

50W to 600W Single Output General Purpose Power Supplies



The RWS50B to RWS6000B AC-DC power supplies are designed to provide solid performance at an economical price. 50, 100, 150, 300 and 600W ratings are available with output voltages from 5V to 48V. All models are certified to IEC62368-1 with UL508 on select models. These 7-year warranty products meet both Class B radiated and conduction EMI standards. The 300W models have a remote on/off option and the 600W have options for remote on/off, parallel operation, DC Good and remote sense.

| Features | Benefits |
|--|---|
| • Seven Year Warranty | • Low Cost of Ownership |
| • Conservatively Rated Electrolytic Capacitors | • Long Field Life |
| • Class B Conducted and Radiated EMI | • Easier System EMC Compliance |
| • UL508 Certified on Select Models | • Suitable for Industrial Control Equipment |

| Model Selector | | | | | | | | |
|----------------|-------------|----------------------|-----------------|----------------------|-------------------|------------------------------|------------------------------|---------------------|
| Model | Voltage (V) | Adjustable Range (V) | Max Current (A) | Max Output Power (W) | Ripple Noise (mV) | Input Current (A) 115/230Vac | Efficiency (typ)% 115/230Vac | UL508 Certification |
| RWS50B-5 | 5 | 4.5 - 5.75 | 10 | 50 | 120 | 1.0 / 0.65 | 78 / 79 | Yes |
| RWS100B-5 | 5 | 4.5 - 5.75 | 14 | 70 | 120 | 0.9 / 0.45 | 77.5 / 79 | Yes |
| RWS150B-5 | 5 | 4.5 - 5.75 | 21 | 105 | 120 | 1.3 / 0.7 | 77.5 / 79.5 | Yes |
| RWS300B-5 | 5 | 4.5 - 5.75 | 50 | 250 | 120 | 3.1 / 1.6 | 75 / 78.5 | - |
| RWS600B-5 | 5 | 4.5 - 5.75 | 100 | 500 | 120 | 6.2 / 3.2 | 74 / 77.5 | - |
| RWS50B-12 | 12 | 10.8 - 13.8 | 4.3 | 51.6 | 150 | 1.0 / 0.65 | 83 / 84 | Yes |
| RWS100B-12 | 12 | 10.8 - 13.8 | 8.5 | 102 | 150 | 1.2 / 0.6 | 83 / 84 | Yes |
| RWS150B-12 | 12 | 10.8 - 13.8 | 13 | 156 | 150 | 1.8 / 0.9 | 84.5 / 87.5 | Yes |
| RWS300B-12 | 12 | 10.8 - 13.8 | 25 | 300 | 150 | 3.6 / 1.9 | 79.5 / 82.5 | Yes |
| RWS600B-12 | 12 | 10.8 - 13.8 | 50 | 600 | 150 | 6.6 / 3.6 | 82 / 84.5 | - |
| RWS100B-15 | 15 | 13.5 - 17.25 | 6.8 | 102 | 150 | 1.2 / 0.6 | 84 / 85 | - |
| RWS150B-15 | 15 | 13.5 - 17.25 | 10 | 150 | 150 | 1.8 / 0.9 | 84.5 / 87.5 | - |
| RWS300B-15 | 15 | 13.5 - 17.25 | 20 | 300 | 150 | 3.6 / 1.9 | 81.5 / 84.5 | Yes |
| RWS600B-15 | 15 | 13.5 - 17.25 | 40 | 600 | 150 | 6.6 / 3.6 | 82 / 84.5 | - |
| RWS50B-24 | 24 | 21.6 - 27.6 | 2.2 | 52.8 | 150 | 1.0 / 0.65 | 86 / 87 | Yes |
| RWS100B-24 | 24 | 21.6 - 27.6 | 4.5 | 108 | 150 | 1.2 / 0.6 | 86 / 87.5 | Yes |
| RWS150B-24 | 24 | 21.6 - 27.6 | 6.5 | 156 | 150 | 1.8 / 0.9 | 86.5 / 89.5 | Yes |
| RWS300B-24 | 24 | 21.6 - 27.6 | 12.5 | 300 | 150 | 3.6 / 1.9 | 85 / 88 | Yes |
| RWS600B-24 | 24 | 21.6 - 27.6 | 25 | 600 | 150 | 6.6 / 3.6 | 85 / 88.5 | Yes |
| RWS150B-28 | 28 | 25.2 - 32.2 | 5.4 | 151.2 | 180 | 1.8 / 0.9 | 86.5 / 89.5 | - |
| RWS300B-36 | 36 | 32.4 - 41.4 | 8.4 | 302.4 | 200 | 3.6 / 1.9 | 85 / 88 | Yes |
| RWS600B-36 | 36 | 32.4 - 41.4 | 16.7 | 601.2 | 200 | 6.6 / 3.6 | 85 / 88.5 | - |
| RWS50B-48 | 48 | 43.2 - 52.8 | 1.1 | 52.8 | 200 | 1.0 / 0.65 | 87 / 88 | - |
| RWS100B-48 | 48 | 43.2 - 52.8 | 2.1 | 100.8 | 200 | 1.2 / 0.6 | 86 / 87 | - |
| RWS150B-48 | 48 | 43.2 - 52.8 | 3.3 | 158.4 | 200 | 1.8 / 0.9 | 86.5 / 89.5 | - |
| RWS300B-48 | 48 | 43.2 - 52.8 | 6.3 | 302.4 | 200 | 3.6 / 1.9 | 85 / 88 | Yes |
| RWS600B-48 | 48 | 43.2 - 52.8 | 12.5 | 600 | 200 | 6.6 / 3.6 | 85 / 88.5 | - |

