Three-Phase Low Frequency Inverter

Beijing Multifit Electrical Technology Co.,Ltd
北 京 众 能 力 电 科 技 有 限 公 司

Tel:86-010-87227420 Fax:86-010-85885278
Email: multifit@multifitele.com
Website: http://www.multifitele.com
Factory Add: 3/F,JieSi Blgd.,6 Keji West Road,
Hi-Tech Zone 515041,Shantou,Guangdong,China.

Beijing Multifit Electrical Technology Co.,Ltd

MULTIFIT

Three-Phase Low Frequency Inverter

PRODUCT OVERVIEW

The product applies to different types of loads because of its full digital design and real pure sine wave output. With power-frequency design and highly stable output voltage and frequency, it can operate continuously for a long time. Thus, it avoids the disadvantages of direct use of the mains supply,voltage instability, noise, and lightning attacks, and the disadvantage of short power supply time of small UPS, guaranteeing continuous and reliable operation for electrical equipment. Sine wave inverter supplies are the best guarantee for the safe and reliable operation of system. The product is now widely used in China Telecom, China Mobile, China Unicom, ierospace, railways, financial management, office automation , industrial automatic control, medical health , military scientific research, ect .

MAIN FEATURES

Excellent performance because of an MCU intelligent control technology.
A wide range of applicable loads because of power frequency transformer design and pure sine wave AC output.
A wide range, high accuracy,and full automatic voltage stabilization.
Overall protection functions(Overload protection, Short circuit protection, under voltage protection, over voltage protection and over temperature protection).
Simple LED and LCD, for visualization of operation status of the equipment.

Technical Data VMI-II

Model	VMI-II 1KW	VMI-II 2KW	VMI-II 3KW	VMI-II 4KW	VMI-II 5KW	VMI-II 7KW	VMI-II 8KW	VMI-II 10KW	VMI-II 12KW	VMI-II 15KW
Rated power	1KW	2KW	3KW	4KW	5KW	7KW	8KW	10KW	12KW	15KW
DC Votalge	48 VDC				48 VDC/96 VDC/192 VDC				192 VDC/240 VDC	
Input voltage	Three - phase four - wire system + ground wire 380 V±20 %									
Input frequency	45 - 65 Hz									
Output Volatge	220 VAC±5% (Three - phase four - wire system)									
Output frequency	50 Hz±1%									
Switching time	Switching from the mains supply mode to the battery mode 50 ms switching from the battery mode to the mains supply mode 25 ms									
Charge current	Max 8A								Max 8A	
Inverter output protection	100 -120 % 30 s > 120 % 100 ms									
Noise	<45 dB									
Ambient temperature for operation	0-40 °C									
Ambient temperature for storage	-15 °C-50 °C									
Ambient temperature for operation /storage	0-90 % (no condensation)									
Altitude for operation	0-3000 m									
Altitude for storage	0-15000 m									
Product dimensions D×W×H(mm)	560×230×570					590×470×730				
Packing dimensions D×W×H(mm)	640×300×730					690×570×850				
Net weight/gross weight(kg)	29.7/30.7	38/46.5		40.7/50.4	49.7/55.3	58.7/64		104/123	113/37	123/150

Three-Phase Low Frequency Inverter

Three-Phase Low Frequency Inverter

MAIN FEATURES

Advanced operation mode:

Frequency tracking, phase-locking voltage stabilization, noise filtering and prevention of impact by fluctuation of the power grid realized in output go the inverter. The best power supply guarantee for the loading equipment of users contributed by a full digital vector control technology based on real-time processing by DSP, MCU and DDC.

Efficient IGBT(insulated Gate Bipolar Transistor)inversion technology:

The good high-speed Switching feature. Large-voltage and large current operating characteristic. And voltage drive of IGBT(The fifth-generation IGBT has a lower saturation voltage drop and higher operation efficiency and reliability) .

High adaptable:

A wide range of input frequency(45Hz~65Hz), which realizes stable operation of fuel generators.

Great loading capacity:

Suitability for industrial applications such as machine tools and wire cutters.

Reliable performance:

A power-on test function for timely discovery and elimination of potential hazards. High stability and reliability guaranteed by integration of functions including AC input over voltage protection, AC input undervoltage protection, output overload protection, short circuit protection, overcurrent protection, bus overvoltage protection,overheat protection, fan fault protection, auxiliary power supply fault protection, battery undervoltage warning protection, battery overcharge protection, etc.

Management function:

Big LCD display, with smart touch screen buttons.You can see the operation status of flow chart,technical data and event records,ect.

Visualization of parameters of the inverter by means of communication with a computer via a RS232/RS485 interface with help of intelligent monitoring software of the inverter.

Intelligent battery management:

Intelligent battery charge: Adjustment of the battery charge parameter according to the battery configuration of the user and switching between equalizing charge and floating charge , temperature compensating charge, and discharge management according to the power supply conditions, which may make the battery life longer and reduce burden of the administrator

Intelligent battery fault detection: Measurement of single parameters, display of the measurement results on the LCD, and immediate alarming and notification for the administrator upon any battery fault.

Personalized settings:

Proper adjustment of the input parameters according to the input power supply conditions

Technical Data VMI-III

Model: VMI-III		10KW	20KW	30KW	40KW	60KW	80KW	100KW	150KW	200KW
Rated capacity		10KW	20KW	30KW	40KW	60KW	80KW	100KW	150KW	200KW
Operation mode and principle		PWM(pulse withmoculation) on DSP accurate control technology and double built-in MCUS Complete isolation of the output power supply								
AC INPUT	Phase number	Three-phrase +N+G								
	Voltage	AC220V/AC380V+-20%								
	Frequency	50Hz/60Hz±5%								
DC INPUT	DC voltage	DC192V/ DC220V/DC384V (16to 32 pieces of 12V batteries)								
	Floating battery	13.6V of each battery×battery quantity(10.8V×16 batteries =217.6V)								
	Cut-off voltage	10.8V of each battery × battery quantity(10.8V×16 batteries =217.8V								
AC OUTPUT	Phase number	Three-phase +N+G								
	Voltage	AC220V/AC380V±1%(steady load)								
	Frequency	50Hz/60Hz±5%(mains supply)50Hz± 0.01%(battery)								
	Efficiency	≥95%(load: 100%)								
	Output waveform	Sine wave								
	THD	Liner load:< 3% Non-liner load:<5%								
	Dynamic load voltage transient	<±5%(jump from 0-100%)								
	Instant recovery time	<10ms								
	Time of swiching between the battery and line mains supply	3s-5s								
	Unbalanced voltage	<±3%< ±1%(balanced load voltage)								
	Overload capacity	120%, 20s;> 150%, 100ms								
System Index	Operation efficiency	≥95%(load: 100%)								
	Computer communication	RS 232/RS 485(SNMP remote monitoring network adapter)								
	Operating temperature	-10℃-40℃								
	Relative humidity	0-90% (no condensation)								
	Noise	40-50dB 40-51dB				50-60dB			60-70dB	
Structure	External dimension D×W×H(mm)	580×750×920				//			//	
	Weight(Kg)	180	220	300	360	600	850	950	1380	1560

Three-Phase Low Frequency Inverter