

Static (FIXED) Voltage / Frequency Converter

SPF Series 10KVA~1000KVA

- **USA MILITARY Approved**
- Frequency Conversion :
 - 50Hz ↔ 60Hz, 50Hz ↔ 400Hz,
 - 60Hz ↔ 400Hz Fixed
 - **400Hz Input / Output Fixed**
- Output Frequency Adjustable
- 10% Output Voltage Adjustable
- 50Hz/60Hz Output Frequency Selectable
- Single and Three Phase Configurations
- **BATTERY Added for UPS Backup (Option)**



Application

- **Voltage and / or Frequency Conversion**
- **Power Conditioning & Freq. Stabilization**
- Factory Automation Equipment
- Auto-test Equipment
- Alarm / Security Monitoring Systems
- Cellular Sites
- Export Product Testing
- Laboratory
- Medical Equipment
- Precise Measuring & Testing Equipment
- Sophisticated Monitoring Systems
- Sophisticated Instruments
- TV & Radio Broadcasting Stations
- **Option: 400HZ APPLICATIONS:**
 - **Military System Diagnostics**
 - **Telecommunication Facilities**
 - **Avionics, Marine, Missile, Projectile Facilities**
 - **Airport Grounding Facilities include Airport Terminal, Control Tower**
 - **Navigation**
 - **Any Facilities / Instruments have 400Hz frequency Power System**



Factory Automation Equipment



Sophisticated Instruments



Alarm / Security Monitoring Systems



Cellular Sites



Laboratory



Export Product Testing



Cruise



Airport Terminal

SATECH POWER

USA Military Approved Power System

SPF Series Static (FIXED) Voltage / Frequency Converter

The SPF series Static (FIXED) Voltage / Frequency Converter is available from 10 to 1000 KVA as standard, in single or three-phase output configurations and may be customized to reach up to 2000KVA.

Power Conditioning & Frequency Stabilization

The SPF series provides clean and stable, regulated power to the load, and the chosen crystal oscillator controlled frequency, free from any spikes, surges, lightning and frequency fluctuation.

High Efficiency, Optimum Stability, and Superior Heat Dissipation

By use of advanced Technology DPS, IGBT and Switching Components to increase the reliability, efficiency and heat dissipation.

Complete Input to Output True Galvanic Isolation design

Solve ultimately power problems, including noise, lightning, ground leakage current, and CEMF (Counter-electromotive Force) etc.

Ruggedness

The rectifier employs phase control technology to regulate the DC bus Voltage. This is the most efficient method to charge the batteries.

The SCR used are inherently rugged. Additionally, a large inductor is added at the input to avoid deforming the AC source waveform.

Reliable Input Protection

Circuit breakers are placed in each individual input loop to ensure power can continuous through another loop in case of breaker trip caused by an abnormal condition.

Diagnostic Panel with LCD and LED Display

400Hz Input / Output Frequency (Option)

Precise frequency (oscillated by crystal oscillator). Designed for application of Airforce, Military, Navy, Aviation, Navigation ...etc.

+/-20% Wide Input Voltage Range

The SPF series is designed to accept a wide input range, it can work effectively under any unstable AC source. All of the input components used are specially selected to handle extremely high voltage and high current.

Multi-CPU Design and Software / Hardware Cooperate Control

Make the SPF series extremely high reliable.

Plug & Play Modular design

The power circuit is separated into several modules plugged into several slots in the unit, which are easy to pull out, permitting quick maintenance and easier troubleshooting (MTTR <25 minutes).

Tolerate Harsh Environment

Each component is chosen with large safety margin to accommodate Extreme environments, such as temperature, humidity, altitude, shock or Contamination.

Intelligent Fan Rotation Rate Control

The fan rotation rate can automatically change according to the load condition, so that the fan's life expectancy is extended and audible noise is reduced.

BATTERY added for UPS Backup (Option)

The SPF series can be started without an AC source, that is, can be started with battery power only. This is possible because current limit circuitry is added, preventing the problem of large inrush current from blowing the battery fuse and damaging the DC capacitors when batteries are connected to an empty DC bus (before the DC bus is energized).

