

## SVL Essential DIN Rail Series

The SolaHD SVL Series power supplies are perfect for high volume, controlled environment applications where essential features are the only requirement. When space inside an enclosure is at a premium, their small footprint makes these power supplies an excellent alternative to embedded open frame switchers. The DIN rail mounting capability provides quicker and easier installation while allowing for design flexibility. These power supplies range from 15 to 960 Watts in 5, 12, 24 and 48 Volt combinations.

### Applications

- Test and Measure Equipment
- Scanners
- Instrumentation
- Printers Peripheral
- ATM Machines
- Semiconductor Fabrication Equipment
- Vending Machines

### Features

- Universal Input, single-phase and three-phase
- Protection
  - Short Circuit
  - Over Voltage
  - Overload
  - Over Temperature
- Power Factor Correction
- Convection Cooling
- Blinking OCP Diagnostic
- DC OK LED
- DC OK Relay for some models
- Two year limited warranty



### Certifications and Compliances

#### All Models

-  Listed, Ind. Control Equipment, E61379
  - UL 508, CSA C22.2 No. 107.1
-  Recognized Component, ITE, E137632
  - UL 62368-1/CSA C22.2 No. 62368-1
  - UL 60950-1/CSA C22.2 No. 60950-1
  - Model SVL 1-24-100, SVL 3-5-100, SVL 4-12-100, SVL 2-24-100 were evaluated for NEC Class II outputs
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  - IEC/EN60950-1
  - IEC/EN62368-1
- RoHS Compliant

