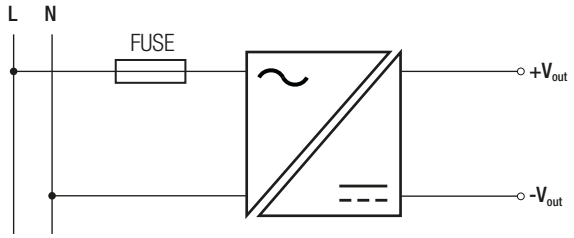
## Specifications (measured @ Ta= 25°C, nom. Vin (115/230VAC), full load and after warm-up unless otherwise stated)

### PROTECTIONS

| Parameter | Type | | Value |
|---|---|---|---|
| Short Circuit Protection (SCP) | | | continuous, automatic recovery |
| Over Voltage Protection (OVP) | zener diode clamp | | 105% - 150% |
| Over Current Limit | | | 120% - 190% |
| Over Voltage Category | | | OVCII |
| Isolation Voltage | I/P to O/P | tested for 1 minute | 3kVAC |
| Isolation Resistance | | | 1GΩ min. |
| Leakage Current | 85-305VAC, 47-440Hz | | 10µA max. |

**Notes:**

Note8: Refer to local wiring regulations if input over-current protection is also required. Recommended fuse: slow blow type




### ENVIRONMENTAL

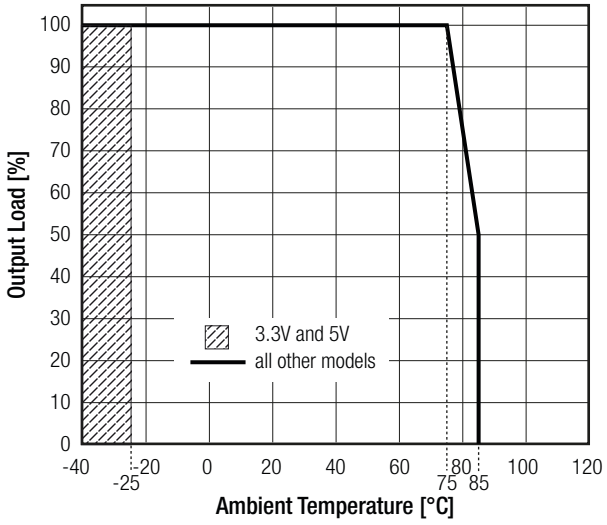
| Parameter | Condition | | Value |
|---|---|---|---|
| Operating Temperature Range [9] | full load | | -40°C to +75°C |
| | refer to derating graph | | -40°C to +85°C |
| Maximum Case Temperature | | | +105°C |
| Thermal Impedance | | | 9.5K/W typ. |
| Operating Humidity | non-condensing | | 5% - 95% RH max. |
| MTBF | according to MIL-HDBK-217F, G.B. | +25°C | 3554 x $10^3$ hours<br>3219 x $10^3$ hours |

**Notes:**

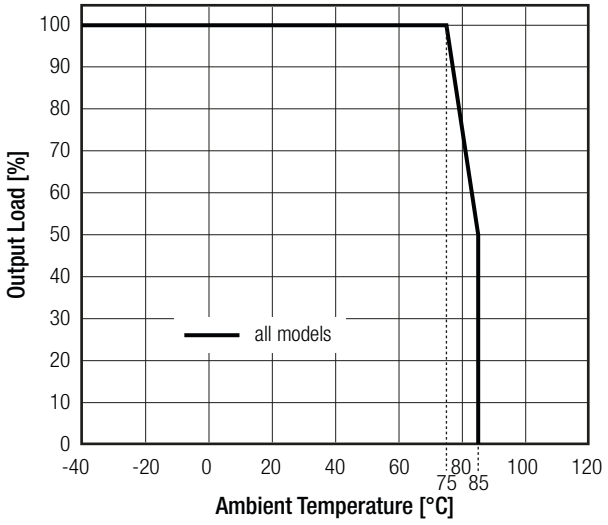
Note9: At low input voltage (85-140VAC) and temperature below -25°C the RAC03-3.3SER/277 and RAC03-05SER/277, will not start

