely opened, which facilitates all maintenance operations
- The recessed control panel is lockable and houses the sockets and machine
- Central lifting eye
- Ready for connection to automatic transfer unit EAS (AMF + ATS)
- Complies with regulation 2016/1628/EU FOR STATIONARY USE ONLY

water cooled | diesel | three-phase power | electric | super silenced

POWER RATINGS	
* Stand-By three-phase power (LTP)	22 kVA (17.6 kW) / 400V / 31.8 A
* PRP three-phase power	20 kVA (16 kW) / 400V / 28.9 A
* PRP single-phase power	7 kVA / 230V / 30.4A
* COP power	/
Frequency	50 Hz
Cos φ	0.8

* Output powers according to ISO 8528-1

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

4 STROKE, DIRECT INJECTION, NATURAL ASPIRATED	
Model	PERKINS - 404A-22G1
* Stand-By net power	20.3 kWm (27.6 hp)
* PRP net power	18.4 kWm (25 hp)
* COP net power	/
Cylinders / Displacement	4/ 2216 cm^3
Bore / Stroke	84 / 100 (mm)
Compression ratio	23.3 : 1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	743.7 kPa – 669.3 kPa
Speed governor type	Mechanical
FUEL CONSUMPTION	
110 % (Stand-by power)	6.1 lt./h
100 % to PRP	5.3 lt./h
75 % to PRP	4 lt./h
50 % to PRP	2.9 lt./h
COOLING SYSTEM	Water
Total system cap. - only engine	7 lt – 3.6 lt.
Fan air flow	40.2 m^3/min
LUBRICATION SYSTEM	
Total oil system capacity	10.3 lt
Oil capacity in sump	/
Oil consumption at full load	/

* Output powers according to ISO 3046-1

EXHAUST SYSTEM	
Maximum exhaust gas flow	3.94 m^3/mim.
Max. exhaust gas temp.	505 °C
Maximum back pressure	10.2 kPa (0.102 bar)
External diameter exhaust pipe	/
ELECTRICAL SYSTEM	12 Vdc
Starter motor power	2 kW
Battery charging alternator cap.	55 A
Cold start	- 15°C
With cold start aid	/
AIR FILTER	Dry
Combustion air flow	1.45 m^3/min.
HEAT REJECTED AT FULL LOAD	
To exhaust system	16.6 kW - 944 Btu/min.
To water and oil	19.6 kW - 1114 Btu/min.
Radiated to room	4.4 kW - 250 Btu/min.
To charge cooler	/

ALTERNATOR

SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS	
Continuos power	20 kVA
Stand-by power	23 kVA
Three phase voltage	380-415 Vac
Frequency	50 Hz
Cos φ	0.8
Model A.V.R.	HVR-30 (3ph. sensing)
Voltage regulation acc.	± 1 %
Sustained short circuit current	2,5 In
Transient dip (100% load)	10 %
Recovery time	≤ 3 sec.
Efficiency at 100% load	86.1 % (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 (20 kVA - 400V)	
Direct axis synchronuos - Xd	242 %
Direct axis transient - X'd	19 %
Subdirect axis transient - X"d	9 %
Quadrature axis synchronuos - Xq	133 %
Quadr. axis subtransient - X"q	/
Negative sequence - X2	/
Zero sequence - X0	/
TIME CONSTANTS	
Transient - T'd	0.007 sec
Subtransient - T"d	0.005 sec
Open circuit - T'do	0.103 sec
Armature - Ta	/
Short-circuit ratio Kcc	0,57
IP protection degree	IP 23
Cooling air flow	0.1 m^3/sec.
Coupling I Bearing	Direct SAE 4 -7 ½ - N°1

GENERAL SPECIFICATIONS

Fuel tank capacity	60 lt.
Running time (75% to PRP)	21.5 h
Starter battery	12 Vdc -80Ah
IP protection degree	IP 23

