



Vietnam Technology Machinery Joint Stock Company

<http://www.vimatek.com.vn>

Email: duynam@vimatek.com.vn

Model:VMP48GF

Generating set Technical Data Sheet



NO:VMC2010

ISO9001:2008



STANDARD SPECIFICATION

General feature

- Coupled with Perkins diesel engine and Stamford Or Marathon alternator
- 24V DC start motor and storage battery
- Brushless, Self-excited, IP23, insulation class H alternator
- 40°C radiator as standard, 50°C is optional
- Key start panel control system as standard, digital auto-start panel is optional
- Optional open type or silent type
- All generator sets are gone through rigorous testing before being released to the market place, including 50% load, 75% load, 100% load , 110% load and all protection function (overspeed stop, high water temperature, low oil pressure, battery charging fail,



Genset Main Technical Data

Generator Model	VMP48GF
Prime power	48KW
Standby power	53KW
Voltage	380V/220V
Frequency	50HZ/1500 rpm
Power factor	0.8(lag)
Governor type	Mechanical/Electronic

Prime Power : Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97; A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

Standby Power Rating : The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

Reliable Performance

Voltage regulation

Voltage regulation maintained within $\pm 0.5\%$ as follow:

- Power factor Between 0.8 ~ 1.0 lag
- From no load to full load, any steady load
- Speed droop variation under 4.5%

Frequency/Speed undulation

- Change load from 0-100%, Frequency/Speed Droop Ratio within 5%
- Load from 25-100%, any steady load Frequency/Speed undulation within 0.25%

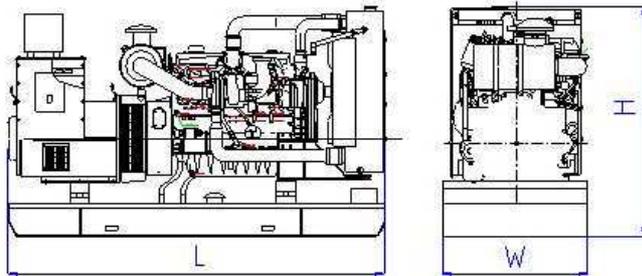
Effect factor of telecom

- Telephone Influence Factor (TIF) : Less than 50
THF : Less than 2%

Criterion

- ISO8528, GB/T2820
- EN12601:2001, EN60034-22:1997, EN60204-1:2006
- ISO9001:2008 Quality Control System

Dimension and Weight



Open Type

Overall size (L*W*H)

1750*750*1250

Weight: 800kg

ENGINE SPECIFICATION

Perkins Diesel Engine

Technical Data

Engine Model	1104C-44TG3
Configuration	4 cycle , 4 cylinders in line
Aspiration	Turbocharged
BorexStroke	105x127 mm
Rated speed	1500rpm
Displacement	4.41 L
Compression ratio	18.2:1
Prime Power	53KW
Speed Governor	Mechanical/Electronic
Cooling System	water-cooled
Speed Stability (%)	≤5%
Fuel Consumption at 100% Load	219g/kw.h
Starter Motor	12V

Alternator SPECIFICATION

Technical Data

Brand	Stamford
Alternator Model	UCI224E
Capacity	48KW
Voltage	220/380V
Frequency & Speed	50HZ/1500RPM
Exciter type	Brushless, Self-excited
Power factor	0.8
Voltage Adjust range	≥5%
Voltage Regulation NL-FL	≤±0.5%
Insulation Grade	H
Protection Grade	IP23

Control System

1. Standard: HGM180HC Key Start

Providing the standard functions as follows:

(Also can be made according to the customers' special requirements)

- * Start/Stop controller
- * Ampere meter
- * Voltmeter and selector switch
- * Frequency meter/ Water temperature gauge/ Oil pressure gauge/ Hour counter/ Battery voltage meter
- * Emergency stop pushbutton
- * Alarm System: Over speed, High Engine Temperature, Low Oil Pressure, Charge Fail
- * Protection System :Over speed, High Engine Temperature, Low Oil Pressure, Emergency Stop. And the other protection function pre-setting

2. Option: Smartgen HGM6110 Digital Auto Start

3. Option: Smartgen HGM6120 Digital Auto Start (Option assembled with the ATS)

4. Option: Deep Sea DSE5210 Digital Auto Start

5. Option: Deep Sea DSE5220 Digital Auto Start (Option assembled with the ATS)

Digital Auto-start Generator controller integrating digital, intelligent and



**Powered by
Perkins Engine**

**1104C-44TG3
Generating Set**

network techniques is used for automatic control system of diesel generator. It can carry out functions including automatic start/stop, data measure and alarming. Optionally assembled with the ATS, it can carry out auto-switching between the outer power and generating set power. (AMF)

Functions:

- * Automatic Start/Stop
- * 3 start attempts failure and Automatic Crank Disconnect
- * Parameters display (V/A/Hz/Hour)
- * Engine monitoring and protection
- * Charge alternator exciting and Charge alternator fail alarm
- * Running hour counting
- * Settings can be adjustable via key buttons on front panel



CÔNG TY CỔ PHẦN CÔNG NGHỆ THIẾT BỊ VIỆT NAM

VPGD: 389 Trương Định, Quận Hoàng Mai, TP Hà Nội

Tel: 04 36628835/36 * Fax: 04 36628837 * Mobile: **0934 311285**

Website: www.vimatek.com.vn Email: duynam@vimatek.com.vn