

**SIFA58 SERIES**

**60W Open Frame Power Supply for Industrial Equipment**

- Wide Operating Voltage 80 to 275 VAC, 47 to 63 Hz
- Crowbar Mode Over Voltage Protection, Short Circuit Protection: Auto Recovery
- Internal EMI filter
- Single Output
- Class I Insolation, Flammability Rating: UL94V-1
- Cooling: Free Air Convection
- **Operating Temperature: -20 ~ +70°C**

**5 Year Warranty**

Approvals:

**Single Output**

PART NO.	Setting Voltage Range (Factory setting, can't be adjusted)		Output Current (Based on the output volt.)		Max. Output Power (W)	Ripple & Noise (mVp-p)	Total Reg. (%)	Typ. Efficiency (%)	Typ. No Load Power (W)	Hold up time (ms)	Protect ion Mode
	min (VDC)	max (VDC)	min (A)	max (A)							
SIFA58-S02	5.0	6.0	6.66	8.00	40	50	±5	77	0.5	12	Hiccup
SIFA58-S03	6.0	8.0	6.00	8.00	48	60	±5	77	0.5	12	Hiccup
SIFA58-S04	8.0	11.0	5.00	6.87	55	100	±5	83	0.5	12	Hiccup
SIFA58-S05	11.0	13.0	4.61	5.45	60	100	±5	83	0.5	12	Hiccup
SIFA58-S06	13.0	16.0	3.75	4.61	60	100	±5	83	0.5	12	Hiccup
SIFA58-S07	16.0	21.0	2.85	3.75	60	100	±5	83	0.5	12	Hiccup
SIFA58-S08	21.0	27.0	2.22	2.85	60	100	±3	84	0.5	12	Hiccup
SIFA58-S09	27.0	33.0	1.81	2.22	60	100	±3	84	0.5	12	Hiccup
SIFA58-S10	33.0	40.0	1.50	1.81	60	100	±3	84	0.5	12	Hiccup
SIFA58-S11	40.0	48.0	1.25	1.50	60	100	±2	85	0.5	12	Hiccup

**Electrical Characteristics**

Characteristic	Condition	Min.	Typ.	Max.	Unit
Safety Approval Input Voltage Range	Safety Approval & Specification in Label	100		240	VAC
Input Operate Voltage Range	Detail to see Fig.1	90		264	VAC
Input Frequency	Sine wave	47		63	Hz
Output Power Range	See Rating Chart			60	W
Low Line Input Current	Full Load, Vin=100VAC			1.6	A
High Line Input Current	Full Load, Vin=240VAC			1.6	A
Low Line Input Inrush Current	Full Load, 25°C, Cool start, Vin=100VAC			30	A
High Line Input Inrush Current	Full Load, 25°C, Cool start, Vin=240VAC			60	A
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.75	mA
Efficiency	Full Load, Vin=230VAC, Detail to see Rating Chart	See Rating Chart			
Line Regulation	Full Load, Vin=100~120VAC	0.5		1	%
Load Regulation	Vin=230VAC, 10~90% Load Change at Condition	2		5	%
Over Voltage Protection	Over Voltage Protection	112		132	%
Over Load Protection	Recovers automatically after fault condition is removed	110		150	%
Time of Transient Response	Full Load, Vin=110VAC			4	ms
Hold-Up Time	Full Load, Vin=100VAC	See Rating Chart			
Start-up time	Full Load, Vin=100~240VAC			2	s
Temperature Coefficient	Full load, Vin=100~240VAC			±0.04	%/°C

