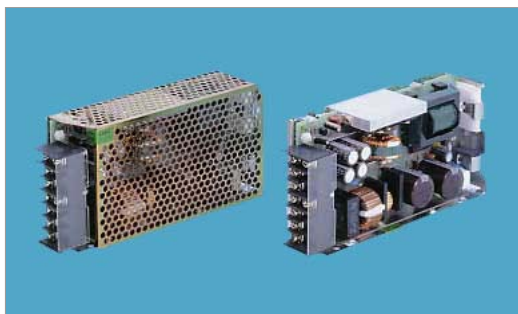


## R150U



### Features

- Built-in Inrush Current Protection
- Small size and light
- Built-in Over Current Protection
- Built-in Over Voltage Protection
- RoHS Compliant

### Safety Agency Approvals

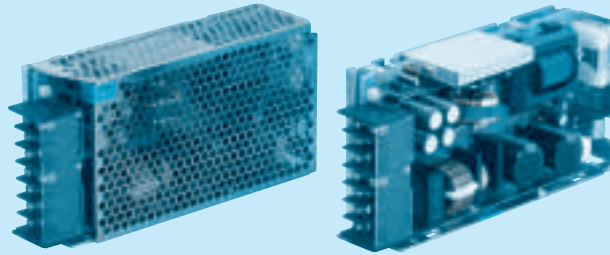
- UL1950 (10W - 150W)
- C-UL (10W - 50W)
- CSA C22.2 No.234 (100W, 150W)
- EN60950, VDE0160 (100W, 150W)
- Complies with DEN-AN (10W - 150W)

### EMI Compliance

- FCC-B, VCCI-B (10W - 150W)

**3 year warranty(refer to Instruction Manual)**

| Model    | Input Voltage [V]           | Output Wattage [W] | DC Output [V/A] |
|----------|-----------------------------|--------------------|-----------------|
| R150U-3  | DC 110 - 170<br>AC 85 - 132 | 90                 | 3V<br>30A       |
| R150U-5  | DC 110 - 170<br>AC 85 - 132 | 150                | 5V<br>30A       |
| R150U-9  | DC 110 - 170<br>AC 85 - 132 | 153                | 9V<br>17A       |
| R150U-12 | DC 110 - 170<br>AC 85 - 132 | 156                | 12V<br>13A      |
| R150U-15 | DC 110 - 170<br>AC 85 - 132 | 150                | 15V<br>10A      |
| R150U-18 | DC 110 - 170<br>AC 85 - 132 | 153                | 18V<br>8.5A     |
| R150U-24 | DC 110 - 170<br>AC 85 - 132 | 156                | 24V<br>6.5A     |



- ① Series name
- ② Output wattage
- ③ UL recognized, TÜV approved, CSA certified
- ④ Output voltage
- ⑤ Optional
- C : with Coating
- G : Low leakage current
- N : with Cover

| MODEL                 | R150U-3 | R150U-5 | R150U-9 | R150U-12 | R150U-15 | R150U-18 | R150U-24 |
|-----------------------|---------|---------|---------|----------|----------|----------|----------|
| MAX OUTPUT WATTAGE[W] | 90      | 150     | 153     | 156      | 150      | 153      | 156      |
| DC OUTPUT             | 3V 30A  | 5V 30A  | 9V 17A  | 12V 13A  | 15V 10A  | 18V 8.5A | 24V 6.5A |

