

### Features:

- Universal Input 100 – 240 VAC
- Internal EMI Filter
- Single, Dual, & Triple Outputs
- 3 VDC to 50 VDC Output Available
- Input Surge Current Protection
- Over-Current Protection
- Over-Voltage Protection
- 100% Burn-In
- RoHS Compliant



### Input

Input Voltage	90 to 264 VAC
Input Frequency	47 to 63Hz
Power Factor Correction	1.0 Max.
Input Current	1.7A Max. at 115VAC 1.0A Max. at 230VAC
Safety Ground Leakage Current	0.75mA Max. @ 240VAC, Full Load

### Output

Output Voltage & Current	<b>See Chart</b>
Ripple & Noise (P-P)	1% Max., Full Load @ 90VAC Input
Over-Voltage Protection	Set at 112 - 132% of Nominal Output Voltage
Over-Current Protection	Set at 110 - 150% of Nominal Output Current
Temperature Coefficient	± 0.04% / °C Max.
Transient Response	Full Load to Half Load @ 100VAC Input: 4mS Max.

### Environmental

Operating Temperature	0°C to 70°C
Derating	Derated from 100% at +50°C to 50% at +70°C
Storage Temperature	-40°C to 85°C
Relative Humidity	5% to 95% Non-Condensing

### Electrical

Efficiency	88% Max.
Hold-Up Time	16mS Min.
Line Regulation	±1% Max. at Full Load
Load Regulation	±5% Max. at 230VAC
Inrush Current	37A @ 115VAC Max. 75A @ 230VAC Max. at 25°C Cold Start
Withstanding Voltage	4242 VDC from Input to Output, 2121 VDC from Input to Ground
Insulation Resistance	50 MΩ Min. from Output to Ground
Mean Time Between Failure (MTBF)	100,000 Hours Min., Full Load at 25°C Ambient

### Safety

EMI Requirements	Meets Conduction Limits of: (A) CISPR-22 Class B (B) FCC Part 15 Class B
Safety Standards	Meets or Exceeds: (A) UR Listed (UL 60950-1) (B) TUV/Bauart (EN 60950-1) (C) CE (D) CB (E) CCC



# SF120P/SFU120P/SFC120P Series

Switchmode Power Supply, Open Frame or U-Channel (Cover Optional), RoHS Compliant

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## Single Output Voltage and Current Chart

Model Number**	Output Voltage	Output Current	Total Regulation	Maximum Output Power
SF120P1XXR	3 - 5 VDC	22.00 - 20.00 A	5%	100W
SF120P1XXR	5 - 6 VDC	22.00 - 18.33 A	5%	110W
SF120P1XXR	6 - 9 VDC	19.16 - 12.77 A	5%	115W
SF120P1XXR	9 - 11 VDC	13.33 - 10.90 A	4%	120W
SF120P1XXR	12 - 13 VDC	10.0 - 9.23 A	3%	120W
SF120P1XXR	14 - 16 VDC	8.57 - 7.50 A	3%	120W
SF120P1XXR	17 - 21 VDC	7.06 - 5.71 A	3%	120W
SF120P1XXR	22 - 27 VDC	5.45 - 4.44 A	2%	120W
SF120P1XXR	28 - 33 VDC	4.29 - 3.63 A	2%	120W
SF120P1XXR	34 - 40 VDC	3.53 - 3.00 A	2%	120W
SF120P1XXR	41 - 50 VDC	2.93 - 2.40 A	2%	120W

\*\* To Determine Part Number:

Replace "XX" with Required Output Voltage (5VDC = "05", 12VDC = "12", 48VDC = "48", ect.)

Note: For U-Channel design, order as SFU120P1XXR

For Optional Cover (on U-Channel), order as SFC120P1XXR

For **Power Fail Detection** Option on Pin 13, order as SF\_120P1XXPR

Example: SFU120P124R indicates a U-Channel, 24VDC Unit with 3-Pin Input.

## Pin Connection

Pin	Single Output
1	Output
2	Output
3	Output
4	Output
5	Output
6	Output
7	Return
8	Return
9	Return
10	Return
11	Return
12	Return
13	PFD (Optional)



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### Dual Output Voltage and Current Chart

Model Number**	Output #1 Voltage & Regulation	Output #2 Voltage & Regulation	Maximum Output Power
SF120P260R	+3.3V @ 15A 5%	+12V @ 6A 5%	120W
SF120P250R	+5V @ 15A 5%	+12V @ 6A 5%	120W
SF120P253R	+5V @ 15A 5%	+15V @ 6A 5%	120W
SF120P254R	+5V @ 15A 5%	+24V @ 3.5A 5%	120W
SF120P259R	+3.3V @ 15A 5%	+5V @ 6A 5%	79.5W
SF120P262R	+5V @ 15A 5%	-24V @ 2A 5%	120W

Note: For U-Channel design, order as SFU120P2XXR

For Optional Cover (on U-Channel), order as SFC120P2XXR

For **Power Fail Detection** Option on Pin 13, order as SF\_120P2XXPR

Example: SFC120P250PR indicates a U-Channel Unit with Cover, with +5VDC & +12VDC Output with Power Fail Detection on Pin 13 and 3-Pin Input.

