

## SHWA12C SERIES



## 12W Wall Mount Power Supply for Medical Equipment

- Wide Input Voltage 90 to 264 VAC, 47 to 63Hz
- European type 2 prong plug
- Output Voltage Available From 5VDC Thru 27VDC
- Single Output
- Over Load Protection.
- Class II Insulation

**2 Year Warranty**

Approvals:

### Single Output

| Model Number  | Output Voltage | Max. Output Current | Total Regulation | Maximum Output Power |
|---------------|----------------|---------------------|------------------|----------------------|
| SHWA12C-S02   | 5 ~ 6 VDC      | 2.00 ~ 1.66 A       | 5%               | 10W                  |
| SHWA12C-S03   | 6 ~ 8 VDC      | 2.00 ~ 1.50 A       | 5%               | 12W                  |
| SHWA12C-S04 * | 8 ~ 11 VDC     | 1.50 ~ 1.09 A       | 5%               | 12W                  |
| SHWA12C-S05 * | 11 ~ 13 VDC    | 1.09 ~ 0.92 A       | 5%               | 12W                  |
| SHWA12C-S06 * | 13 ~ 16 VDC    | 0.92 ~ 0.75 A       | 5%               | 12W                  |
| SHWA12C-S07 * | 16 ~ 21 VDC    | 0.75 ~ 0.57 A       | 3%               | 12W                  |
| SHWA12C-S08 * | 21 ~ 27 VDC    | 0.57 ~ 0.44 A       | 3%               | 12W                  |

Mark "\*" means approved by CEC level V.

Total Regulation is conditioned by below configuration

(S02~S04 AWG16/2C/4FT output cable)

(S05~S08: AWG18/2C/6FT output cable)

### Electrical Characteristics

| Parameter                                            | Test Conditions                                                                                               | Min.  | Typ. | Max. | Unit |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------|------|------|------|
| Input Voltage                                        | Operating Voltage                                                                                             | 90    |      | 264  | VAC  |
| Input Frequency                                      |                                                                                                               | 47    |      | 63   | Hz   |
| Output Power Range                                   | Vin=90 to 264VAC                                                                                              | 0     |      | 12   | W    |
| Input Current (Low Line)                             | Io=Full load, Vin=115VAC                                                                                      |       | 0.25 | 0.35 | A    |
| Input Current (High Line)                            | Io=Full load, Vin=230VAC                                                                                      |       | 0.17 | 0.22 | A    |
| Low Line Inrush Current                              | Io=Full load, 25°C Cool start, Vin=115VAC                                                                     |       | 14   | 16   | A    |
| High Line Inrush Current                             | Io=Full load, 25°C Cool start, Vin=230VAC                                                                     |       | 28   | 30   | A    |
| Efficiency                                           | Io=Full Load, Vin=230VAC                                                                                      | 77.7  |      |      | %    |
| Line Regulation                                      | Io=Full Load                                                                                                  |       |      | 1    | %    |
| Load Regulation                                      | Vin=230VAC                                                                                                    |       |      | 5    | %    |
| 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                                                                                      | 10    |      |      | mS   |
| Start Up Time                                        | Io=Full Load, Vin=100VAC                                                                                      | 0.3   | 1    | 2    | S    |
| Ripple & Noise(Peak to Peak)                         | Full Load, Vin=90VAC                                                                                          |       |      | 1    | %    |
| Temperature Coefficient                              | All output                                                                                                    | -0.04 |      | 0.04 | %/°C |
| Thermal Shutdown* By Junction Temperature Controller | The parameter is not subject to production test-verified by design/characterization of integrated controller. | -25   |      | 130  | °C   |

\* As long as faulty conditions have been removed, the adaptor will automatically power up as usual.

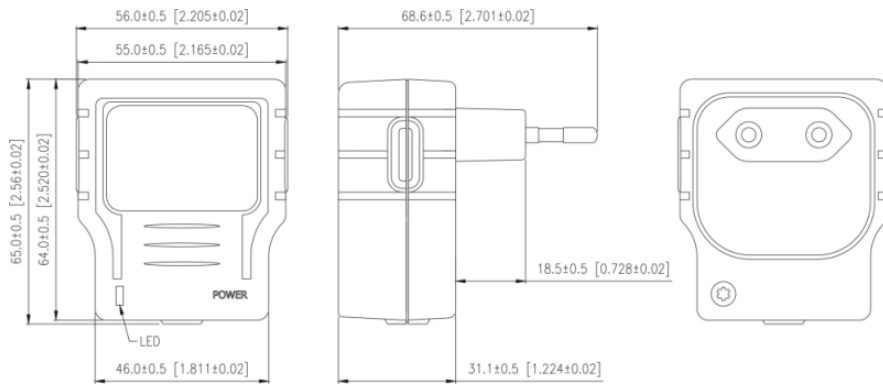
## Conditions

| Parameter                                                     | Test Conditions | Min. | Typ. | Max. | Unit |
|---------------------------------------------------------------|-----------------|------|------|------|------|
| Operating Temperature                                         |                 | 0    | 40   | 70   | °C   |
| Storage Temperature                                           |                 | -40  |      | 85   | °C   |
| Relative Humidity                                             | No-Condensing   | 5    |      | 95   | %    |
| Operating Temperature at 25°C, Calculated per MIL-HDBK-217F   |                 | 0.1M |      |      | Hrs  |
| De-rate linearly from 100 % load at 40°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 | 5656 | VDC   |
| Meet EMI requirements: CISPR-11                          | Vin=220VAC           | B    | CLASS |
| Meet EMI requirements: FCC Part18                        | Vin=110VAC           | B    | CLASS |

## Mechanical and PIN out



### Note:

1. Dimensions are shown in mm & inch
2. Weight: approx. 140g
3. Optional output connector.