



Vietnam Technology Machinery Joint Stock Company

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

[Email: duynam@vimatek.com.vn](mailto: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%

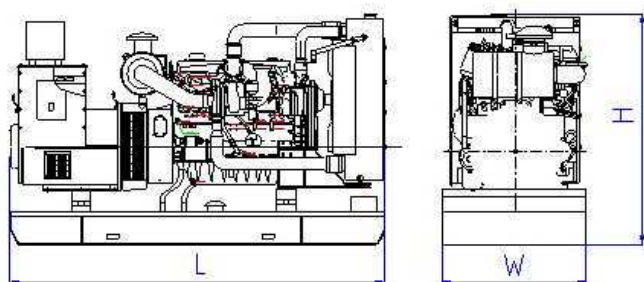
Effect factor of telecom

- 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