

TEBEVERT III MODULAR 5-25 kVA INVERTER SYSTEM

The TEBEVERT III Modular Inverter System is designed to address the critical AC powering requirements of Industrial and Utility applications. The TEBEVERT III Modular Inverter System can be scaled in 5 kVA increments up to 25 kVA (non-redundant). Unlike conventional stand alone inverters, these parallel operating inverters can also be scaled to operate with N+1 redundancy. N+1 redundancy insures optimal availability for your critical load applications. If an inverter failure should ever occur, the faulty inverter module will automatically be removed from the output bus before a disruption in the output is seen by the critical load. In this mode of operation, a failure of one inverter will not effect the operation of your critical load. Since all units are designed for "hot swap" replacement, a faulty module can easily be unplugged and replaced to maintain power to your critical load.

Key Features

- Hot Swap 5 kVA Inverter Modules
- Hot Swap Static Switch Module
- Supports High Inrush Current Loads
- High Efficiency Operation, Lowers Operating Costs
- Low Distortion Output Voltage
- Integrated Maintenance Bypass Switch
- Meets EN 55022 Class B Requirements
- Automatic Master-Slave Operation
- Up to Five Inverter Modules Can Be Paralleled As Load Increases
- No Single Points Of Failure
- User Friendly Display Of Operating Mode
- Optional—Seismic Zone 4 Certified



120VDC Tebevert III
System with Optional MCU
2000 and Display

Technical Specifications



CAPACITY & AC BYPASS	60HZ Models		
	Output Capacity	5 - 25.0 KVA	
	Maximum Number of Modules	The inverter cabinet supports a maximum of 5 inverter modules	
	Nominal Bypass AC Input	120 VAC 208, 220, 240, 480VAC	
	# of Bypass AC Phases	1 2	
	Bypass AC Input Wiring	L, N, PE L1, L2, PE	
DC INPUT	Nominal DC Input 120VDC		
	DC Input Range	-15%, +20%	
	Reflected DC Ripple, 120VDC	< 2mV reverse smoothing < 5% RMS	
SYSTEM OUTPUT	Nominal AC Output Voltage	120VAC 120VAC	
	Optional AC Output Voltage	120/240VAC 120/240VAC	
	Output Voltage Regulation	+/- 5% for all combinations of line, load and temperature	
	Output Power Factor	0.7 lagging to 0.8 leading	
	Output Voltage Waveform	PWM sine-wave	
	Output Crest Factor	2:8:1	
	Output Voltage Distortion	< 3.5% @ 100% rated linear load	
	Output Overcurrent Protection	Electronic current limiting	
	SYSTEM	Overload Rating (Inverters)	200% for approx. 75 cycles (1.25 seconds)
Overload Rating (Static Bypass)		500% for 100ms	
System Operating Efficiency		> 89% (typical)	
Frequency Stability		+/- 0.1% free running, +/- 3% when AC present	
Module Capacity		5.0kVA/4.0kW	
Static Switch Transfer Time		< 2ms	
Cooling		Temperature controlled fans	
Maintenance Bypass Switch		Standard make-before-break mechanically interlocked switch provided on all models	
Remote Alarming		(1) Form-C Summary Alarm, Optional Relay Card (8 Alarms)	
LED indicators (Inverter Modules)		Output present, fault, overload, AC synchronized, parallel operation	
LED indicators (Static Bypass Switch)		Power flow diagram, normal, fault, ac present, dc present, overload, load on bypass, load on inverter	
Metering		(4) segment LCD display switchable between output voltage and current	
Cabinet Dimensions (H x W x D)		84" (2134 mm) x 23.6" (600 mm) x 23.6" (600 mm)	
OPERATING CONDITIONS		Radio Interference	EN 55022, class B
	Altitude	6000 ft (1800 m), 13, 000 ft. (4000 m) at 30°C	
	Operating Temperature	-5 to +40° C	
	Operating Humidity	0-95% non-condensing	

Module Data	5.0kVA
Power Rating	5000VA/4000W
Nominal Input Current 120 VDC	38.0A
Maximum Input Current 120VDC	44A
Output Current NOM 120VAC	41.6A

Benning Power Electronics, Inc.
 1220 Presidential Dr., Richardson, TX 75081
 E-Mail: sales@benning.us
 Web: www.benning.us

Toll Free North America: 800.910.3601
 Local: 214.553.1444
 Fax: 214.553.1355