Reasonable Heat Evacuation Passage Design

Control circuitry and power circuitry are physically separated. Thus, the SPF series can operate under harsh environment.

Serial & Parallel Redundant Connection (Option)

12-Pulse Full Controlled Rectifier (Option)

Reduce harmonic current for 80KVA and above SPF series.

Technical Specification (3-Phase Input / 3-Phase Output)

MODEL	SPF 3310	SPF 3315	SPF 3320	SPF 3330	SPF 3340	SPF 3350	SPF 3360	SPF 3380	SPF 33100	SPF 33120	SPF 33160	
Capacity (KVA)	10	15	20	30	40	50	60	80	100	120	160	
INPUT												
Input Voltage (Select One)	3phase 3W:200VΔ/220VΔ/380VΔ/460VΔ (Option:480VΔ/600VΔ) 3phase+N:200VY/208VY/220V/380VY/400VY/415VY/440VY (Option:480VY/600VY)											
Input Voltage Range	±20% (> ±20% is available upon request)											
Input Frequency	50Hz or 60Hz or 400Hz (Please specify)											
Input Frequency Range	±3Hz (wider ranges offered, please consult)											
Power Walk In	0% ~ 100%: 20Sec											
Efficiency	≅ 98%											
Rectification Type	6 Pulse Standard, 12 Pulse Optional								12 Pulse Standard			
OUTPUT												
Voltage (Select One)	3phase 3W:200VΔ/220VΔ/380VΔ/460VΔ (Option:480VΔ/600VΔ) 3phase+N:200VY/208VY/220V/380VY/400VY/415VY/440VY (Option:480VY/600VY) (Option: ±10% adjustable from nominal)											
Voltage Regulation	±1% from Set Point											
Frequency (Select One)	50 or 60Hz ±0.1Hz (Option-1: 400Hz)(Option-2: Switch Selectable 50/60Hz) (Option-3: Frequency Adjustable ±10% from nominal)											
Wave Form	Pure Sine Wave											
Power Factor	0.8											
Phase Shift	120° ±0.5° (100% Unbalance Load)											
Total Harmonic Distortion	< 3% (0~100% Linear Load)											
Overload Capacity	<110% Continuous, 125%/15Mins, 150%/10Mins, >150%/30Secs											
Efficiency (100% Load) (%)	93	93	93	93	93.5	93.5	94	94.5	94.5	95	95	
Overall Efficiency (%)	91	91	91	91	91.5	92	92	92.5	92.5	93	93	
Max. Heat Dissipation (kw)	1.1	1.2	1.3	1.9	2.6	3.0	3.5	4.6	5.4	6.5	8.7	
BTU/h @ Full Load (K)	2.4	3.6	4.8	6.5	8.9	10.3	12	16	19	22	30	
PROTECTION												
Over/Under Voltage	Alarm											
Output Short Circuit	Current Limited and cut-off and fuse and breaker											
Overload	Auto-shutdown 1 Minute. Auto Restore when back to normal											
Over Temperature	Auto-shutdown											
Lightning / EMC Filter	MOV / Input & Output (FCC CLASS A)											
Galvanic Isolation	Input & Output True Galvanic Isolation											
INDICATORS & ALARM												
LCD Data Display	Real Time Status, Data or Historical Events, Parameters, Real Time Clock, Inv & Buzzer											
LED Data Display	Up to date information (Status) to The User & Audible Alarm											
INTERFACE												
Contact Closure, RS-232/485	Supports Remote Control Module, Option: SNMP card Model MEGATEC Net Agent II											
STANDARDS												
EMI/EMC	EN50091-1,-2, CE Approved											
OUTLOOKS												
Capacity (KVA)	10	15	20	30	40	50	60	80	100	120	160	
Size (H*W*D/mm)	1600*550*800						1600*1100*800					
Net Weight at 220/380V (Kgs)	280	290	300	400	480	550	680	820	950	1180	1450	
ENVIRONMENT												
Audible Noise(at 1m)(dBA)	< 65						< 67					
Relative Humidity	0%~90% (Non-Condensing)											
Operating Temperature	0~40°C (32~104°F)											
Altitude	< 1500M Above Sea Level											



6.25~60KVA



80~160KVA

- Remarks:
1. Different specifications required are available
 2. All specifications mentioned above are subject to change without prior notice.