| | | | |
|----------------|-----------|----------|----------|
| RWS50B- | 12 | / | - |
|----------------|-----------|----------|----------|

Output voltage 5, 12, 15, 24, 28, 36, 48

blank No options
 /CO2 Double sided board coating
 /FO DC Good and parallel (600W only)
 /R Remote On/Off (600W only)
 /RFO Remote on/off, DC Good and parallel (600W only)

| Related Products | | |
|---------------------------|---|---|
| Type | Part Number | Description |
| Higher power RWS-B models | RWS1000B , RWS1500B | 1000W to 1500W single output AC-DC power supplies |
| DIN rail mounting bracket | DIN-04 | RWS50B DIN rail bracket |
| DIN rail mounting bracket | DIN-05 | RWS100B DIN rail bracket |
| DIN rail mounting bracket | DIN-06 | RWS150B DIN rail bracket |
| DIN rail mounting bracket | DIN-07 | RWS300B DIN rail bracket |

| Specifications | | RWS50B | RWS100B | RWS150B | RWS300B | RWS600B |
|---|-----|---|-------------|---------|-----------|---------|
| Input | | | | | | |
| AC Input Voltage Range | Vac | 85 - 265 (300 peak for 5s) | | | | |
| DC Input Voltage Range(1) | Vdc | 120 - 370 | | | 120 - 330 | |
| Input Frequency | Hz | 47 - 63 | | | | |
| Input Current (115/230Vac) | A | See model selector table | | | | |
| Inrush Current at 200Vac (typ) (Cold Start) | A | 36 | 30 | 32 | 34 | 40 |
| Leakage Current | uA | <750, typically 175 at 115Vac 63Hz | | | | |
| Power Factor (100/200Vac) | - | Not specified | 0.95 / 0.90 | | | |
| Harmonic Compliance | - | Designed to meet IEC61000-3-2 | | | | |
| Hold Up Time (typ) at 110/220Vac Input | ms | 20 (15 at 100Vac input) | | 20 | | |
| Efficiency | - | See model selector table | | | | |
| Conducted & Radiated EMI | - | EN55011/EN55032-B, FCC Class B, VCCI-B | | | | |
| Immunity | - | See immunity table | | | | |
| Safety Certifications and Markings | - | IEC/UL/CSA/EN62368-1, UL508 (see model selector), CE Mark and UKCA Mark | | | | |

