

# SERIES SFC

# MODEL 6 / 12 PULSE

The **Series SFC** incorporates the latest technology in solid state PWM Inverter and advanced Rectifier controls combined with the use of Galvanic Isolation on the output creates a rugged and efficient static frequency converter. This advancement in digital technology gives the PS&C **Series SFC** a great advantage over other conventional frequency converters. Although IGBT's are a more expensive solution, PS&C employs the digital inverter topology over the older technology (i.e. diodes & SCR's) when the customer requires it. PS&C has over 40 years vested in the development of power conditioning equipment and we always create the best solution for the task. With an incredible input range reaching further, this machine will support equipment in the most extreme electrical conditions. **Series SFC** comes with access to PS&C's Service Division which gives our customers the type of support which is not only required today, but is mandatory for industry to continue to move on a daily basis.

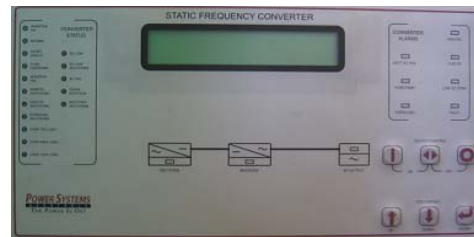


## Standard Equipment Features

- Digital 12 Pulse Rectifier
- PWM IGBT Inverter
- Nema 1
- Input Current THD is less than 2%
- Wide Input Range (Optional)
- Input Frequency is 47 to 63 Hz
- Lower Audible Noise
- Front Access
- SNMP Support over Ethernet (Optional)
- RS485 communications port
- Modbus over TCP/IP support for Ethernet (Optional)
- LCD display with softkeys for control

## Optional Features

- Split input/output voltage
- Nema 3R Enclosures
- Nema 12 Enclosures
- Remote monitor (Status)
- HTTP Monitoring Support
- "Turn-key" Installation
- Remote communications
- Outdoor Enclosures



Graphic Interface  
(shown without options)

**POWER SYSTEMS**  
& CONTROLS  
THE POWER IS ON!

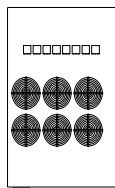
# System Specifications

INPUT		OUTPUT	
Nominal Voltage Available		Nominal Voltage Available	
➤ @ 60 Hz	208/440/460/480	➤ @ 60 Hz	208/240/440/460/480
➤ @ 50 Hz	380/400/415	➤ @ 50 Hz	190/220/23/380/400/415
➤ @ 400 Hz	200/208	➤ @ 400 Hz	200/208
➤ Phase	3 Phase 3 or 4 Wire + Gnd	➤ Phase	3 Phase 3 or 4 Wire + Gnd
➤ Frequency Range	47 to 63Hz & 400Hz	➤ Frequency Regulation	± .1hz for 50 & 60Hz ± .4hz for 400Hz
➤ Magnitude Tolerance		➤ Voltage Adjustment	± 15% from nominal
➤ Continuous	+20%, -20%		
➤ Transient	1500v for 1 ms	➤ Voltage Regulation	
➤ Current Distortion	< 2% (Linear Load)	➤ Balanced Load	± 1.0%
<b>General</b>		➤ 25% Imbalance	± 2% phase to phase
➤ Crest Factor	3 : 1	Voltage THD (Total Harmonic Distortion)	
➤ Efficiency	> 93%	➤ Single	2% Max
➤ Interlock	28VDC E&F (Optional)	Overload Capacity	
➤ Dead Front Interlock	Immediate Shutdown (Optional)	➤ 100% Rating	Continuous
		➤ 125%	15 Minutes
		➤ 150%	10 Minutes
		➤ > 150%	1 Minutes
		Output Power Factor	
		➤ Power Factor	.80

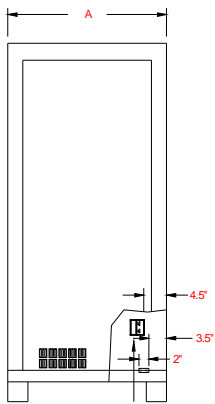
ENVIRONMENT	
➤ Temperature	32° to 104° F (0° to 40° C) (55° C Optional)
➤ Altitude	0 to 6600 FT
➤ Humidity	0 to 90% non-condensing
➤ Noise Level	65 dBa @ 3 FT (50&60Hz)

SERIES SFC DIMENSIONS & WEIGHTS				
KVA	H (C)	W (B)	D (A)	LBS
10	63	22	31.5	595
20	63	22	31.5	890
30	63	22	31.5	1100
40	63	22	31.5	1200
50	63	22	31.5	1400
60	63	22	31.5	1500
80	63	44	31.5	2200
100	63	44	31.5	2900
120	63	44	31.5	3100
160	63	44	31.5	3600
200	63	88	31.5	5400
240	63	88	31.5	5800
300	63	88	31.5	6400
320	63	88	31.5	7500

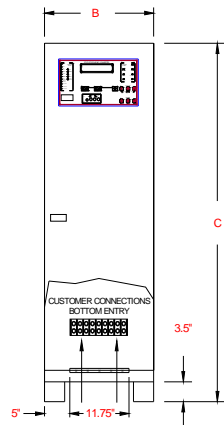
These dimensions may alter based on topology and enclosure  
All Dimensions above are in Inches



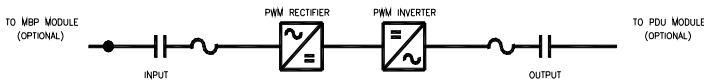
TOP VIEW



SIDE VIEW



FRONT VIEW



Power Systems & Controls reserves the right to improve, enhance and modify the features and specifications of its products and services without prior notification.

**POWER SYSTEMS**  
**& CONTROLS**  
THE POWER IS ON!