

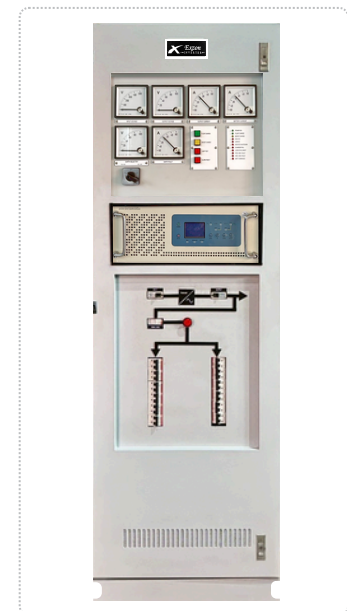
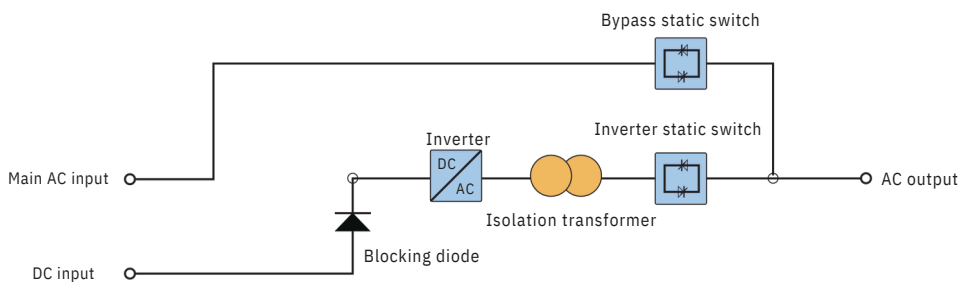
Industrial Inverter

Ensure stable operation of the power system

Overview

Industrial Inverter is specially designed for the railway system, electric power system and carefully designed for a new generation of intelligent inverter power supply to meet the requirements of high quality of the power supply, and is suitable for all the power supply interference sensitive, need to be stable, reliable, purified, uninterrupted sinusoidal wave AC power supply system. It can also prevent various aberrations of public power, such as supply voltage drop, surge voltage, spike voltage and broadcast interference.

Schematic diagram



Providing inverter with cubicle and measuring system

Technical features



Intelligent microcomputer CPU control technology: advanced control theory and mature and stable frequency inverter mode can quickly respond to changes in the external environment, real-time to provide uninterrupted high-quality AC output.



Adopting imported high-power IGBT: high output precision, good load characteristics and excellent EMI/EMC indicators.



Using SPWM pulse width modulation technology: output frequency stabilization, voltage stabilization, noise filtering, low distortion, pure sine wave.



Built-in static bypass switch: fast switching between bypass and inverter, improving the continuity and reliability of inverter power supply.



With rich LED/LCD status display and alarm signal display function: the host of a variety of status at a glance, convenient to view the operating information.



With automatic start-up recovery function, suitable for the operation of the power supply. Output with isolation transformer, strong overload capacity and anti-shock capacity.



Support RS485, SNMP communication function: use the monitoring software to understand the working condition of the power supply in real time.



Provide six groups of passive dry nodes: for bypass operation, inverter abnormality, power failure, power overload, DC abnormality, AC abnormality. Adopt intelligent control.



With a redundancy function, this solution ensures continuity of auxiliary power even if one of the two power supply units fails. It maintains service continuity after a power supply equipment failure.



With perfect safety protection function system: provide input anti-reverse, buffer, output short-circuit, overload, internal over-temperature, input/output high/low voltage and other protection functions to ensure the comprehensive reliability of the product operation stability.

TECHNICAL PARAMETER TABLE

Model		Industrial Inverter U Series			
Rated capacity		1KVA-20KVA			
DC Input	Rated DC voltage （VDC）	110V		220V	
	DC input range （VDC）	90V-135V		180-275V	
Bypass input	Bypass input voltage range	220/230VAC：-25%~20%			
	Input frequency	50Hz±10%			
AC output	Output voltage (VAC)	220/230V±2%			
	Output Frequency (Hz)	50Hz±0.1%			
	Output Power Factor (PF)	0.8			
	Output waveform	Pure sine wave			
	Transient voltage variation range	220/230VAC±10%			
	Transient response time	≤20ms (Load suddenly changes from 20% to 100% to 20%)			
	Voltage waveform distortion (THD)	≤3%(Linear load); ≤ 5% (non-linear load, load power factor 0.8)			
	Crest factor	3:1			
	Bypass conversion time (ms)	≤4ms (Typical value 1.2ms)			
	Overload capacity	105% < Load ≤ 125%, 10 min 125% < Load ≤ 150%, 1 min Load > 150%, 200 ms			
System characteristics	Protection	DC overvoltage and undervoltage; AC input overvoltage and undervoltage; Output overload and short circuit protection; Output overvoltage protection; Inverter over temperature protection, system fault protection; Static switch switching protection, etc.			
	Efficiency	≥85%			
	Cooling method	Forced air cooling			
	Switching device	Static switch (SCR)			
Interface communication interface	Interface	LED+LCD			
	Communicate	Standard RS485; Optional SNMP card;			
	Dry contact output	6 sets of passive normally open dry contact alarm signals for inverter power supply, bypass power supply, AC abnormality, DC abnormality, output overload, and inverter fault;			
Work environment	Safety	EN 60950			
	EMC (for immunity)	EN 61000-4-2...6			
	Noise (1 meter)	≤60db			
	Environmental temperature (°C)	-5℃ ～ 40℃			
	Relative humidity	0-95% No Condensation			
	Relative altitude (m)	< 1500			
	Protection class (Enclosure)	IP41			
	Quality	ISO9001/2015			
Dimension (Inverter unit)	Rated capacity	1KVA-2KVA	3KVA-5KVA	10KVA	20KVA
	WxDxH(mm.)	482x485x176	482x485x310	610x485x266	678x485x355

SELECTION MODEL

Ratings (kVA)	110VDC	220VDC
1 kVA	LFV1-110/240-1KU	LFV1-220/240-1KU
2 kVA	LFV1-110/240-2KU	LFV1-220/240-2KU
3 kVA	LFV1-110/240-3KU	LFV1-220/240-3KU
5 kVA	LFV1-110/240-5KU	LFV1-220/240-5KU
10 kVA	LFV1-110/240-10KU	LFV1-220/240-10KU
20 kVA	LFV1-110/240-20KU	LFV1-220/240-20KU

KEY REFERENCES

Industrial Inverter