#### SVL 5-24-480, SVL 10-24-480, SVL 20-24-480

-  ANSI/ISA-12.12.01/CSA 213, Class I, Div 2 Groups A, B, C, D

### Related Products

- SDN-C Series
- SDN-P™ Series
- SDP™ Series

## SVL Specifications &lt;120W

| Description                      | Catalog Number                                                                                                                                                                            |                                    |                                         |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------------|
|                                  | SVL 3–5–100                                                                                                                                                                               | SVL 1–24–100                       | SVL 6–5–100                             |
| Input                            |                                                                                                                                                                                           |                                    |                                         |
| Input Voltage, Nominal           | 100-240 Vac, 50/60 Hz                                                                                                                                                                     |                                    |                                         |
| Input Voltage, AC Min/Max Range  | 85-264 Vac                                                                                                                                                                                |                                    |                                         |
| Input Voltage, DC Min/Max Range¹ | 120-375 Vdc                                                                                                                                                                               |                                    |                                         |
| Nominal Current                  | 0.5 A @ 115 Vac<br>0.3 A @ 230 Vac                                                                                                                                                        | 0.8 A @ 115 Vac<br>0.4 A @ 230 Vac | 0.9 A @ 115 Vac<br>0.5 A @ 230 Vac      |
| – Inrush Current max,            | 35 A @ 115 Vac<br>65 A @ 230 Vac                                                                                                                                                          | 35 A @ 115 Vac<br>60 A @ 230 Vac   |                                         |
| Efficiency                       | 79% typ.                                                                                                                                                                                  | 88% typ.                           | 80% typ.                                |
| Leakage Current                  | <1 mA @ 240 Vac                                                                                                                                                                           |                                    |                                         |
| Power Factor Correction          | Meets EN61000-3-2 Class A                                                                                                                                                                 |                                    |                                         |
| Output                           |                                                                                                                                                                                           |                                    |                                         |
| Nominal Voltage                  | 5 V                                                                                                                                                                                       | 24 V                               | 5 V                                     |
| – Tolerance                      | +/-2%                                                                                                                                                                                     |                                    |                                         |
| Voltage Adjustable Range         | 5-5.5 V                                                                                                                                                                                   | 24-28 V                            | 5-5.5 V                                 |
| – Ripple (25°C)                  | <75 mVp-p                                                                                                                                                                                 |                                    |                                         |
| PARD (25°C)                      | <75 mVp-p                                                                                                                                                                                 |                                    |                                         |
| Nominal Current                  | 3 A                                                                                                                                                                                       | 1.25 A                             | 6 A                                     |
| Max. Power                       | 15 W                                                                                                                                                                                      | 30 W                               |                                         |
| Holdup Time at full load (25°C)  | 20 ms typ. @ 115 Vac<br>100 ms typ. @ 230 Vac                                                                                                                                             |                                    |                                         |
| Rise Time at full load (25°C)    | <100 ms                                                                                                                                                                                   |                                    |                                         |
| Start Up at full load (25°C)     | <3000 ms @ 115 Vac, <1500 ms @ 230 Vac                                                                                                                                                    |                                    |                                         |
| Regulation                       | <0.5% Line and <1% Load                                                                                                                                                                   |                                    |                                         |
| Environmental Data               |                                                                                                                                                                                           |                                    |                                         |
| Operating Temperature            | -20 °C to +70 °C                                                                                                                                                                          |                                    |                                         |
| Relative Humidity                | 5 to 95% RH Non-condensing                                                                                                                                                                |                                    |                                         |
| Storage temp                     | -40 °C to +85 °C                                                                                                                                                                          |                                    |                                         |
| Power Derating                   | See derating tables.                                                                                                                                                                      |                                    |                                         |
| Shock                            | IEC60068-2-27: half sine wave 10 G, single axis for a duration of 11 ms operational and 50 G three axes for duration of 11 ms each non-operational                                        |                                    |                                         |
| Vibration                        | IEC60068-2-6: sine wave; 10 Hz to 500 Hz at 2 g, 0.35 mm displacement, three axes for 60 min each operational and 5 Hz to 500 Hz at 2.09 grms, three axes for 20 min each non-operational |                                    |                                         |
| Protections                      |                                                                                                                                                                                           |                                    |                                         |
| Overvoltage Protection           | 6.3-7.4 V, Latching                                                                                                                                                                       | 30-34.8 V, Latching                | 6.3-7.4 V, Latching                     |
| Overload Protection              | Hiccup                                                                                                                                                                                    |                                    |                                         |
| Over Temperature Protection      | No component damage, latch mode                                                                                                                                                           |                                    |                                         |
| Short Circuit                    | Hiccup mode, non-latching (auto-recovery when the fault is removed)                                                                                                                       |                                    |                                         |
| Reliability                      |                                                                                                                                                                                           |                                    |                                         |
| MTBF                             | >350 khrs (115 Vac/230 Vac @ 25 °C) acc. to Telcordia SR-332 issue 3                                                                                                                      |                                    |                                         |
| EMC                              |                                                                                                                                                                                           |                                    |                                         |
| Galvanic Isolation               | I/P to O/P: 3 K Vac; I/P to GND: 1.5 K Vac; O/P to GND: 0.5 K Vac                                                                                                                         |                                    |                                         |
| Emissions                        | EN55022 (CISPR22) Class B, EN55011 Class B, EN61000-6-3, EN61000-6-4, EN61000-3-3, EN61204-3, EN61000-3-2 Class A                                                                         |                                    |                                         |
| Immunity                         | EN55024, EN61000-6-1, EN61000-6-2 (EN61000-4-2, 3, 4, 5, 6, 8, 11, 12) Level 3, Performance Criteria A                                                                                    |                                    |                                         |
| General                          |                                                                                                                                                                                           |                                    |                                         |
| Housing                          | Plastic                                                                                                                                                                                   |                                    |                                         |
| H x W x D – in (mm)              | 2.95 x 0.82 x 3.52 (75.0 x 21.0 x 89.5)                                                                                                                                                   |                                    | 2.95 x 1.18 x 3.52 (75.0 x 30.0 x 89.5) |
| Unit Weight – lbs (g)            | 0.242 (110)                                                                                                                                                                               |                                    | 0.368 (167)                             |
| Shipping Weight – lbs (g)        | 0.309 (140)                                                                                                                                                                               |                                    | 0.419 (190)                             |
| LED Signals                      | GREEN light = DC OK , OCP = blinking                                                                                                                                                      |                                    |                                         |
| DC OK Relay Contact              | No                                                                                                                                                                                        |                                    |                                         |
| Warranty                         | 2 year                                                                                                                                                                                    |                                    |                                         |

