

## SIFA120 SERIES



## 120W Open Frame Power Supply for Industrial Equipment

- Wide Input Voltage 90 to 260 VAC, 47 to 63 Hz
- Single to Triple Output
- Input Surge Current, Over Voltage and Over Load protection
- Operating temperature -20~70°C
- Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal
- Size: 3"x5"x1.32"
- Class I Insulation

3 Year Warranty

Approvals:    

### Single Output

Part Number	Output Voltage	Output Current	Total Regulation	Max. Output Power
SIFA120-S01	03 ~05 VDC	22.00 ~ 20.00A	5%	100W
SIFA120-S02	05 ~06 VDC	22.00 ~ 18.33A	5%	110W
SIFA120-S03	06 ~09 VDC	19.16 ~ 12.77A	5%	115W
SIFA120-S04	09 ~11 VDC	13.33 ~ 10.90A	4%	120W
SIFA120-S05	11 ~ 13 VDC	10.90 ~ 9.23A	3%	120W
SIFA120-S06	13 ~ 16 VDC	9.23 ~ 7.50A	3%	120W
SIFA120-S07	16 ~ 21 VDC	7.50 ~ 5.71A	3%	120W
SIFA120-S08	21 ~ 27 VDC	5.71 ~ 4.44A	2%	120W
SIFA120-S09	27 ~ 33 VDC	4.44 ~ 3.63A	2%	120W
SIFA120-S10	33 ~ 40 VDC	3.63 ~ 3.00A	2%	120W
SIFA120-S11	40 ~ 50 VDC	3.00 ~ 2.40A	2%	120W

### Multi Output

Part Number	Output 1				Output 2				Output 3				Max. Output Power
	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	
SIFA120-D00	+3.3V	1.5A	15A	5%	+12V	0.6A	6A	5%					120W
SIFA120-D01	+5V	1.5A	15A	5%	+12V	0.8A	6A	5%					120W
SIFA120-D02	+5V	1.5A	15A	5%	+15V	0.6A	6A	5%					120W
SIFA120-D03	+5V	1.5A	15A	5%	+24V	0.4A	3.5A	5%					120W
SIFA120-D04	+3.3V	1.5A	15A	5%	+5V	0.8A	6A	5%					79.5W
SIFA120-D15	+5V	1.5A	15A	5%					-24V	0.2A	2A	5%	120W
SIFA120-D19	+28V	0.4A	3.92A	5%					+5V	0A	2A	5%	120W
SIFA120-T00	+3.3V	1.5A	15A	5%	+12V	0.6A	6A	5%	-12V	0A	0.8A	5%	120W
SIFA120-T00-1	+3.3V	1.5A	15A	5%	+12V	0.6A	6A	5%	+12V	0A	0.8A	5%	120W
SIFA120-T01	+5V	1.5A	15A	5%	+12V	0.8A	6A	5%	-5V	0A	0.8A	5%	120W
SIFA120-T01-1	+5V	1.5A	15A	5%	+12V	0.8A	6A	5%	+5V	0A	0.8A	5%	120W
SIFA120-T02	+5V	1.5A	15A	5%	+12V	0.8A	6A	5%	-12V	0A	0.8A	5%	120W
SIFA120-T02-1	+5V	1.5A	15A	5%	+12V	0.8A	6A	5%	+12V	0A	0.8A	5%	120W
SIFA120-T03	+5V	1.5A	15A	5%	+15V	1.0A	6A	5%	-15V	0A	0.8A	5%	120W
SIFA120-T03-1	+5V	1.5A	15A	5%	+15V	1.0A	6A	5%	+15V	0A	0.8A	5%	120W
SIFA120-T04	+5V	1.5A	15A	5%	+24V	0.45A	3.5A	5%	-24V	0.25A	0.8A	5%	120W
SIFA120-T04-1	+5V	1.5A	15A	5%	+24V	0.45A	3.5A	5%	+24V	0.25A	0.8A	5%	120W
SIFA120-T05	+5V	1.5A	15A	5%	+24V	0.4A	3.5A	5%	-12V	0A	0.8A	5%	120W
SIFA120-T05-1	+5V	1.5A	15A	5%	+24V	0.4A	3.5A	5%	+12V	0A	0.8A	5%	120W
SIFA120-T06	+3.3V	1.5A	15A	5%	+12V	0.8A	6A	5%	-5V	0A	0.8A	5%	120W
SIFA120-T06-1	+3.3V	1.5A	15A	5%	+12V	0.8A	6A	5%	+5V	0A	0.8A	5%	120W
SIFA120-T07	+5V	1.5A	15A	5%	+10V	0.6A	6A	5%	-10V	0A	1.0A	5%	120W
SIFA120-T07-1	+5V	1.5A	15A	5%	+10V	0.6A	6A	5%	+10V	0A	1.0A	5%	120W
SIFA120-T08	+3.3V	1.5A	15A	5%	+5V	0.8A	6A	5%	-12V	0A	1.0A	5%	91.5W
SIFA120-T08-1	+3.3V	1.5A	15A	5%	+5V	0.8A	6A	5%	+12V	0A	1.0A	5%	91.5W