Technical Specification (3-Phase Input / 3-Phase Output)



200-320KVA



400-100KVA

MODEL	SPF 33200	SPF 33240	SPF 33300	SPF 33320	SPF 33400	SPF 33500	SPF 33600	SPF 33800	SPF 331000
Capacity (KVA)	200	240	300	320	400	500	600	800	1000
INPUT									
Input Voltage (Select One)	3phase 3W:200VΔ/220VΔ/380VΔ/460VΔ (Option:480VΔ/600VΔ) 3phase+N:200VY/ 208VY/220V/380VY/400VY/415VY/440VY (Option:480VY/600VY)								
Input Voltage Range	±20% (> ±20% is available upon request)								
Input Frequency	50Hz or 60Hz or 400Hz (Please specify)								
Input Frequency Range	±3Hz (wider ranges offered, please consult)								
Power Walk In	0% ~ 100%: 20Sec								
Efficiency	≅ 98%								
Rectification Type	12 Pulse Standard								
OUTPUT									
Voltage (Select One)	3phase 3W:200VΔ/220VΔ/380VΔ/460VΔ (Option:480VΔ/600VΔ) 3phase+N:200VY/208VY/220V/380VY/400VY/415VY/440VY (Option:480VY/600VY) (Option: ±10% adjustable from nominal)								
Voltage Regulation	±1% from Set Point								
Frequency (Select One)	50 or 60Hz ±0.1Hz (Option-1: 400Hz) (Option-2: Switch Selectable 50/60Hz) (Option-3: Frequency Adjustable ±10% from nominal)								
Wave Form	Pure Sine Wave								
Power Factor	0.8								
Phase Shift	120° ±0.5° (100% Unbalance Load)								
Total Harmonic Distortion	< 3% (0~100% Linear Load)								
Overload Capacity	<110% Continuous, 125%/15Minutes, 150%/10Minutes, >150%/30seconds								
Efficiency(100% Load) (%)	95	95	95	95	95	94.5	94.5	95	96.5
Overall Efficiency (%)	93	93	93	93	94	95	95	95	96
Max.Heat Dissipation (kw)	10.8	13	17.4	21.7	27	32.55	40.6	43.4	56.4
PROTECTION									
Over/Under Voltage	Alarm								
Output Short Circuit	Current Limited and cut-off and fuse and breaker								
Overload	Auto-shutdown 1 Minute. Auto Restore when back to normal								
Over Temperature	Auto-shutdown								
Lightning / EMC Filter	MOV / Input & Output (FCC CLASS A)								
Galvanic Isolation	Input & Output True Galvanic Isolation								
INDICATORS & ALARM									
LCD Data Display	Real Time Status, Data or Historical Events, Parameters, Real Time Clock, Inv & Buzzer								
LED Data Display	Up to date information (Status) to The User & Audible Alarm								
INTERFACE									
Contact Closure, RS-232/485	Supports Remote Control Module, Option: SNMP card Model MEGATEC Net Agent II								
STANDARDS									
EMI/EMC	EN50091-1,-2, CE Approved								
OUTLOOKS									
Capacity (KVA)	200	240	300	320	400	500	600	800	1000
Size	Height (mm)	1600			1900	1900	1900		1900
	Width (mm)	2240			2220	3340	3910		4460
	Depth (mm)	800			1000	1000	1000		1000
N.W. at 220/380V (Kgs)	2450	2620	2880	2980	3720	5000	6000	7800	9000
ENVIRONMENT									
Audible Noise(at 1m)(dBA)	< 67				<75		<80	<85	
Relative Humidity	0%~90% (Non-Condensing)								
Operating Temperature	0~40°C (32~104°F)								
Altitude	< 1500M Above Sea Level								