1. DC input range is not listed in safety file it is only to confirm product functional performance.

## SVL Specifications &lt;120W

| Description                                  | Catalog Number                                                                                                                                                                 |                                    |                                              |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------|
|                                              | SVL 4–12–100                                                                                                                                                                   | SVL 2–24–100                       | SVL 4–24–100                                 |
| Input                                        |                                                                                                                                                                                |                                    |                                              |
| Input Voltage, Nominal                       | 100-240 Vac, 50/60 Hz                                                                                                                                                          |                                    |                                              |
| Input Voltage, AC Min/Max Range              | 85-264 Vac                                                                                                                                                                     |                                    |                                              |
| Input Voltage, DC Min/Max Range <sup>1</sup> | 120-375 Vdc                                                                                                                                                                    |                                    |                                              |
| Nominal Current                              | 1.0 A @ 115 Vac<br>0.6 A @ 230 Vac                                                                                                                                             | 1.0 A @ 115 Vac<br>0.6 A @ 230 Vac | 1.2 A @ 115 Vac<br>0.6 A @ 230 Vac           |
| – Inrush Current max.                        | 35 A @ 115 Vac<br>60 A @ 230 Vac                                                                                                                                               |                                    |                                              |
| Efficiency                                   | 88% typ.                                                                                                                                                                       |                                    | 89% typ.                                     |
| Leakage Current                              | <1 mA @ 240 Vac                                                                                                                                                                |                                    |                                              |
| Power Factor Correction                      | Meets EN61000-3-2 Class A                                                                                                                                                      |                                    | Active PFC >0.9                              |
| Output                                       |                                                                                                                                                                                |                                    |                                              |
| Nominal Voltage                              | 12 V                                                                                                                                                                           | 24 V                               |                                              |
| – Tolerance                                  | +/-2%                                                                                                                                                                          |                                    |                                              |
| Voltage Adjustable Range                     | 12-15 V                                                                                                                                                                        | 24-28 V                            |                                              |
| – Ripple (25°C)                              | <75 mVp-p                                                                                                                                                                      |                                    |                                              |
| PARD (25°C)                                  | <75 mVp-p                                                                                                                                                                      |                                    |                                              |
| Nominal Current                              | 4 A                                                                                                                                                                            | 2.1 A                              | 4 A                                          |
| Max. Power                                   | 48 W                                                                                                                                                                           | 50 W                               | 96 W                                         |
| Holdup Time at full load (25°C)              | 20 ms typ. @ 115 Vac<br>90 ms typ. @ 230 Vac                                                                                                                                   |                                    | 25 ms typ. @ 115 Vac<br>50 ms typ. @ 230 Vac |
| Rise Time at full load (25°C)                | <100 ms                                                                                                                                                                        |                                    |                                              |
| Start Up at full load (25°C)                 | <3000 ms @ 115 Vac, <1500 ms @ 230 Vac                                                                                                                                         |                                    |                                              |
| Regulation                                   | <0.5% Line and <1% Load                                                                                                                                                        |                                    |                                              |
| Environmental Data                           |                                                                                                                                                                                |                                    |                                              |
| Operating Temperature                        | -20 °C to +70 °C                                                                                                                                                               |                                    |                                              |
| Relative Humidity                            | 5 to 95% RH Non-condensing                                                                                                                                                     |                                    |                                              |
| Storage temp                                 | -40 °C to +85 °C                                                                                                                                                               |                                    |                                              |
| Power Derating                               | See SVL derating tables.                                                                                                                                                       |                                    |                                              |
| Shock                                        | IEC60068-2-27: half sine wave 10 G, single axis for a duration of 11 ms operational and 50 G three axes for duration of 11 ms each non-operational                             |                                    |                                              |
| Vibration                                    | IEC60068-2-6: 10 Hz to 500 Hz at 2 g, 0.35 mm displacement, three axes for 60 min each operational and 5 Hz to 500 Hz at 2.09 grms, three axes for 20 min each non-operational |                                    |                                              |
| Protections                                  |                                                                                                                                                                                |                                    |                                              |
| Overvoltage Protection                       | 16-18.7 V, Latching                                                                                                                                                            | 30-34.8 V, Latching                |                                              |
| Overload Protection                          | Current foldforward and then hiccup                                                                                                                                            |                                    |                                              |
| Over Temperature Protection                  | No component damage, latch mode                                                                                                                                                |                                    |                                              |
| Short Circuit                                | Hiccup mode, non-latching (auto-recovery when the fault is removed)                                                                                                            |                                    |                                              |
| Reliability                                  |                                                                                                                                                                                |                                    |                                              |
| MTBF                                         | >350 khrs (115 Vac/230 Vac @ 25 °C) as per Telcordia SR-332 issue 3 Jan 2011.                                                                                                  |                                    |                                              |
| EMC                                          |                                                                                                                                                                                |                                    |                                              |
| Galvanic Isolation                           | I/P to O/P: 3 K Vac; I/P to GND: 1.5 K Vac; O/P to GND: 0.5 K Vac                                                                                                              |                                    |                                              |
| Emissions                                    | EN55022 (CISPR22) Class B, EN55011 Class B, EN61000-6-3, EN61000-6-4, EN61000-3-3, EN61204-3, EN61000-3-2 Class A                                                              |                                    |                                              |
| Immunity                                     | EN55024, EN61000-6-1, EN61000-6-2 (EN61000-4-2, 3, 4, 5, 6, 8, 11, 12) Level 3, Performance Criteria A                                                                         |                                    |                                              |
| General                                      |                                                                                                                                                                                |                                    |                                              |
| Housing                                      | Metal Encased                                                                                                                                                                  |                                    |                                              |
| H x W x D – in (mm)                          | 2.95 x 1.18 x 3.52 (75.0 x 30.0 x 89.5)                                                                                                                                        |                                    | 2.95 x 1.77 x 3.93 (75.0 x 45.0 x 100.0)     |
| Unit Weight – lbs (g)                        | 0.390 (177)                                                                                                                                                                    |                                    | 0.698 (317)                                  |
| Shipping Weight – lbs (g)                    | 0.478 (217)                                                                                                                                                                    |                                    | 0.816 (370)                                  |
| LED Signals                                  | GREEN light = DC OK , OCP = blinking                                                                                                                                           |                                    |                                              |
| DC OK Relay Contact                          | No                                                                                                                                                                             |                                    |                                              |
| Warranty                                     | 2 year                                                                                                                                                                         |                                    |                                              |