| Immunity | | | | | |
|---------------------------------|--------------|--|----------|--|--|
| Test | Standard | Test Level | Criteria | Notes | |
| ESD | EN61000-4-2 | Air ± 8kV and contact ± 4kV | B | See IEC61000 immunity test report on website | |
| Radiated Susceptibility | EN61000-4-3 | 80M -1GHz: 10V/m 1.4 - 2.0GHz: 3V/m 2.0 - 2.7GHz: 1V/m | A | | |
| Electrical Fast Transient Burst | EN61000-4-4 | ± 2kV | B | | |
| Surge | EN61000-4-5 | Normal ± 2kV Common ± 4kV | B | | |
| Conducted Susceptibility | EN61000-4-6 | 10Vrms | A | | |
| Magnetic Fields | EN61000-4-8 | 30A/m | A | | |
| Voltage Dips | EN61000-4-11 | 30% 500ms | B | | |
| | | 60% 10ms | B | | |
| | | 100% 20ms | A | | |
| | | 100% 5000ms | B | | |
| SEMI F47 Line Dip | SEMI F47 | | | At input voltages > 200Vac | |

| Specifications | | | | | | |
|--------------------------------------|--------|---|-------------------|-------------------|---------------------------|-------------------|
| Model | | RWS50B | RWS100B | RWS150B | RWS300B | RWS600B |
| Output | | | | | | |
| Output Voltage Adjustment | - | See model selector table | | | | |
| Switching Frequency | kHz | 100 | 120, PFC 65 | | | 190, PFC 50-70 |
| Line Regulation | mV | 5V: 20, 12V: 48, 15V: 60, 24V: 96, 28V: 112, 36V: 144, 48V: 192 | | | | |
| Load Regulation | mV | 5V: 40, 12V: 96, 15V: 120, 24V: 192, 28V: 224, 36V: 288, 48V: 384 | | | | |
| External Load Capacitance | uF | RWS50B; 5-12V, 10,000, 24V: 3,300, 48V: 400, RWS100B-600B: 10,000 | | | | |
| Ripple & Noise | - | See model selector table | | | | |
| Temperature Coefficient | %/°C | 0.02 | | | | |
| Minimum Load | - | No minimum load required | | | | |
| Overcurrent Protection | % | >105. Constant current characteristics | | | | |
| Overvoltage Protection | % | 115-140. Cycle AC line to reset | | | | |
| Remote Sense | - | None | | | | See options |
| Remote On/Off | - | None | | | | See options |
| Parallel Operation | - | None | | | | See options |
| Environmental | | | | | | |
| Operating Temperature ⁽²⁾ | °C | -20 to +70. See note (2) or installation manuals on website | | | | |
| Humidity (non condensing) | %RH | Operating: 30 - 90, storage: 10 - 90 | | | | |
| Storage Temperature | °C | -30 to +75 | | | | |
| Cooling | - | Convection | | | Forced air - internal fan | |
| Altitude | m | 3000 | | | | |
| Withstand Voltage (For 1 minute) | Vac | Input to Ground 2,000, Input to Output 3,000, Output to Ground 500 for 1 minute | | | | |
| Vibration (Non operating) | - | 10-55Hz (Sweep for 1min.) 19.6m/s ² Constant X,Y,Z 1 hour each | | | | |
| Shock (Non operating) | - | Less than 196m/s ² , 11ms, ±X, ±Y, ±Z 3 times each | | | | |
| Other | | | | | | |
| Weight (Typ) | g | 230 | 400 | 480 | 900 | 1600 |
| Size (LxWxH) | mm | 81.5 x 82 x 34 | 108 x 94 x 39 | 128 x 94 x 41 | 170 x 102 x 41 | 190 x 120 x 61 |
| Size (LxWxH) | Inches | 3.21 x 3.23 x 1.34 | 4.25 x 3.7 x 1.54 | 5.04 x 3.7 x 1.61 | 6.7 x 4.02 x 1.61 | 7.48 x 4.72 x 2.4 |
| Case Material | - | Metal | | | | |
| MTBF - Telcordia SR-332 issue 3* | Hours | 4,170,949 | 1,978,533 | 2,235,743 | 2,027,824 | 2,157,340 |
| Warranty | yrs | 7 | | | | |