Remarks: 1. Different specifications required are available
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Technical Specification (3-Phase Input / 1-Phase Output)

MODEL	SPF 3110	SPF 3115	SPF 3120	SPF 3130	SPF 3140	SPF 3150	SPF 3160
Capacity (KVA)	10	15	20	30	40	50	60
INPUT							
Input Voltage (Select One)	3phase 3W:200VΔ/220VΔ/380VΔ/460VΔ (Option:480VΔ/600VΔ) 3phase+N:200VY/ 208VY/220V/380VY/400VY/415VY/440VY (Option:480VY/600VY)						
Input Voltage Range	±20% (> ±20% is available upon request)						
Input Frequency	50Hz or 60Hz or 400Hz (Please specify)						
Input Frequency Range	±3Hz (wider ranges offered, please consult)						
Power Walk In	0% ~ 100%: 20Sec						
Efficiency	≈ 98%						
OUTPUT							
Voltage (Select One)	1 Phase 100V/110V/115V/120V/ 200V/208V/220V/230V/240V (Option: ± 10% adjustable from nominal)						
Phase	1 Phase, 2W+G (Optional 3W)						
Voltage Regulation	± 1% from Set Point						
Frequency (Select One)	50 or 60Hz ±0.1Hz (Option-1: 400Hz) (Option-2: Switch Selectable 50/60Hz) (Option-3: Frequency Adjustable ±10% from nominal)						
Power Factor	0.8						
Total Harmonic Distortion	< 3% (0~100% Linear Load)						
Overload Capacity	<110% Continuous, 125%/15Minutes, 150%/10Minutes, >150%/30seconds						
Efficiency (100% Load) (%)	93	93	93	93	93.5	93.5	94
Overall Efficiency (%)	91	91	91	91	91.5	92	92
Max. Heat Dissipation (kw)	1.1	1.2	1.3	1.9	2.6	3.0	3.5
BTU/h @ Full Load (k)	2.4	3.6	4.8	6.5	8.9	10.3	12
PROTECTION							
Over/Under Voltage	Alarm						
Output Short Circuit	Current Limited and cut-off and fuse and breaker						
Overload	Auto-shutdown 1 Minute. Auto Restore when back to normal						
Over Temperature	Auto-shutdown						
Lightning / EMC Filter	MOV / Input & Output (FCC CLASS A)						
Galvanic Isolation	Input & Output True Galvanic Isolation						
INDICATORS & ALARM							
LCD Data Display	Real Time Status,Data or Historical Events, Parameters, Real Time Clock, Inv & Buzzer						
LED Data Display	Up to date information (Status) to The User & Audible Alarm						
INTERFACE							
Contact Closure, RS-232/485	Supports Remote Control Module, Option: SNMP card Model MEGATEC Net Agent II						
STANDARDS							
EMI/EMC	EN50091-1,-2, CE Approved						
OUTLOOK							
Capacity (KVA)	10	15	20	30	40	50	60
Size (H*W*D/mm)	1600*550*800						
Net Weight at 220/380V (Kgs)	370	400	450	580	600	710	850
ENVIRONMENT							
Audible Noise (At 1m) (dBA)	< 65						
Relative Humidity	0%~90% (Non-Condensing)						
Operating Temperature	0~40°C (32~104°F)						
Altitude	< 1500M Above Sea Level						



10~60KVA



80~160KVA

Remarks: 1. Different specifications required are available
2. All specifications mentioned above are subject to change without prior notice.