* Measured acoustic power LwA (pressure LpA)	90 dB(A) (65 dB(A) @ 7m)
* Guaranteed acoustic power LwA (pressure LpA)	91 dB(A) (66 dB(A) @ 7m)
Performance class (ISO 8528)	G2

* 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
- Voltmeter switch 0 - RS - ST - TR
- Four pole circuit breaker
- ELCB-GFI (Ground Fault Interruptor)
- Output sockets: 1x400V 32A 3P+N+T CEE
  1x400V 16A 3P+N+T CEE
  2x230V 16A 2P+T CEE
- Circuit breaker for 400V 16A socket
- Circuit breaker for 230V 16A socket
- Earth terminal (PE)

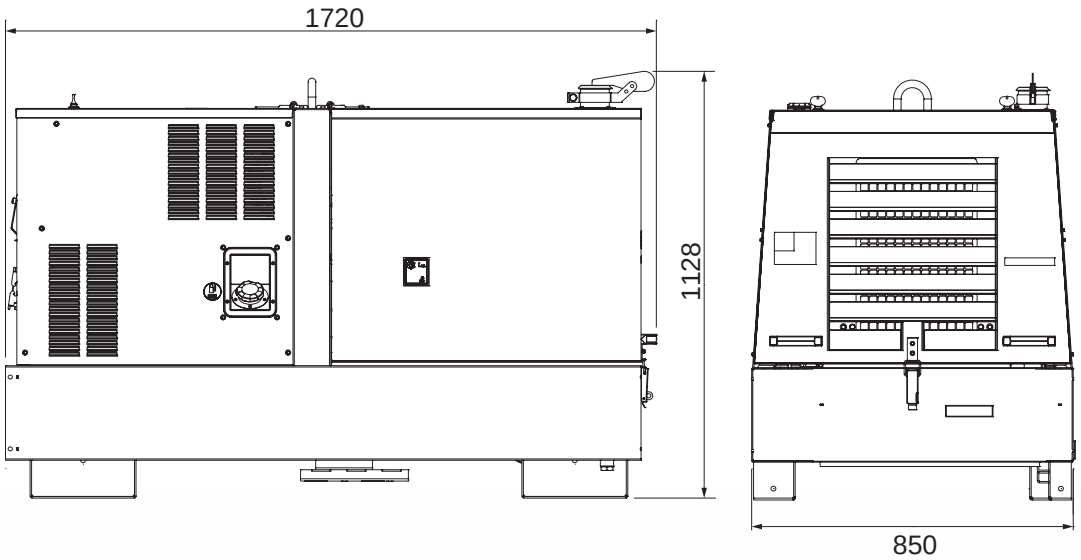
EP6 CONTROLLER CHARACTERISTICS	
Modalità Operative	OFF - MAN.- AUTO
Display	4-digits display
LEDs	Engine is running AUTO mode
Buttons/controls	Starter key AUTO button N° 5 pulsanti per la programmazione del controller
Measures	Generator voltage Generator current Frequency Engine speed Battery voltage 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

DRY WEIGHT MACHINE:
- 650 Kg

Generating set pictured may include optional accessories.

DIMENSIONS DRAW



OPTIONS ON REQUEST

- Automatic transfer unit EAS 28-809
- Remote control TCM35
- Site tow CTL22
- Road trailer CTV1/O
- Road trailer CTV1/S
- Locking Fuel Cap
- Earthing kit

VERSIONS ON REQUEST

- Version with SCHUKO

FACTORY INSTALLATION OPTIONS

- Gauges - water temperature and oil pressure
- Radio control
- Engine water heater WH
- Spark arrestor
- * Plug-in module with double RS232 and RS485 port
- * GSM modem with antenna
- * Internet / Ethernet plug-in module with Web Server

* Only with EAS

GENERAL INFORMATION

Not compliant with directive 2000/14/EC Acoustic Emission for machines intended to operate outdoors.

ISO 9001:2015 - Cert. 0192

WARRANTY

All devices are covered by the manufacturer's warranty.