Notes

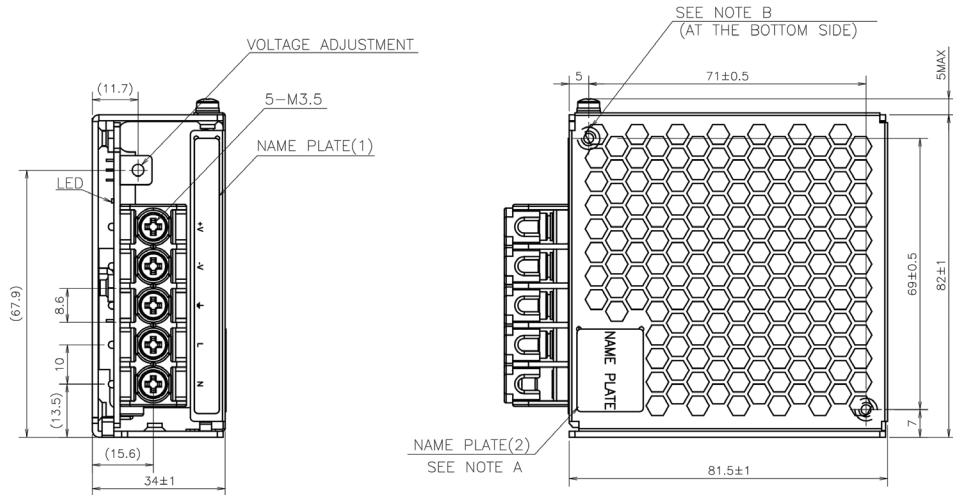
See website for detailed specifications, test methods and [installation manual](#)

*25°C ambient, full load, 24Vdc input

(1) Safety certified for AC input only

(2) RWS50-100B derates linearly above 45°C to 20% load at 70°C, 150B derates above 40°C and 300-600B derates above 50°C to 50% load at 70°C

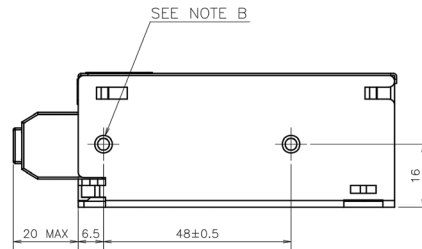
Outline Drawing RWS50B



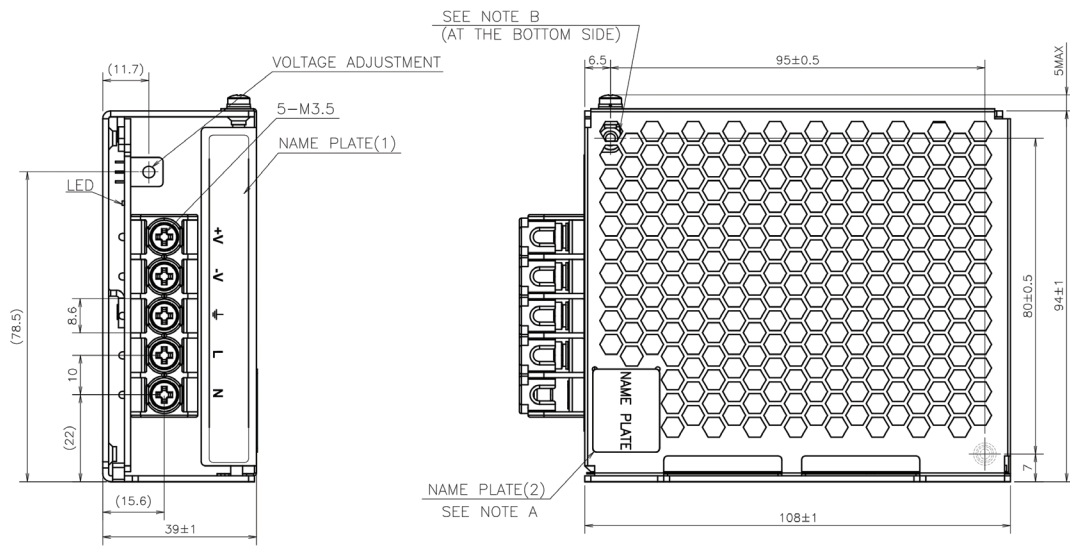
NOTES

A: MODEL NAME, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT, COUNTRY OF MANUFACTURE AND SAFETY MARKING (FOR ONLY APPROVED PRODUCTS) ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATIONS.

