SIFA81 SERIES

80W Open Frame Power Supply for Industrial Equipment



- Wide Input Voltage 90 to 260 VAC, 47 to 63Hz
- Dual to Triple Output
- Output voltage available from 3.3 to 24 VDC
- Input Surge Current and Overload protection
- Class I Insulation
- Active Power Factor Correction
- Operating temperature -20~70°C
- Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal
- Size: 3"x5"x1.18"

3 Year Warranty

Approvals:

Multi Output

Product Number	Output #1				Output #2				Output #3				Maximum Output Power
	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	
SIFA81-D00	+3.3V	1.2A	12A	7%	+12V	0.5A	5A	5%					80W
SIFA81-D01	+5V	1.2A	12A	5%	+12V	0.5A	5A	5%					80W
SIFA81-D02	+5V	1.2A	12A	5%	+15V	0.5A	5A	5%					80W
SIFA81-D03	+5V	1.2A	12A	5%	+24V	0.3A	3A	5%					80W
SIFA81-D04	+3.3V	1.2A	12A	7%	+5V	0.5A	5A	5%					64.6W
SIFA81-D15	+5V	1.2A	12A	5%					-24V	0A	2A	5%	80W
SIFA81-T00	+3.3V	1.2A	12A	7%	+12V	0.5A	5A	5%	-12V	0A	0.8A	5%	80W
SIFA81-T00-1	+3.3V	1.2A	12A	7%	+12V	0.5A	5A	5%	+12V	0A	0.8A	5%	80W
SIFA81-T01	+5V	1.2A	12A	5%	+12V	0.5A	5A	5%	-5V	0A	0.8A	5%	80W
SIFA81-T01-1	+5V	1.2A	12A	5%	+12V	0.5A	5A	5%	+5V	0A	0.8A	5%	80W
SIFA81-T02	+5V	1.2A	12A	5%	+12V	0.5A	5A	5%	-12V	0A	0.8A	5%	80W
SIFA81-T02-1	+5V	1.2A	12A	5%	+12V	0.5A	5A	5%	+12V	0A	0.8A	5%	80W
SIFA81-T03	+5V	1.2A	12A	5%	+15V	0.5A	5A	5%	-15V	0A	0.8A	5%	80W
SIFA81-T03-1	+5V	1.2A	12A	5%	+15V	0.5A	5A	5%	+15V	0A	0.8A	5%	80W
SIFA81-T04	+5V	1.2A	12A	5%	+24V	0.3A	3A	5%	-24V	0A	0.8A	5%	80W
SIFA81-T04-1	+5V	1.2A	12A	5%	+24V	0.3A	3A	5%	+24V	0A	0.8A	5%	80W
SIFA81-T05	+5V	1.2A	12A	5%	+24V	0.3A	3A	5%	-12V	0A	0.8A	5%	80W
SIFA81-T05-1	+5V	1.2A	12A	5%	+24V	0.3A	3A	5%	+12V	0A	0.8A	5%	80W
SIFA81-T06	+3.3V	1.2A	12A	7%	+12V	0.5A	5A	5%	-5V	0A	0.8A	5%	80W
SIFA81-T06-1	+3.3V	1.2A	12A	7%	+12V	0.5A	5A	5%	+5V	0A	0.8A	5%	80W
SIFA81-T07	+5V	1.2A	12A	5%	+10V	0.5A	5A	5%	-10V	0A	1.0A	5%	80W
SIFA81-T07-1	+5V	1.2A	12A	5%	+10V	0.5A	5A	5%	+10V	0A	1.0A	5%	80W
SIFA81-T08	+3.3V	1.2A	12A	7%	+5V	0.5A	5A	5%	-12V	0A	1.0A	5%	76.6W
SIFA81-T08-1	+3.3V	1.2A	12A	7%	+5V	0.5A	5A	5%	-12V	0A	1.0A	5%	76.6W

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	0.91	1.0	
Output Power Range	Vin=90 to 264VAC	0		80	W
Input Current (Low Line)	Io=Full load, Vin=115VAC			2.0	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		39	45	A
Efficiency	Io=Full Load, Vin=230VAC		82	88	%
Line Regulation	Io=Full Load		0.5	1	%
Load Regulation	Vin=230VAC		5	7	%
Over Voltage Protection		112		132	%
Over Current Protection		110		150	%
Transient Response	Io=Full Load to Half Load, Vin=100VAC			4	mS
Hold-Up Time	Io=Full Load, Vin=110VAC	16			mS
Start Up Time	Io=Full Load, Vin=100VAC	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 Compliance

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

PIN CHART

MODEL \ PIN	1	2	3	4	5	6	7	8	9	10	11	12	13
SIFA81-D15-13pin	N/C	N/C	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	Vo3	COM	COM	N/C
SIFA81-DXX-13pin	Vo2	Vo2	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	N/C	COM	COM	N/C
SIFA81-TXX-13pin	Vo2	Vo2	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	Vo3	COM	COM	N/C

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

Note:

1. Dimensions are shown in inches or mm.
2. Weight: 350gs approx.
3. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3061 (or 09-50-3081) and Molex 2478 series crimp terminal