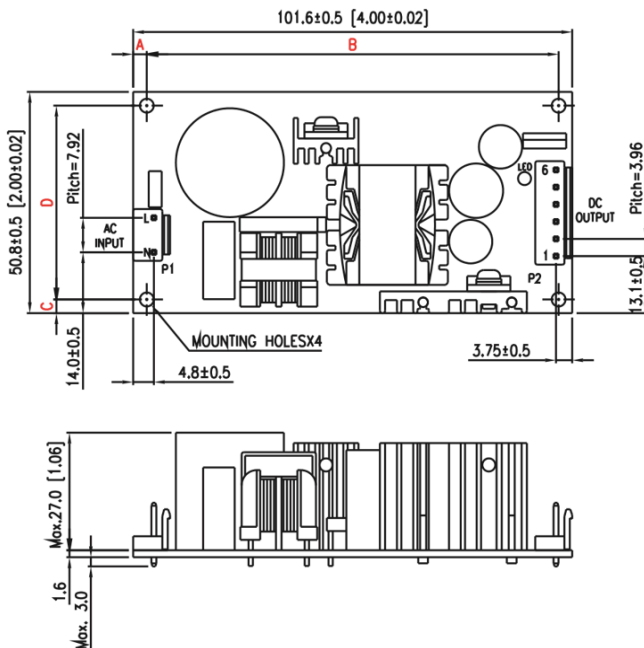
### Conditions

Characteristic	Condition	Min.	Typ.	Max.	Unit
Operating Temperature	Detail to see Fig.2 (Derate linearly from 100% load at 50°C to 50% load at 70°C)	-20		70	°C
Storage Temperature	10 ~ 95% RH	-40		85	°C
Operating Humidity	non-condensing	0		95%	RH
Storage Humidity		0		95%	RH
Electro Static Discharge	Air Discharge, IEC61000-4-2			8	kV
Electro Static Discharge	Contact Discharge, IEC61000-4-2			6	kV
Mean Time Between Failure	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	100k			h
Operating Altitude (Elevation)	All condition			2000	m
Vibration	10 ~ 500Hz, 10min./1cycle, 60min. each along X, Y, Z axes			5	G
Surge Voltage	Line-Neutral			1	kV
Surge Voltage	Line-PE & Neutral-PE			2	kV

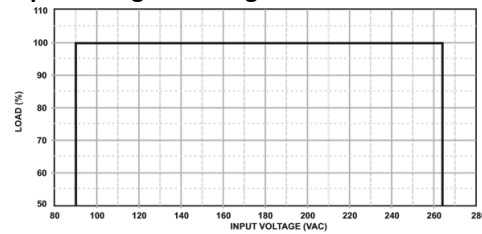
### Approvals and Compliance

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	2718	VDC
EMI requirements for CISPR-22	Vin=220VAC	B	CLASS
Safety UL/c-UL, TUV/T-mark, CE	UL/c-UL(UL 60950-1:2nd Edition), TUV/GS(EN 60950-1:2nd Edition)		

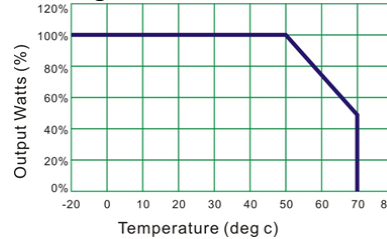
### Mechanical Drawing and Technical Charts



Input Voltage Derating Curve



Derating Curve



PIN Chart

PART NO.	PIN	1	2	3	4	5	6
SIFA58-SXX		OUT	OUT	OUT	RTN	RTN	RTN

P/N: SIFA58-XXX-H3 (Standard)  
or SIFA58-XXX-H4 (Optional)

	H3 (Standard)	H4 (Optional)
MOUNTING HOLES	3.2±0.5	4.0±0.5
A	3.15±0.5	4.3±0.5
B	95.3±0.5	93.0±0.5
C	3.15±0.5	4.0±0.5
D	44.5±0.5	42.8±0.5

**Note:**

1. Dimensions are shown in mm & inch
2. Weight: approx. 140g
3. Input connector mates with JST housing VHR-3N and JST SVH series crimp terminal.
4. Output connector mates with JST housing VHR-6N and JST SVH series crimp terminal.