B: 4-M3 BR & COUNTERSINK ARE FOR CUSTOMER'S CHASSIS MOUNTING. (SCREW PENETRATION DEPTH 6mm MAX.)



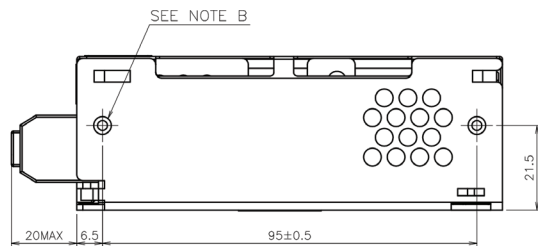
Outline Drawing RWS100B



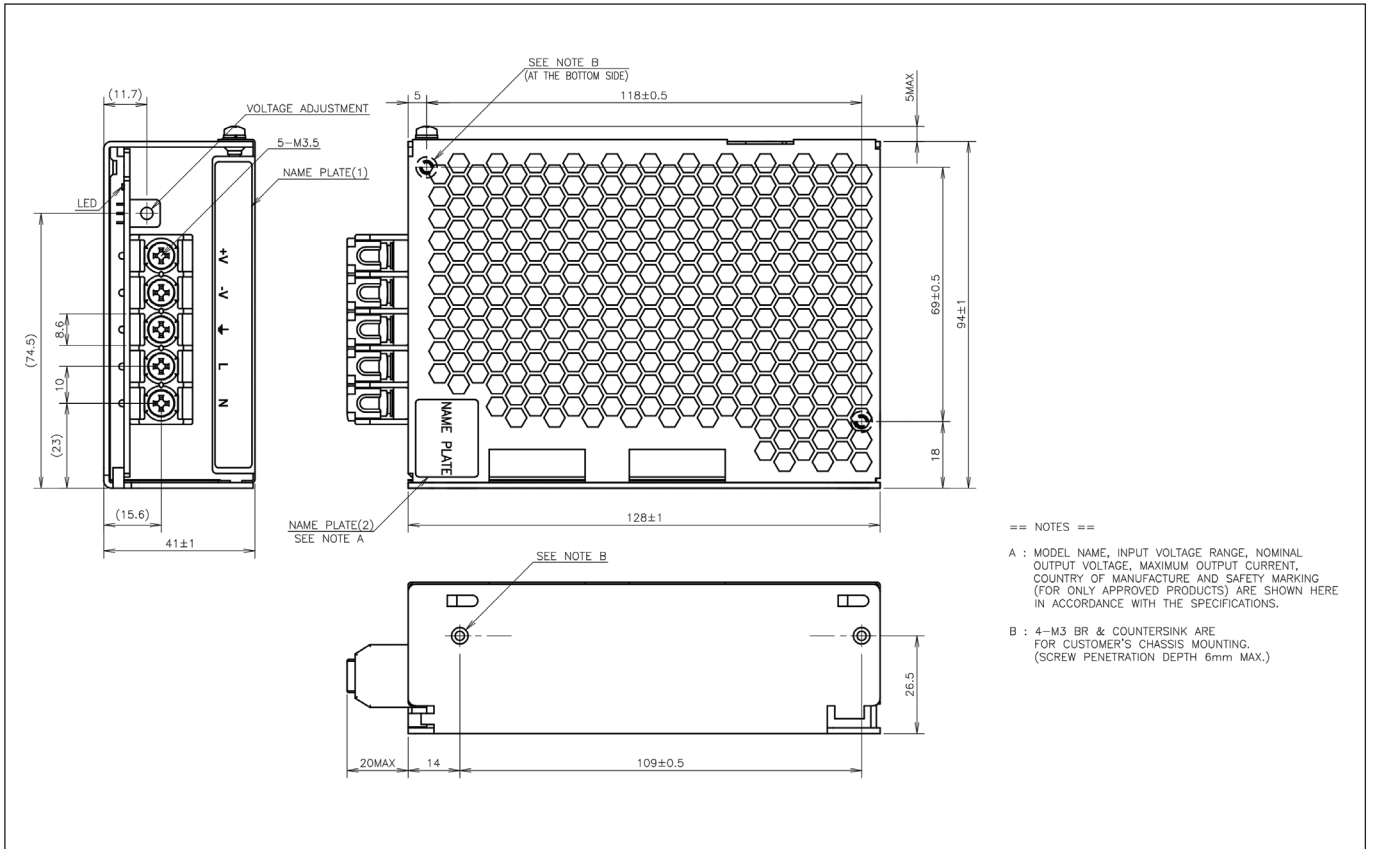
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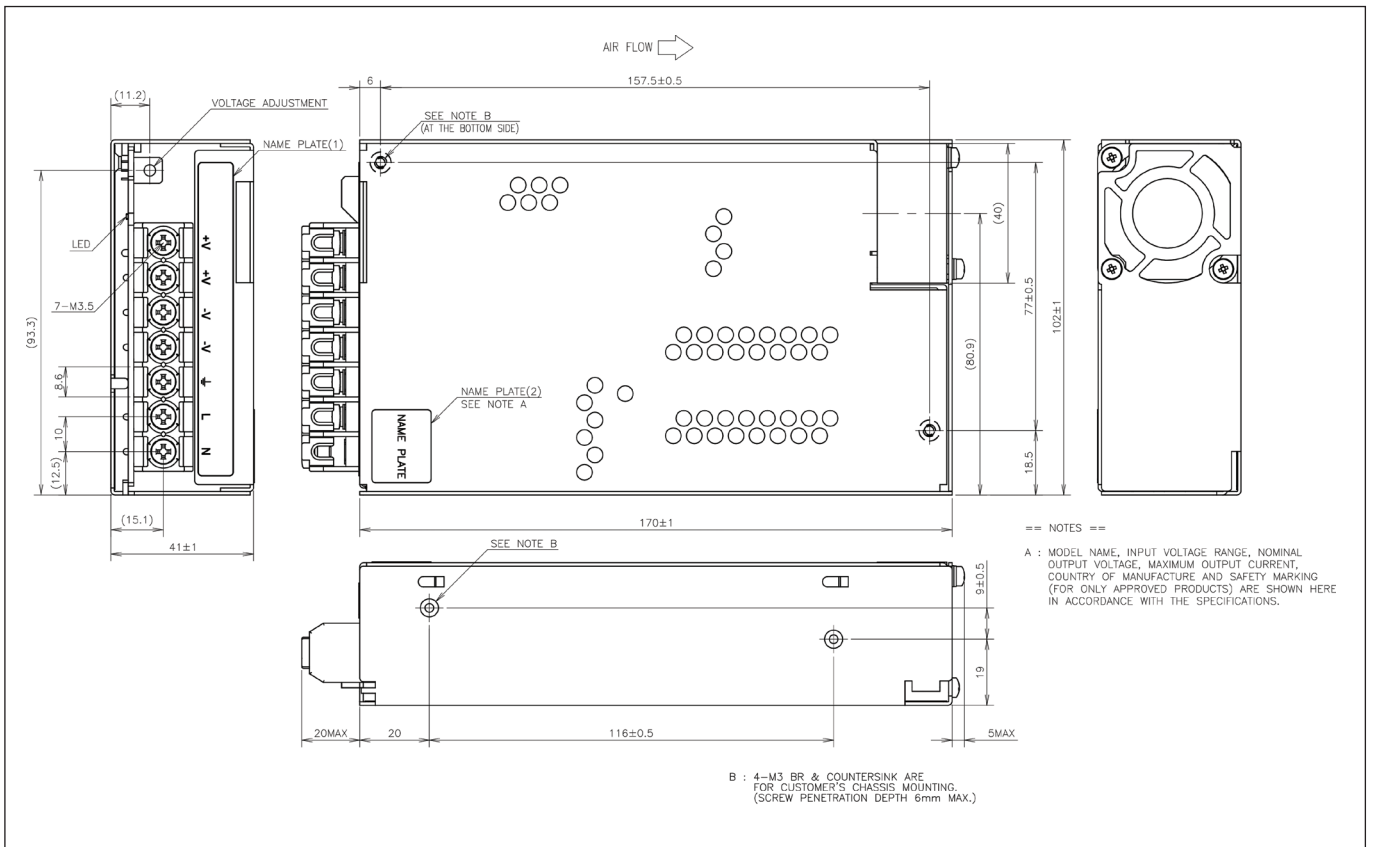
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