### Pin Connection

Pin	Dual Output
1	Output #2
2	Output #2
3	Output #1
4	Output #1
5	Output #1
6	Output #1
7	Common
8	Common
9	Common
10	No Connection
11	Common
12	Common
13	PFD (Optional)



## Output Voltage and Current Chart

Model Number	Output #1 Voltage & Regulation	Output #2 Voltage & Regulation	Output #3 Voltage & Regulation	Maximum Output Power
SF120P382R	+3.3V @ 15A 5%	+12V @ 6A 5%	-12V @ 0.8A 5%	120W
SF120P383R	+3.3V @ 15A 5%	+12V @ 6A 5%	+12V @ 0.8A 5%	120W
SF120P377R	+5V @ 15A 5%	+12V @ 6A 5%	-5V @ 0.8A 5%	120W
SF120P384R	+5V @ 15A 5%	+12V @ 6A 5%	+5V @ 0.8A 5%	120W
SF120P370R	+5V @ 15A 5%	+12V @ 6A 5%	-12V @ 0.8A 5%	120W
SF120P385R	+5V @ 15A 5%	+12V @ 6A 5%	+12V @ 0.8A 5%	120W
SF120P374R	+5V @ 15A 5%	+15V @ 6A 5%	-15V @ 0.8A 5%	120W
SF120P386R	+5V @ 15A 5%	+15V @ 6A 5%	+15V @ 0.8A 5%	120W
SF120P376R	+5V @ 15A 5%	+24V @ 3.5A 5%	-24V @ 0.5A 5%	120W
SF120P387R	+5V @ 15A 5%	+24V @ 3.5A 5%	+24V @ 0.5A 5%	120W
SF120P379R	+5V @ 15A 5%	+24V @ 3.5A 5%	-12V @ 0.8A 5%	120W
SF120P388R	+5V @ 15A 5%	+24V @ 3.5A 5%	+12V @ 0.8A 5%	120W
SF120P380R	+3.3V @ 15A 5%	+12V @ 6A 5%	-5V @ 0.8A 5%	120W
SF120P389R	+3.3V @ 15A 5%	+12V @ 6A 5%	+5V @ 0.8A 5%	120W
SF120P390R	+5V @ 15A 5%	+10V @ 6A 5%	-10V @ 1A 5%	120W
SF120P391R	+5V @ 15A 5%	+10V @ 6A 5%	+10V @ 1A 5%	120W
SF120P393R	+3.3V @ 15A 5%	+5V @ 6A 5%	-12V @ 1A 5%	91.5W
SF120P392R	+3.3V @ 15A 5%	+5V @ 6A 5%	+12V @ 1A 5%	91.5W

Note: For U-Channel design, order as SFU120P3XXR

For Optional Cover (on U-Channel), order as SFC120P3XXR

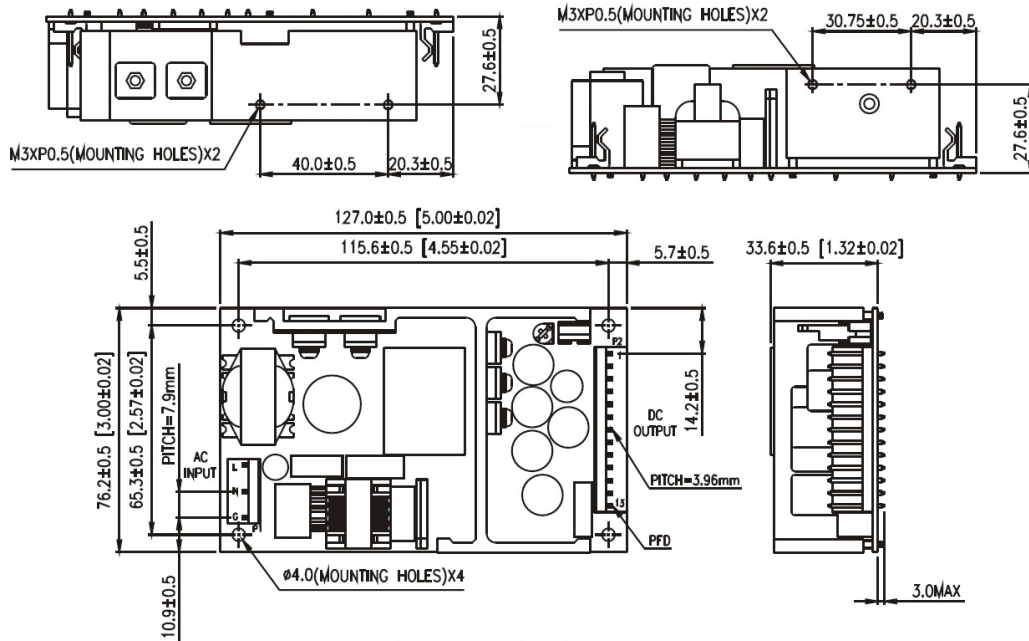
For **Power Fail Detection** Option on Pin 13, order as SF\_120P3XXPR

Example: SF120P388PR indicates an Open Frame Unit, with +5VDC, +24VDC & +12VDC Output with Power Fail Detection on Pin 13 and 3-Pin Input.

### Pin Connection

Pin	Triple Output
1	Output #2
2	Output #2
3	Output #1
4	Output #1
5	Output #1
6	Output #1
7	Common
8	Common
9	Common
10	Output #3
11	Common
12	Common
13	PFD (Optional)

For Open Frame, Order as: SF120P\_\_\_R



For U-Channel, Order as: SFU120P\_\_\_R