## Electrical Characteristics

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Input Voltage	Operating Voltage	90		260	VAC
Input Frequency		47		63	Hz
Power Factor Correction	Io=Full load, Vin=90~260VAC	0.95	0.97	1.0	
Output Power Range	Vin=90 to 264 VAC	0		120	W
Input Current (Low Line)	Io=Full load, Vin=115VAC			1.7	A
Input Current (High Line)	Io=Full load, Vin=230VAC			1.0	A
Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC		16	20	A
High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		46	51	A
Efficiency	Io=Full load, Vin=230VAC	70	80	88	%
Line Regulation	Io=Full load		0.5	1	%
Load Regulation	Vin=230VAC		3	5	%
Over Voltage Protection		112		132	%
Over Current Protection		110		150	%
Transient Response	Io=Full load to Half Load, Vin=S00VAC			4	mS
Hold-Up Time	Io=Full load, Vin=150VAC	16			mS
Start Up Time	Io=Full load, Vin=S00VAC	0.3	1	2	S
* Ripple & Noise (Peak to Peak)	Full load, Vin=90VAC		0.5	1	%
Safety Ground Leakage Current	Io=Full load, Vin=240VAC		0.4	0.75	mA
Temperature Coefficient	All output	-0.04		0.04	%/°C

\* Note: The Ripple & Noise which is under 3.3VDC at 2% max

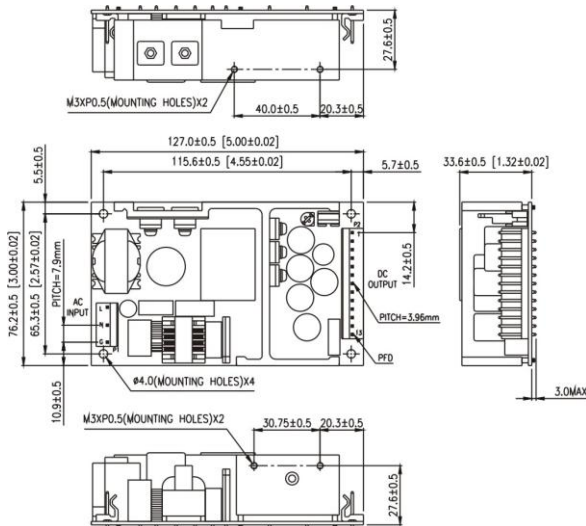
## Conditions

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		-20	50	70	°C
Storage Temperature		-40		85	°C
Relative Humidity		5		95	%
Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs
De-rate linearly from 100% load at 50°C to 50% load at 70°C					

## Approvals and Compliances

Parameter	Test Conditions	Min.	Unit
Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242	VDC
Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2121	VDC
Isolation Resistance	Test Voltage=500VDC	50	MΩ
EMI requirements for CISPR-22	Vin=220VAC	B	CLASS
EMI requirements for FCC PART-15	Vin=110VAC	B	CLASS

## Mechanical and PIN Out



### Note:

- Dimensions are shown in mm.
- Weight: 350~428gs approx.
- Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
- Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal.

### PIN CHART

MODEL	PIN	1	2	3	4	5	6	7	8	9	10	11	12	13 (Optional)
SIFA120-SXX-13PIN	OUT	OUT	OUT	OUT	OUT	OUT	RTN	RTN	RTN	RTN	RTN	RTN	RTN	PFD
SIFA120-D19-13PIN	N/C	N/C	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	Vo3	COM	COM	COM	PFD
SIFA120-D15-13PIN	N/C	N/C	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	Vo3	COM	COM	COM	PFD
SIFA120-DXX-13PIN	Vo2	Vo2	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	N/C	COM	COM	COM	PFD
SIFA120-TXX-13PIN	Vo2	Vo2	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	Vo3	COM	COM	COM	PFD

Note: Vo1:Output#1 Vo2:Output#2 Vo3:Output#3