1. DC input range is not listed in safety file it is only to confirm product functional performance.



## SVL Specifications 120W and Above

| Description                      | Catalog Number                                                                                                                                                                            |                                              |                                              |                                            |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------|--------------------------------------------|
|                                  | SVL 2–48–100                                                                                                                                                                              | SVL 5–24–100                                 | SVL 10–24–100                                | SVL 20–24–100                              |
| Input                            |                                                                                                                                                                                           |                                              |                                              |                                            |
| Input Voltage, Nominal           | 100-240 Vac, 50/60 Hz                                                                                                                                                                     |                                              |                                              |                                            |
| Input Voltage, AC Min/Max Range  | 85-264 Vac                                                                                                                                                                                |                                              |                                              |                                            |
| Input Voltage, DC Min/Max Range¹ | 120-375 Vdc                                                                                                                                                                               |                                              |                                              |                                            |
| Nominal Current                  | 2.20 A @ 115 Vac<br>1.40 A @ 230 Vac                                                                                                                                                      | 2.8 A @ 115 Vac<br>1.4 A @ 230 Vac           | 5.4 A @ 115 Vac<br>2.7 A @ 230 Vac           |                                            |
| – Inrush Current max.            | 20 A typ. @ 115 Vac<br>40 A typ. @ 230 Vac                                                                                                                                                |                                              |                                              | 40 A typ. @ 115 Vac<br>80 A typ. @ 230 Vac |
| Efficiency                       | 88% typ                                                                                                                                                                                   |                                              |                                              |                                            |
| Leakage Current                  | <1 mA @ 240 Vac                                                                                                                                                                           |                                              |                                              |                                            |
| Power Factor Correction          | Meets EN61000-3-2 Class A                                                                                                                                                                 |                                              | Active PFC >0.95                             |                                            |
| Output                           |                                                                                                                                                                                           |                                              |                                              |                                            |
| Nominal Voltage                  | 48 V                                                                                                                                                                                      | 24 V                                         |                                              |                                            |
| – Tolerance                      | +/-2%                                                                                                                                                                                     |                                              |                                              |                                            |
| Voltage Adjustable Range         | 44-56 V                                                                                                                                                                                   | 22-28 V                                      |                                              |                                            |
| – Ripple (25°C)                  | <120 mVp-p                                                                                                                                                                                | <100 mVp-p                                   |                                              |                                            |
| PARD (25°C)                      | <150 mVp-p                                                                                                                                                                                | <120 mVp-p                                   |                                              |                                            |
| Nominal Current                  | 2.5 A                                                                                                                                                                                     | 5 A                                          | 10 A                                         | 20 A                                       |
| Max. Power                       | 120 W                                                                                                                                                                                     |                                              | 240 W                                        | 480 W                                      |
| Holdup Time at full load (25°C)  | 10 ms typ.@ 115 Vac<br>16 ms typ @ 230 Vac                                                                                                                                                |                                              |                                              |                                            |
| Rise Time at full load (25°C)    | <100 ms                                                                                                                                                                                   |                                              |                                              |                                            |
| Start Up at full load (25°C)     | <1000 ms @ 115 Vac & 230 Vac                                                                                                                                                              |                                              |                                              |                                            |
| Regulation                       | <0.5% Line and <1% Load                                                                                                                                                                   |                                              |                                              |                                            |
| Environmental Data               |                                                                                                                                                                                           |                                              |                                              |                                            |