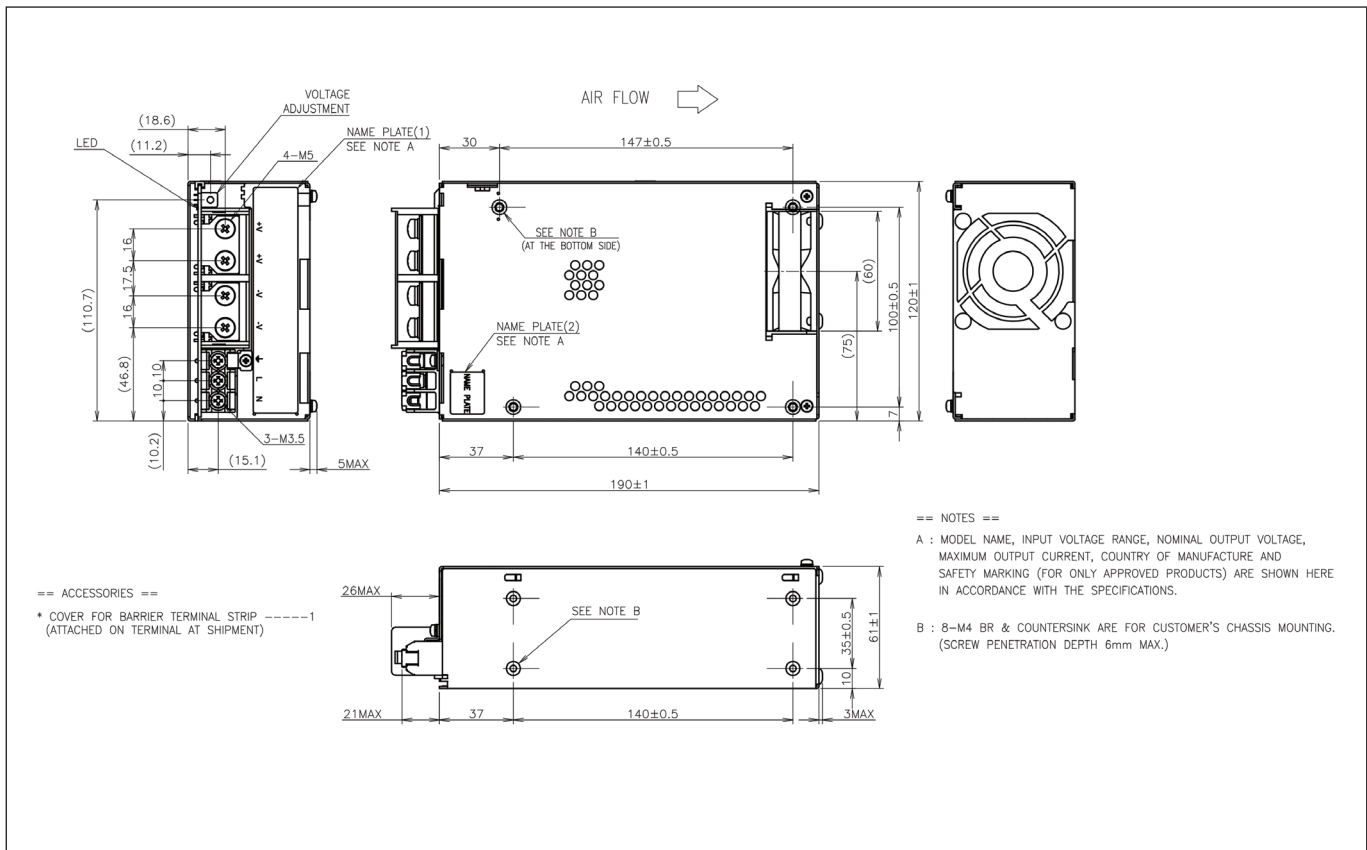
Outline Drawing RWS150B



Outline Drawing RWS300B



Outline Drawing RWS600B





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