Technical Specification (3-Phase Input / 1-Phase Output)



80~160KVA

MODEL	SPF 3180	SPF 31100	SPF 31120	SPF 31160
Capacity (KVA)	80	100	120	160
INPUT				
Input Voltage (Select One)	3phase 3W:200VΔ/220VΔ/380VΔ/460VΔ (Option:480VΔ/600VΔ) 3phase+N:200VY/ 208VY/220V/380VY/400VY/415VY/440VY (Option:480VY/600VY)			
Input Voltage Range	±20% (> ±20% is available upon request)			
Input Frequency	50Hz or 60Hz or 400Hz (Please specify)			
Input Frequency Range	±3Hz (wider ranges offered, please consult)			
Power Walk In	0% ~ 100%: 20Sec			
Efficiency	≙ 98%			
Rectification Type	6 Pulse Standard, 12 Pulse Optional		12 Pulse Standard	
OUTPUT				
Output Voltage (Select One)	1phase 2W+G:200V/220V/230V/240V (Special voltage can be customized)			
Voltage Regulation	±1%			
Output Wave Form	Pure Sine Wave			
Output Power Factor	0.8			
Frequency (Select One)	50 or 60Hz ±0.1Hz (Option-1: 400Hz) (Option-2: Switch Selectable 50/60Hz) (Option-3: Frequency Adjustable ±10% from nominal)			
Frequency Stability	±0.1Hz (Crystal Controlled, Free Running)			
Total Harmonic Distortion	< 3% (0~100% Linear Load)			
Overload	<110%	Continuous		
	110~124%	15 minutes		
	125~149%	5 minutes		
	>=150%	30 seconds		
Efficiency (100% Load)	94.5%	94.5%	95%	95%
STATIC SWITCH				
Voltage Range	173 ~ 277 VAC (L-N) (Different voltages are available upon request.)			
Mains <-> Inverter	0 ms (True Online) Zero cross transfer			
OVERALL CHARACTERISTICS				
Capacity (KVA)	80	100	120	160
Overall Efficiency (%)	92.5	92.5	93	93
Max.Heat Dissipation (Kw)	4.6	5.4	6.5	8.7
Size (W*D*H/mm)	1100*800*1600			
Weight (Kg, w/o battery) at I/O 380/220V	980	1250	1400	1600
Audible Noise (at 1m)	< 67dBA			
Relative Humidity	0%~90% (Non-Condensing)			
Temperature / Altitude	0~40°C (32~104°F) / < 1500M Above Sea Level			
Protection	Over/Under Voltage, Output Short Circuit, Overload, Over Temperature Protection			
Lightning / EMC Filter	MOV / Input & Output (FCC CLASS A)			
Galvanic Isolation	Input and Output True Galvanic Isolation			
Diagnostic Panel	LCD Display Real Time Status, Historical Events, 24 Status LED Indicators & Alarm			
Remote Control / Communication Interface	Remote Monitoring 1~99 units simultaneously, distance up to 1,000m / Dry contact, RS232, RS485 (Optional MobBus protocol or SNMP Card)			
STANDARDS				
EMI/EMC	EN50091-1,-2, CE Approved			

- Remarks:
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 2. All specifications mentioned above are subject to change without prior notice.

Technical Specification (1-Phase Input / 3-Phase Output)