| Operating Temperature            | -20 °C to +70 °C                                                                                                                                                                          |                                              |                                              |                                            |
| Relative Humidity                | 5 to 95% RH Non-condensing                                                                                                                                                                |                                              |                                              |                                            |
| Storage temp                     | -40 °C to +85 °C                                                                                                                                                                          |                                              |                                              |                                            |
| Power Derating                   | See derating tables.                                                                                                                                                                      |                                              |                                              |                                            |
| Shock                            | IEC60068-2-27: half sine wave 10 G, single axis for a duration of 11 ms operational and 50 G three axes for duration of 11 ms each non-operational                                        |                                              |                                              |                                            |
| Vibration                        | IEC60068-2-6: sine wave; 10 Hz to 500 Hz at 2 g, 0.35 mm displacement, three axes for 60 min each operational and 5 Hz to 500 Hz at 2.09 grms, three axes for 20 min each non-operational |                                              |                                              |                                            |
| Protections                      |                                                                                                                                                                                           |                                              |                                              |                                            |
| Overvoltage Protection           | 56-67.2 V, Latching, re-power to recover                                                                                                                                                  | 28.8-35.2 V, latching, re-power to recover   |                                              |                                            |
| Overload Protection              | 105- 50% of rated load; constant current at >20 V output and hiccup at <20 V output.<br>SVL 2–48–100: constant current at >40 V output and hiccup at <40 V output, auto-recovery          |                                              |                                              |                                            |
| Over Temperature Protection      | No component damage, latch mode, re-power to recover                                                                                                                                      |                                              |                                              |                                            |
| Short Circuit                    | Hiccup mode, non-latching (auto-recovery when the fault is removed)                                                                                                                       |                                              |                                              |                                            |
| Reliability                      |                                                                                                                                                                                           |                                              |                                              |                                            |
| MTBF                             | >700 khrs (115 Vac & 230 Vac @ 25 °C) as per Telcordia SR-332 issue 3 Jan 2011.                                                                                                           |                                              |                                              |                                            |
| EMC                              |                                                                                                                                                                                           |                                              |                                              |                                            |
| Galvanic Isolation               | I/P to O/P: 3 K Vac; I/P to GND: 2 K Vac; O/P to GND: 0.5 K Vac                                                                                                                           |                                              |                                              |                                            |
| Emissions                        | EN55022 (CISPR22) Class B, EN55011 Class B, EN61000-6-3, EN61000-6-4, EN61000-3-3, EN61204-3, EN61000-3-2 Class A                                                                         |                                              |                                              |                                            |
| Immunity                         | EN55024, EN61000-6-1, EN61000-6-2 (EN61000-4-2, 3, 4, 5, 6, 8, 11, 12) Level 3, Performance Criteria A, SEMI F47 @ 200 Vac                                                                |                                              |                                              |                                            |
| General                          |                                                                                                                                                                                           |                                              |                                              |                                            |
| Housing                          | Plastic                                                                                                                                                                                   |                                              |                                              |                                            |
| H x W x D – in (mm)              | 4.84 x 1.57 x 4.63<br>(123.6 x 40.0 x 117.6)                                                                                                                                              | 4.87 x 2.36 x 4.63<br>(123.6 x 60.0 x 117.6) | 4.87 x 3.37 x 5.06<br>(123.6 x 85.5 x 128.5) |                                            |
| Unit Weight – lbs (g)            | 1.19 (540)                                                                                                                                                                                | 1.76 (800)                                   | 2.87 (1300)                                  |                                            |
| Shipping Weight – lbs (g)        | 1.46 (660)                                                                                                                                                                                | 2.09 (950)                                   | 3.20 (1452)                                  |                                            |
| LED Signals                      | GREEN light = DC OK , OCP = blinking                                                                                                                                                      |                                              |                                              |                                            |
| DC OK Relay Contact              | Yes                                                                                                                                                                                       |                                              |                                              |                                            |
| Warranty                         | 2 year                                                                                                                                                                                    |                                              |                                              |                                            |