**Derating Graph**

@ 85-140VAC




@ 140-305VAC



## Specifications (measured @ Ta= 25°C, nom. Vin (115/230VAC), full load and after warm-up unless otherwise stated)

| SAFETY AND CERTIFICATIONS | | |
|---|---|---|
| **Certificate Type (Safety)** | **Report / File Number** | **Standard** |
| Information Technology Equipment, General Requirements for Safety (CB Scheme) | L0339L26-CB-1-B4 | IEC60950-1:2005 2nd Edition + A2:2013<br>EN60950-1:2006 + A2:2013 |
| Information Technology Equipment, General Requirements for Safety | E224736-A24-UL | UL No. 60950-1, 2nd Edition, 2014<br>CAN/CSA-C22.2 No. 60950-1-07, 2nd Edition, 2014 |
| Household and similar electrical appliances, General requirements | L0339L26-B2-L | EN60335-1:2012+A11:2014 |
| EAC Safety of Low Voltage Equipment | RU-AT.37.02367 | TP TC 004/2011 |
| RoHS2+ | | RoHS-2011/65/EU + AM-2015/863 |
| | | |
| **EMC Compliance (Industrial)** | **Condition** | **Standard / Criterion** |
| Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement | | EN55032:2015, Class B |
| Information technology equipment - Immunity characteristics - Limits and methods of measurement | | EN55024:2010 |
| ESD Electrostatic discharge immunity test | ±8kV air, ±4kV contact | EN61000-4-2:2009, Criteria B |
| Radiated, radio-frequency, electromagnetic field immunity test | 3V/m | EN61000-4-3:2006 + A2:2010, Criteria A |
| Fast Transient and Burst Immunity | AC Power Port: ±1kV | EN61000-4-4:2012, Criteria A |
| Power Magnetic Field Immunity | 50Hz, 1A/m | EN61000-4-8:2010, Criteria A |
| Voltage Dips and Interruption | Voltage Dips: >95% reduction<br>>30% reduction<br>Interruption: >95% | EN61000-4-11:2004, Criteria A<br>EN61000-4-11:2004, Criteria A<br>EN61000-4-11:2004, Criteria B |
| Limits of Voltage Fluctuations & Flicker | | EN61000-3-3:2013 |
| | | |
| **EMC Compliance (Household)** | **Condition** | **Standard / Criterion** |
| Electromagnetic compatibility of multimedia equipment – Emission Requirements | | EN55014-1:2006+A2:2011 |
| Information technology equipment - Immunity characteristics - Limits and methods of measurement | | EN55014-2:2015 |
| ESD Electrostatic discharge immunity test | ±8kV Air, ±4kV Contact | IEC61000-4-2:2008, Criteria A |
| Radiated, radio-frequency, electromagnetic field immunity test | 3V/m | IEC61000-4-3:2006 + A2:2010, Criteria A |
| Fast Transient and Burst Immunity | AC Power Port +/-1.0kV<br>DC Output +/-0.5kV | IEC61000-4-4:2012, Criteria A |
| Surge Immunity | AC Power Port L-N +/-2kV<br>DC Output L-N +/-1kV | IEC61000-4-5:2014, Criteria B |
| Immunity to conducted disturbances, induced by radio-frequency fields | AC Power Port 3V, DC Output 3V | IEC61000-4-6:2013, Criteria A |
| Voltage Dips and Interruption | Voltage Dips: >95% reduction<br>>30% reduction<br>Interruption: >95% | IEC61000-4-11:2004, Criteria B<br>IEC61000-4-11:2004, Criteria C<br>IEC61000-4-11:2004, Criteria C |
| Limits of Harmonic Current Emissions | | EN61000-3-2:2014 |
| Limits of Voltage Fluctuations & Flicker | | EN61000-3-3:2013 |

| DIMENSION AND PHYSICAL CHARACTERISTICS | | |
|---|---|---|
| **Parameter** | **Type** | **Value** |
| Material | case<br>potting | black plastic, (UL94V-0)<br>epoxy, (UL94V-0) |
| Dimension (LxWxH) | | 50.3 x 50.3 x 11.0mm |
| Weight | | 41g typ. |

continued on next page