

INVERTA SERIES

Industrial Inverter System



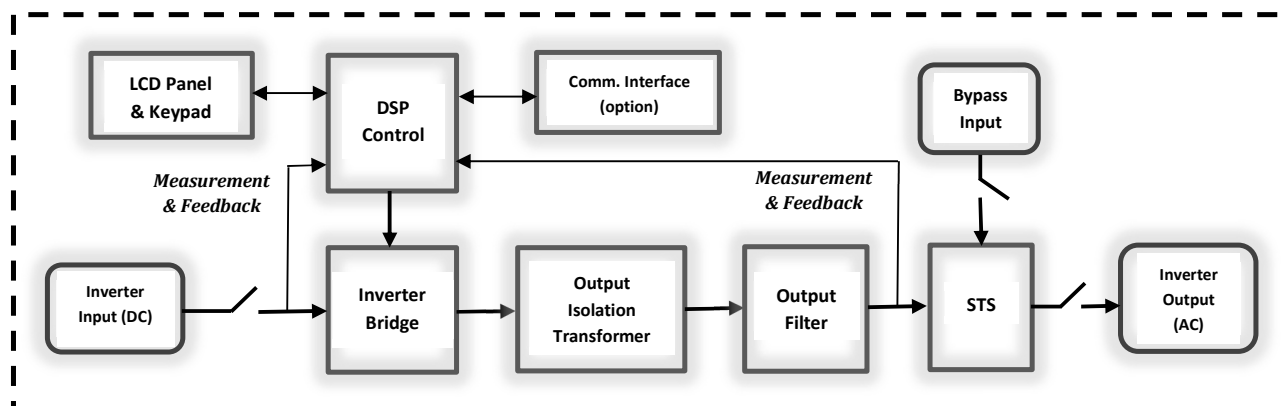
Product Description

INVERTA Series, 1-Phase & 3-Phase Output (DC to AC) Industrial IGBT Inverter system with integrated bypass is an advanced technology equipment. Built-in with protections, galvanic isolation and DSP control systems, this inverter system is designed and manufactured to convert DC voltage to pure sinewave and regulated AC voltage. It provides AC power, which is especially important for Industrial, Telecom and Military applications.



Key Features

- DSP controlled 1 or 3 phase output
- Input and output protection breakers
- 1kVA to 500kVA power options
- Output isolation transformer
- 50Hz/60Hz/83 1/3Hz/400Hz output
- 50Hz/60Hz adjustable frequency
- By-Pass input correction interruptible
- Interruptible Bypass switching
- Compatible with inrush current devices
- Short circuit protection
- Parallel working and scaling (optional)
- 2x16 LCD display to monitor the output input voltage and current
- Line voltage low/high, output voltage low/high, over temperature, and IGBT/Mosfet fault and alarms
- Through RS232 or Dry Contacts *RS485 Modbus, TCP/IP communication option
- Advanced PC control and monitoring program
- Monitoring and controlling of all operational parameters by the LCD display
- Automatic or Manual Start
- Language selection on LCD
- Log records up to 200 events
- Controlling with an external input
- Soft Start
- LED's on the front panel
- Free-Standing or rack-mount configurations
- Voltage & Current Transducers
- Minimum IP20 protection class
- Parallel operation option



Inverter Block Diagram

Technical Specifications

SPECIFICATIONS

INPUT			
Inverter Type	RACK TYPE (1 PHASE)	TOWER TYPE (1 Phase)	TOWER TYPE (3 Phase)
Voltage (VDC)	24VDC to 220VDC	24VDC to 220VDC	24VDC to 432VDC
Alternative Voltage (AC)	110V to 600VAC		
Frequency (Hz)	50Hz / 60Hz to 400Hz		
OUTPUT			
Voltage (V)	110V / 220V / 230V / 240V	110V / 220V / 230V / 240V	3x200VAC / 3x220VAC to 3x440VAC / 3x480VAC
Power (kVA)	1kVA to 3kVA	1kVA to 200kVA	5kVA to 500kVA
Power (kW)	800W to 2.4kW	800W to 160KW	4000W to 400kW
Frequency (Hz)	50Hz/60Hz to 400Hz		
Power Factor	0.80		
Crest Factor	3:1		
Waveform	Pure Sinus Wave		
Efficiency	> 82% to 90% (depending on DC Bus voltage)		
Static Bypass	<4 msec : to Bypass & 0 msec : to Inverter (Re-transfer delay adjustable)		
THDu	< 2% (Linear), <5% (non-linear)		
Overload (INV)	125% for 10mins / 150% for 1min / 200% for 1sec (adjustable)		
Overload (BYP)	110% continuous / 150% for 1min / 1000% for 50ms (adjustable)		
GENERAL			
Conformance	Safety: IEC/EN 62040-1 ; EMI: IEC/EN 62040-2 ; EN 61000-4-2, -3, -4, -5, -6, -8 ; LF Signal EN 61000-2-2 ; Emission EN 55011		
Protection Class & Color	IP20 Protection & RAL7032, RAL 7035 *other options available		
Cooling	Fan Forced Cooling or Natural-cool option (Customised)		
Display & Indicators	2x16 LCD display: OUTPUT OK & INPUT OK & Common Alarm LEDs, Output/Input Fuse		
Alarms & Protections	DC Undervoltage / Overvoltage & Overload & Short Circuit & IPM Fault & Over Temperature		
Mounting	Rack	Tower	Tower
ENVIRONMENTAL CHARACTERISTICS			
Operation Temperature	0°C - 50°C		
Storage Temperature	(-20°C) - 70°C		
Relative Humidity	0-90 % non-condensing		
INVERTA Single & Three Phase Industrial Inverter System powered by EPC. Specifications can change without notice. Datasheet v1.2			