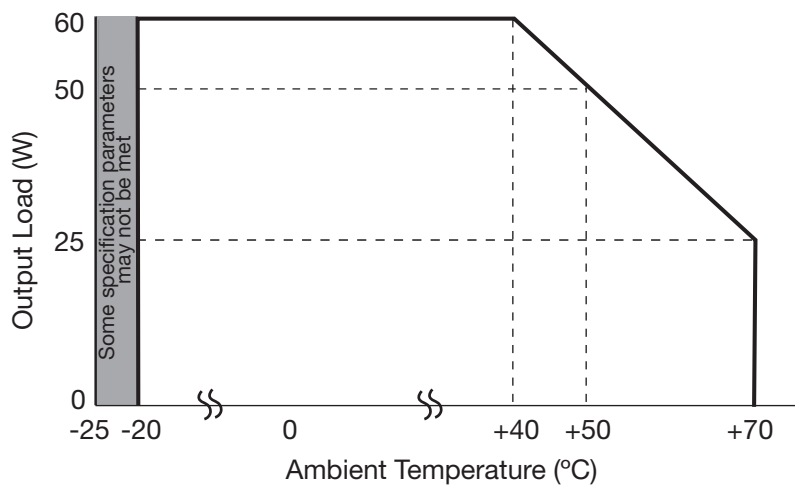


Environmental

| Characteristic | Minimum | Typical | Maximum | Units | Notes & Conditions |
|-----------------------|--|---------|-----------|-------|---------------------------|
| Operating Temperature | -25 | | +70 | °C | See derating curve, fig.1 |
| Storage Temperature | -40 | | +85 | °C | |
| Humidity | 5 | | 95 | %RH | Non-condensing |
| Operating Altitude | | | 5000/4000 | m | ITE/Medical |
| Shock | ±3 x 30g shocks in each plane, total 18 shocks. 30g = 11ms (+/- 0.5msecs), half sine. Conforms to EN60068-2-27 | | | | |
| Vibration | Single axis 10-500 Hz at 2g sweep and endurance at resonance in all 3 planes. Conforms to EN60068-2-6 | | | | |

Temperature Derating Curve

Figure 1



Notes

FCS60US12 ripple and noise is <1.5% from -25 °C to 0 °C reducing to <1% after 1 minute warm up.

EMC: Emissions

| Phenomenon | Standard | Test Level | Notes & Conditions |
|-------------------|-------------|------------|---|
| Conducted | EN55011/32 | Class B | See note 1. |
| Radiated | EN55011/32 | Class A | Class B with Wurth Electronics 742 700 91 with 4 turns on AC Input. See note 1. |
| Harmonic Current | EN61000-3-2 | Class A | |
| Voltage Functions | EN61000-3-3 | | |

Notes

1. For class I applications, ensure the two mounting holes marked with ⊕ are connected together and to safety earth to meet Class B conducted and radiated emissions.

EMC: Immunity

| Phenomenon | Standard | Test Level | Criteria | Notes & Conditions | |
|---------------------------|------------------------|----------------------------|----------|--------------------|---------------|
| Medical Device EMC | IEC60601-1-2 | Ed.4.0 : 2014 | as below | | |
| Low Voltage PSU EMC | EN61204-3 | High severity level | as below | | |
| ESD | EN61000-4-2 | ±8kV contact, ±15kV air | A | | |
| Radiated | EN61000-4-3 | 3 | A | | |
| EFT | EN61000-4-4 | 3 | A | | |
| Surge | EN61000-4-5 | Installation class 3 | A | | |
| Conducted | EN61000-4-6 | 3 | A | | |
| Magnetic Fields | EN61000-4-8 | 4 | A | | |
| Dips and Interruptions | EN61000-4-11 (100 VAC) | Dip 100% (0 VAC), 8.4 ms | A | 25% derating | |
| | | Dip 100% (0 VAC), 16.7 ms | B | | |
| | | Dip 60% (40 VAC), 200 ms | B | | |
| | | Dip 30% (70 VAC), 500 ms | B | | |
| | | Dip 20% (80 VAC), 5000 ms | B | | |
| | | Int 100% (0 VAC), 5000 ms | B | | |
| | EN61000-4-11 (115 VAC) | Dip 100% (0 VAC), 8.4 ms | A | | |
| | | Dip 100% (0 VAC), 16.7 ms | B | | |
| | | Dip 60% (40 VAC), 200 ms | B | | |
| | | Dip 30% (70 VAC), 500 ms | B | | |
| | | Dip 20% (80 VAC), 5000 ms | B | | |
| | | Int 100% (0 VAC), 5000 ms | B | | |
| | EN61000-4-11 (240 VAC) | Dip 100% (0 VAC), 10 ms | A | | |
| | | Dip 100% (0 VAC), 20 ms | B | | |
| | | Dip 60% (96 VAC), 200 ms | B | | |
| | | Dip 30% (168 VAC), 500 ms | B | | |
| | | Dip 20% (192 VAC), 5000 ms | B | | |
| | | Int 100% (0 VAC), 5000 ms | B | | |
| | EN60601-1-2 (100 VAC) | Dip 100% (0 VAC), 10 ms | A | | TBA% derating |
| | | Dip 100% (0 VAC), 20 ms | A | | TBA% derating |
| | | Dip 60% (40 VAC), 100 ms | A | | TBA% derating |
| | | Dip 30% (70 VAC), 500 ms | A | | |
| | | Int 100% (0 VAC), 5000 ms | B | | |
| | EN60601-1-2 (240 VAC) | Dip 100% (0 VAC), 10 ms | A | | |
| Dip 100% (0 VAC), 20 ms | | A | | | |
| Dip 60% (96 VAC), 100 ms | | A | | | |
| Dip 30% (168 VAC), 500 ms | | A | | | |
| Int 100% (0 VAC), 5000 ms | | B | | | |

Safety Approvals

| Safety Agency | Safety Standard | Notes & Conditions |
|---------------|------------------------|------------------------|
| CB Report | IEC60950-1, IEC62368-1 | Information Technology |
| UL | cUL62368-1 | Information Technology |
| TUV | EN62368-1 | Information Technology |
| CE | LVD | |

| Safety Agency | Safety Standard | Notes & Conditions |
|---------------|---|--------------------|
| CB Report | IEC60601-1 Ed 3.1 Including Risk Management | Medical |
| UL | ANSI/AAMI ES60601-1: & CSA C22.2 No.6061-1:08 | Medical |
| CE | EN60601-1 | Medical |

| Safety Agency | Safety Standard | Notes & Conditions |
|---------------|-----------------|--------------------|
| CB Report | IEC60335-1 | Household |

| Isolation | Safety Standard | Notes & Conditions |
|----------------------|--|--------------------|
| Primary to Secondary | 2 x MOPP (Means of Patient Protection) | IEC60601-1 Ed 3.1 |
| Primary to Earth | 1 x MOPP (Means of Patient Protection) | |
| Secondary to Earth | 1 x MOPP (Means of Patient Protection at output voltage) | |