10~60KVA

MODEL	SPF 1310	SPF 1315	SPF 1320	SPF 1330	SPF 1340	SPF 1350	SPF 1360	SPF 1380	
Capacity (KVA)	10	15	20	30	40	50	60	80	
INPUT									
Voltage (Select One)	1 Phase 100V/110V/115V/120V/ 200V/208V/220V/230V/240V								
Voltage Range	±20% (> ±20% is available upon request)								
Input Frequency	50Hz or 60Hz or 400Hz (Please specify)								
Input Frequency Range	±3Hz (wider ranges offered, please consult)								
Power Walk In	0% ~ 100%: 20Sec								
Efficiency	≅ 98%								
OUTPUT									
Voltage (Select One)	3phase 3W:200VΔ/220VΔ/380VΔ/460VΔ (Option:480VΔ/600VΔ) 3phase+N:200VY/208VY/220VY/380VY/400VY/415VY/440VY (Option:480VY/600VY) (Option: ± 10% adjustable from nominal)								
Voltage Regulation	±1% from Set Point								
Frequency (Select One)	50 or 60Hz ± 0.1Hz (Option-1: 400Hz) (Option-2: Switch Selectable 50/60Hz) (Option-3: Frequency Adjustable ±10% from nominal)								
Power Factor	0.8								
Phase Shift	120° ±0.5° (100% Unbalance Load)								
Distortion (THD)	< 3% (0~100% Linear Load)								
Overload Capacity	<110% Continuous, 125%/15Minutes, 150%/10Minutes, >150%/30seconds								
Efficiency (100% Load) (%)	93	93	93	93	93.5	93.5	94	94.5	
Overall Efficiency (%)	91	91	91	91	91.5	92	92	92.5	
Max.Heat Dissipation (kw)	1.1	1.2	1.3	1.9	2.6k	3.0	3.5	4.6	
BTU/h @ Full Load (k)	2.4	3.6	4.8	6.5	8.9	10.3	12	16	
PROTECTION									
Over/Under Voltage	Alarm								
Output Short Circuit	Current Limited and cut-off and fuse and breaker								
Overload	Auto-shutdown 1 Minute. Auto Restore when back to normal								
Over Temperature	Auto-shutdown								
Lightning / EMC Filter	MOV / Input & Output (FCC CLASS A)								
Galvanic Isolation	Input & Output True Galvanic Isolation								
INDICATORS & ALARM									
LCD Data Display	Real Time Status, Data or Historical Events, Parameters, Real Time Clock, Inv & Buzzer								
LED Data Display	Up to date information (Status) to The User & Audible Alarm								
INTERFACE									
Contact Closure, RS-232/485	Supports Remote Control Module, Option: SNMP card Model MEGATEC Net Agent II								
STANDARDS									
EMI/EMC	EN50091-1,-2, CE Approved								
OUTLOOKS									
Capacity (KVA)	10	15	20	30	40	50	60	80	
Size (H*W*D/mm)	600*550*800							1600*1100*800	
Net Weight at 220/380V(Kgs)	370	400	450	580	600	710	850	980	
ENVIRONMENT									
Audible Noise(at 1m)(dBA)	< 65dBA							< 67dBA	
Relative Humidity	0%~90% (Non-Condensing)								
Operating Temperature	0~40°C (32~104°F)								
Altitude	< 1500M Above Sea Level								



80~160KVA

Remarks: 1. Different specifications required are available
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Technical Specification (1-Phase Input / 1-Phase Output)



10-60KVA

MODEL	SPF 1110	SPF 1115	SPF 1120	SPF 1130	SPF 1140	SPF 1150	SPF 1160
Capacity (KVA)	10	15	20	30	40	50	60
INPUT							
Voltage (Select One)	1 Phase 100V/110V/115V/120V/ 200V/208V/220V/230V/240V						
Voltage Range	±20% (>±20% is available upon request)						
Frequency	50Hz or 60Hz or 400Hz ±3Hz (Please specify)						
Power Walk In	0~100%: 20 seconds						
OUTPUT							
Voltage (Select One)	1 Phase 100V/110V/115V/120V/ 200V/208V/220V/230V/240V (Option: ±10% adjustable from nominal)						
Phase	1 Phase, 2W+G (Optional 3W)						
Voltage Regulation	± 1% from Set Point						
Frequency (Select One)	50 or 60Hz ± 0.1Hz (Option: 400Hz) (Option: Switch Selectable 50/60Hz) (Option: Frequency Adjustable ±10% from nominal)						
Wave Form	Pure Sine Wave						
Power Factor	0.8						
Total Harmonic Distortion	< 3% (0~100% Linear Load)						
Overload Capacity	<110% Continuous, 125%/15Minutes, 150%/10Minutes, >150%/30seconds						
Efficiency (100% Load) (%)	93	93	93	93	93.5	93.5	94
Overall Efficiency (%)	91	91	91	91	91.5	92	92
Max. Heat Dissipation (kw)	1.1	1.2	1.3	1.9	2.6	3.0	3.5
BTU/h @ Full Load (K)	2.4	3.6	4.8	6.5	8.9	10.3	12
PROTECTION							
Over/Under Voltage	Alarm						
Output Short Circuit	Current Limited and cut-off and fuse and breaker						
Overload	Auto-shutdown 1 Minute. Auto Restore when back to normal						
Over Temperature	Auto-shutdown						
Lightning / EMC Filter	MOV / Input & Output (FCC CLASS A)						
Galvanic Isolation	Input & Output True Galvanic Isolation						
INDICATORS & ALARM							
LCD Data Display	Real Time Status, Data or Historical Events, Parameters, Real Time Clock, Inv & Buzzer						
LED Data Display	Up to date information (Status) to The User & Audible Alarm						
INTERFACE							
Contact Closure, RS-232/485	Supports Remote Control Module, Option: SNMP card Model MEGATEC Net Agent II						
STANDARDS							
EMI/EMC	EN50091-1,-2, CE Approved						
OUTLOOK							
Capacity (KVA)	10	15	20	30	40	50	60
Size (H*W*D/mm)	1600*550*800						
Net Weight at 220V (Kgs)	370	400	450	580	600	710	850
ENVIRONMENT							
Audible Noise(at 1m)(dBA)	< 65						
Relative Humidity	0%~90% (Non-Condensing)						
Operating Temperature	0~40°C (32~104°F)						
Altitude	< 1500M Above Sea Level						