1. DC input range is not listed in safety file it is only to confirm product functional performance.

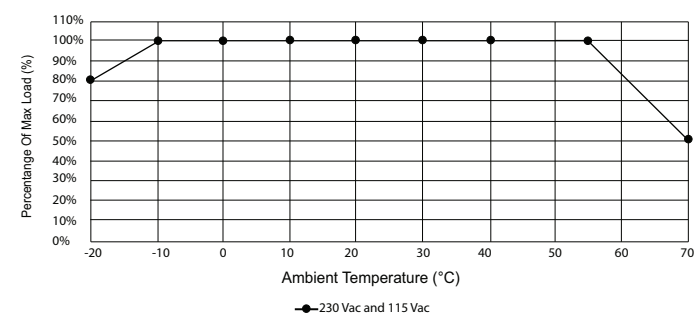
## SVL Specifications Three-Phase

| Description                  | Catalog Number                                                                                                  |                                                   |                                                   |                                                   |
|------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------------------|---------------------------------------------------|
|                              | SVL 5–24–480 (5 A)                                                                                              | SVL 10–24–480 (10 A)                              | SVL 20–24–480 (20 A)                              | SVL 40–24–480 (40 A)                              |
| Input                        |                                                                                                                 |                                                   |                                                   |                                                   |
| Input Voltage, Nominal       | 3 x 400-500 Vac, 50/60 Hz                                                                                       |                                                   |                                                   |                                                   |
| Input Voltage, Min/Max Range | 3 x 320-575 Vac<br>2 x 360-575 Vac                                                                              |                                                   |                                                   |                                                   |
| Input Current                | < 0.50 A @ 3 x 400 Vac,<br>< 0.40 A @ 3 x 500 Vac                                                               | < 0.75 A @ 3 x 400 Vac,<br>< 0.65 A @ 3 x 500 Vac | < 1.00 A @ 3 x 400 Vac,<br>< 0.75 A @ 3 x 500 Vac | < 1.70 A @ 3 x 400 Vac,<br>< 1.40 A @ 3 x 500 Vac |
| – Inrush Current             | < 30 A @ 3 x 400 Vac<br>& 3 x 500 Vac                                                                           | < 40 A @ 3 x 400 Vac<br>& 3 x 500 Vac             | < 50 A @ 3 x 400 Vac<br>& 3 x 500 Vac             | < 60 A @ 3 x 400 Vac<br>& 3 x 500 Vac             |
| Efficiency                   | > 86%                                                                                                           | > 90%                                             | > 91%                                             | > 92%                                             |
| Power Factor Correction      | EN 61000-3-2, Class A                                                                                           |                                                   | > 0.95 @ 3 x 400 Vac, > 0.94 @ 3 x 500 Vac        |                                                   |
| Output                       |                                                                                                                 |                                                   |                                                   |                                                   |
| Nominal Voltage              | 24 V (24-28 Vdc Adjustable), +/-2%                                                                              |                                                   |                                                   |                                                   |
| Ripple and PARD (25°C)       | < 150 mVpp                                                                                                      |                                                   |                                                   | < 240 mVpp                                        |
| Nominal Current              | 5 A                                                                                                             | 10 A                                              | 20 A                                              | 40 A                                              |
| Max. Power                   | 120 W                                                                                                           | 240 W                                             | 480 W                                             | 960 W                                             |
| Hold–up Time (100 % load)    | > 20 ms @ 3 x 400 Vac, > 40 ms @ 3 x 500 Vac                                                                    |                                                   | > 20 ms @ 3 x 400 Vac and 3 x 500 Vac             |                                                   |
| Regulation                   | < 0.5 % Line and < 1.0% Load                                                                                    |                                                   |                                                   |                                                   |
| Environmental Data           |                                                                                                                 |                                                   |                                                   |                                                   |
| Operating Temperature        | -25 °C to +80 °C                                                                                                |                                                   |                                                   |                                                   |
| Relative Humidity            | 5 to 95% RH (Non-Condensing)                                                                                    |                                                   |                                                   |                                                   |
| Storage temp                 | -40 °C to +85 °C                                                                                                |                                                   |                                                   |                                                   |
| Power Derating               | See derating tables.                                                                                            |                                                   |                                                   |                                                   |
| Shock                        | Non-Operating: IEC 60068-2-27, 30 G (300 m/S²) for a duration of 18 ms, 1 times per direction, 2 times in total |                                                   |                                                   |                                                   |
| Vibration                    | Non-Operating: IEC 60068-2-6, 10 Hz to 500 Hz @ 30 m/S² (3G peak); 60 min per axis for all X, Y, Z direction    |                                                   |                                                   |                                                   |
| Protections                  |                                                                                                                 |                                                   |                                                   |                                                   |
| Overvoltage Protection       | 32V ±10%, Hiccup Mode                                                                                           |                                                   |                                                   |                                                   |
| Overload Protection          | Hiccup                                                                                                          |                                                   |                                                   |                                                   |
| Over Temperature Protection  | < 80 °C¹                                                                                                        |                                                   |                                                   | < 65 °C¹                                          |
| Short Circuit                | Hiccup mode, non-latching (auto-recovery when the fault is removed)                                             |                                                   |                                                   |                                                   |
| Reliability                  |                                                                                                                 |                                                   |                                                   |                                                   |
| MTBF                         | > 800 khrs²                                                                                                     | > 500 khrs²                                       | > 500 khrs²                                       | > 300 khrs²                                       |
| EMC                          |                                                                                                                 |                                                   |                                                   |                                                   |
| Galvanic Isolation           | Input to Output: 4.0 KVac. Input to Ground: 2.0 KVac. Output to Ground: 1.5 KVac.                               |                                                   |                                                   |                                                   |
| Emissions                    | CISPR 32, EN 55032, CISPR 11, EN 55011, FCC Title 47: Class B                                                   |                                                   |                                                   |                                                   |
| Immunity                     | EN 55024, EN 61000-6-2 (EN 61000-4-2, 3, 4, 5, 6, 8, 11, 12)                                                    |                                                   |                                                   |                                                   |
| General                      |                                                                                                                 |                                                   |                                                   |                                                   |
| Housing                      | Metal                                                                                                           |                                                   |                                                   |                                                   |
| H x W x D – in (mm)          | 4.76 x 1.97 x 4.62<br>(121 x 50 x 117.3)                                                                        | 4.76 x 2.76 x 4.62<br>(121 x 70 x 117.3)          | 4.76 x 5.51 x 4.62<br>(121 x 140 x 117.3)         | 4.76 x 10 x 4.62<br>(121 x 255 x 117.3)           |
| Unit Weight – lbs (g)        | 1.46 (660)                                                                                                      | 1.96 (890)                                        | 2.98 (1350)                                       | 5.73 (2600)                                       |
| LED Signals                  | GREEN Light = DC OK, OCP = Blinking, OVP = Blinking @ Max load, OTP = LED OFF, SCP = LED OFF                    |                                                   |                                                   |                                                   |
| Warranty                     | 2 years                                                                                                         |                                                   |                                                   |                                                   |