Remarks: 1. Different specifications required are available
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Peripheral Options

Communications Options

■ UPSCAN™ - Remote Control Panel

A hand held remote display and control module with LCD and LED display that can monitor up to 99 Frequency Converters via RS-485 at a remote distance up to <1,000M (up to 3,000feet.)



■ GPRS MODEM - Auto-dialing Module

In case of abnormal situation, it will automatically dial to specified service center for help. Multiple phone numbers can be set and no dedicated line is required.



■ NET AGENT

Can provide real-time three phases information of Frequency Converter connected on the line and monitor 31 Frequency Converters max. with one PC.



■ 3 Phase SNMP Card

Can monitor and manage the Frequency Converters through Web browser and Java applet, providing simultaneously three phases data acquisition.



■ Emergency Stop Switch (EPO)

Be installed outside or nearby the Frequency Converters for stopping the Frequency Converters output in case of emergency.



Other Options

■ Shock Mount Option

The cabinet can be shock mounted using optional rubber or coil type isolators. This will enable the unit to withstand shock levels as specified in MIL-S-901.

■ Ruggedizing Option

■ Casters & Levelers

■ Cable Entrance Direction

Cable entry can be from Front, Side, Rear or Top side

PRODUCT QUARANTEE

Reliability and Serviceability (MTBF & MTTR)

Reliability is a feature that is designed and integrated into every piece of equipment that carries the Satech Power name. This is accomplished by utilizing state of the art circuitry which substantially reduces the total number of components (especially heat producing components). The result is greater efficiency, high reliability and low cost. A study of installed units has indicated a MTBF of over 300,000 hours! MTBF figures are based upon ground fixed normal 25-degree ambient temperature and proper and preventive maintenance.

The MTTR for all items offered is approximately 30 minutes. Part of the maintenance and repair philosophy of the units is to use the BIT equipment to aid in fault isolation. At that point, a decision is made to either replace an LRU or a component within the power supply with a spare. The construction methods used throughout the SPF Series provide for user friendly service. All circuit boards are plug in and are easily accessed from the front of the system. Power modules are designed on slide out trays for easy access to all power semiconductors and similar power components. The MTTR value specified is based upon proper training of local maintenance technicians and engineers.

Military and Rugged Commercial (COTS) Designs

The SPF series feature robust construction quality and rugged designs. They are suitable for demanding military, industrial, and commercial applications. Most products can be equipped to meet MIL-STD-461, MIL-STD-810, MIL-STD-901, MIL-STD-167, MIL-STD-1399, MIL-STD-1472, and other important specifications as required. Please consult the factory about your specific application.