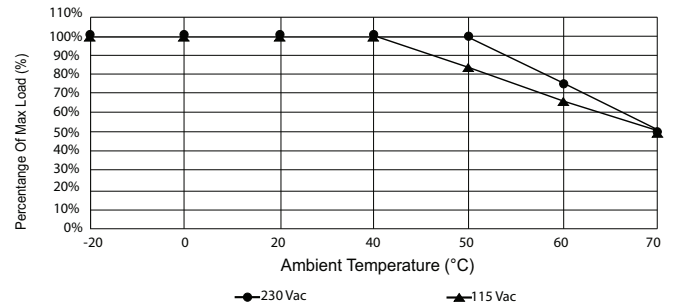
1. Surrounding Air Temperature @ 100% load, Non-Latching (Auto-Recovery).  
2. According to Telcordia SR-332, I/P: 3 x 400 Vac, O/P: 100% load, Ta: 25 °C.

SVL Derating Tables

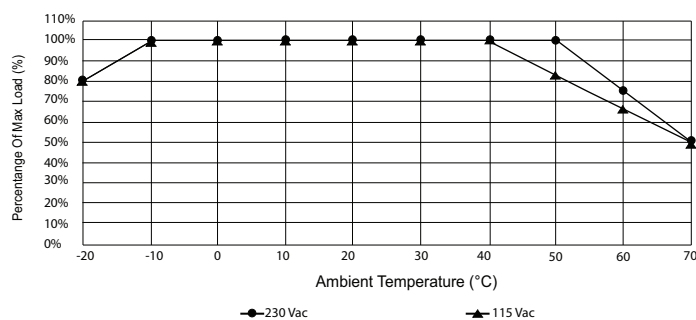
15 Watt – 96 Watt Models (Single Phase)



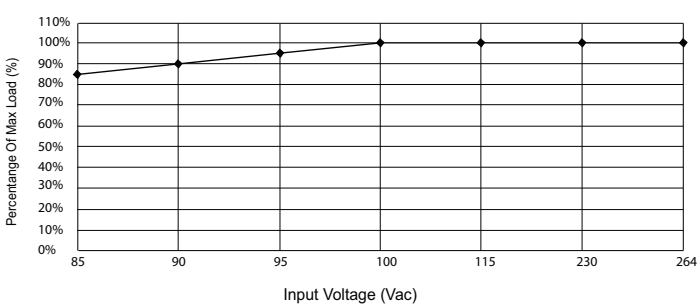
240 Watt Models (Single Phase)



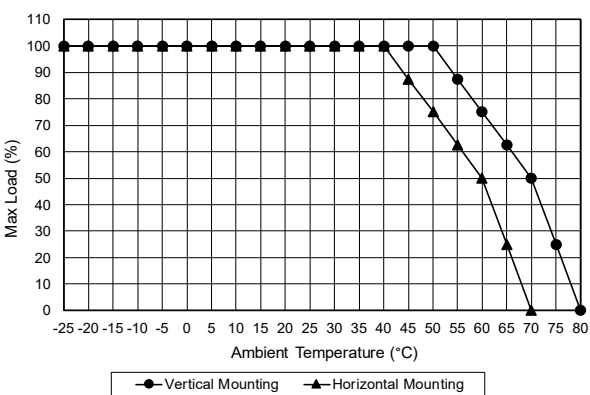
120 Watt and 480 Watt Models (Single Phase)



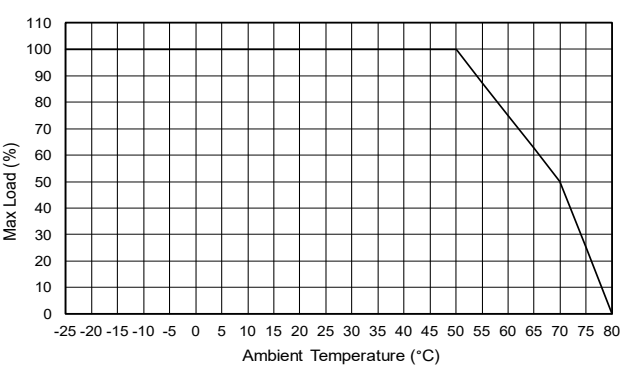
120 Watt – 480 Watt Models (Single Phase)



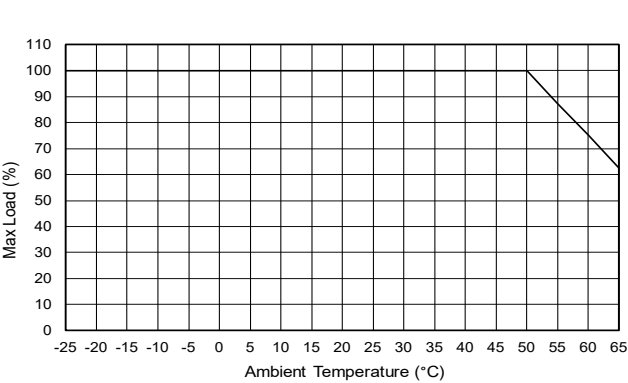
120 Watt and 240 Watt (Three Phase)



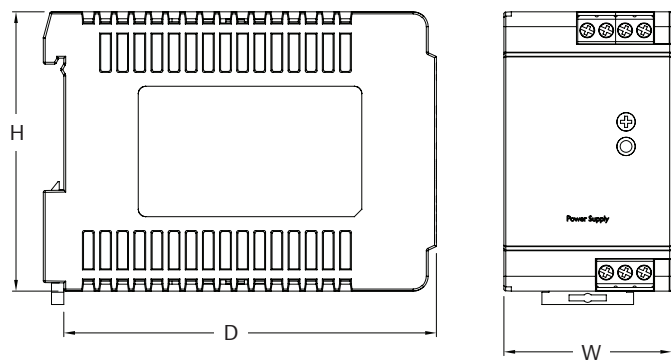
480 Watt Models (Three Phase)



960 Watt Models (Three Phase)



SVL Series Dimensions



| Catalog Number       | Dimensions – inches (mm) |               |              |
|----------------------|--------------------------|---------------|--------------|
|                      | H                        | W             | D            |
| <b>SVL 3–5–100</b>   | 2.95 (75.0)              | 0.82 (21.0)   | 3.52 (89.5)  |
| <b>SVL 1–24–100</b>  | 2.95 (75.0)              | 0.82 (21.0)   | 3.52 (89.5)  |
| <b>SVL 6–5–100</b>   | 2.95 (75.0)              | 1.18 (30.0)   | 3.52 (89.5)  |
| <b>SVL 4–12–100</b>  | 2.95 (75.0)              | 1.18 (30.0)   | 3.52 (89.5)  |
| <b>SVL 2–24–100</b>  | 2.95 (75.0)              | 1.18 (30.0)   | 3.52 (89.5)  |
| <b>SVL 4–24–100</b>  | 2.95 (75.0)              | 1.77 (45.0)   | 3.93 (100.0) |
| <b>SVL 2–48–100</b>  | 4.84 (123.6)             | 1.57 (40.0)   | 4.63 (117.6) |
| <b>SVL 5–24–100</b>  | 4.84 (123.6)             | 1.57 (40.0)   | 4.63 (117.6) |
| <b>SVL 10–24–100</b> | 4.87 (123.6)             | 2.36 (60.0)   | 4.63 (117.6) |
| <b>SVL 20–24–100</b> | 4.87 (123.6)             | 3.37 (85.5)   | 5.06 (128.5) |
| <b>SVL 5–24–480</b>  | 4.76 (121.0)             | 1.97 (50.0)   | 4.62 (117.3) |
| <b>SVL 10–24–480</b> | 4.76 (121.0)             | 2.76 (70.0)   | 4.62 (117.3) |
| <b>SVL 20–24–480</b> | 4.76 (121.0)             | 5.51 (140.0)  | 4.62 (117.3) |
| <b>SVL 40–24–480</b> | 4.76 (121)               | 10.00 (255.0) | 4.62 (117.3) |