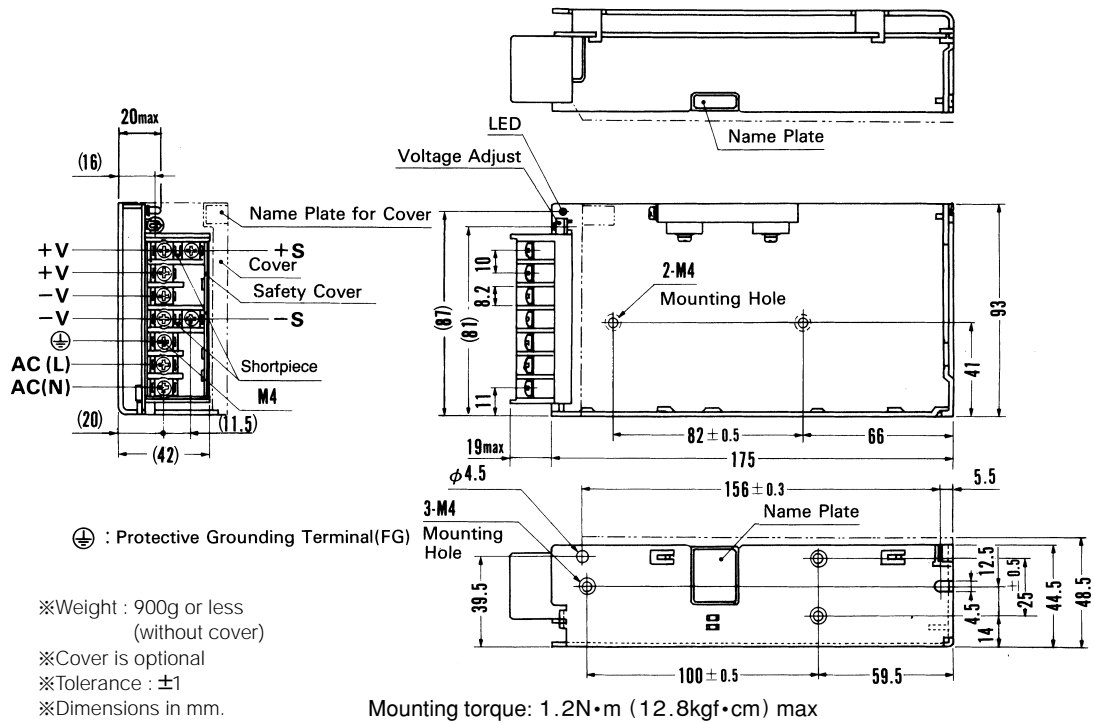
SPECIFICATIONS

|                                    | MODEL  | R150U-3  | R150U-5                       | R150U-9     | R150U-12    | R150U-15    | R150U-18    | R150U-24 |        |
|------------------------------------|--|--|-------------------------------|-------------|-------------|-------------|-------------|----------|--------|
| INPUT                              | VOLTAGE[V]   | AC85 - 132 1 φ or DC110 - 170  |                               |             |             |             |             |          |        |
|                                    | CURRENT[A]   | ACIN 100V  | 4.2typ (Io=100%)              |             |             |             |             |          |        |
|                                    | FREQUENCY[Hz]  | 47 - 440 or DC   |                               |             |             |             |             |          |        |
|                                    | EFFICIENCY[%]  |  | 74typ                         | 78typ       | 79typ       | 80typ       | 82typ       | 83typ    | 84typ  |
|                                    | INRUSH CURRENT[A]  | ACIN 100V  | 15typ (Io=100%)               |             |             |             |             |          |        |
|                                    | LEAKAGE CURRENT[mA]  | 0.5max (60Hz, According to UL, CSA and DEN-AN)   |                               |             |             |             |             |          |        |
| OUTPUT                             | VOLTAGE[V]   | 3  | 5                             | 9           | 12          | 15          | 18          | 24       |        |
|                                    | CURRENT[A]   | 30   | 30                            | 17          | 13          | 10          | 8.5         | 6.5      |        |
|                                    | LINE REGULATION[mV]  | 20max  | 20max                         | 36max       | 48max       | 60max       | 72max       | 96max    |        |
|                                    | LOAD REGULATION[mV]  | 40max  | 40max                         | 100max      | 100max      | 120max      | 120max      | 150max   |        |
|                                    | RIPPLE[mVp-p]  | 0 to +50°C   | 80max                         | 80max       | 120max      | 120max      | 120max      | 120max   | 120max |
|                                    |  | -10 - 0°C  | 140max                        | 140max      | 160max      | 160max      | 160max      | 160max   | 160max |
|                                    | RIPPLE NOISE[mVp-p]  | 0 to +50°C   | 120max                        | 120max      | 150max      | 150max      | 150max      | 150max   | 150max |
|                                    |  | -10 - 0°C  | 160max                        | 160max      | 180max      | 180max      | 180max      | 180max   | 180max |
|                                    | TEMPERATURE REGULATION[mV]   | 0 to +50°C   | 50max                         | 50max       | 90max       | 120max      | 150max      | 180max   | 240max |
|                                    |  | -10 to +50°C   | 60max                         | 60max       | 120max      | 150max      | 180max      | 200max   | 290max |
| DRIFT[mV]                          | *1   | 20max  | 20max                         | 36max       | 48max       | 60max       | 72max       | 96max    |        |
| START-UP TIME[ms]                  | 200max (ACIN 85V, Io=100%)   |  |                               |             |             |             |             |          |        |
| HOLD-UP TIME[ms]                   | 20typ (ACIN 100V, Io=100%, 0 to +50°C) 10typ (ACIN 85V, Io=100%, 0 to +50°C) |  |                               |             |             |             |             |          |        |
| OUTPUT VOLTAGE ADJUSTMENT RANGE[V] | 2.85 - 3.6   | 4.5 - 5.5  | 8.1 - 9.9                     | 10.8 - 13.2 | 13.5 - 16.5 | 16.2 - 19.8 | 21.6 - 26.4 |          |        |
| PROTECTION CIRCUIT AND OTHERS      | OVERCURRENT PROTECTION   | Works over 105% of rating and recovers automatically   |                               |             |             |             |             |          |        |
|                                    | OVERVOLTAGE PROTECTION   | 4.00 - 5.25V   | Works at 115 - 140% of rating |             |             |             |             |          |        |
|                                    | OPERATING INDICATION   | LED (Green)  |                               |             |             |             |             |          |        |
|                                    | REMOTE SENSING   | Provided   |                               |             |             |             |             |          |        |
|                                    | REMOTE ON/OFF  | Not provided   |                               |             |             |             |             |          |        |
| ISOLATION                          | INPUT-OUTPUT   | AC2,000V 1minute, Cutoff current = 10mA max, DC500V 50MΩ min (At Room Temperature)           |                               |             |             |             |             |          |        |
|                                    | INPUT-FG, COVER  | AC2,000V 1minute, Cutoff current = 10mA max, DC500V 50MΩ min (At Room Temperature)           |                               |             |             |             |             |          |        |
|                                    | OUTPUT-FG, COVER   | AC500V 1minute, Cutoff current = 100mA max, DC500V 50MΩ min (At Room Temperature)            |                               |             |             |             |             |          |        |
| ENVIRONMENT                        | OPERATING TEMP., HUMID. AND ALTITUDE   | -10 to +60°C, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max |                               |             |             |             |             |          |        |
|                                    | STORAGE TEMP., HUMID. AND ALTITUDE   | -20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max                           |                               |             |             |             |             |          |        |
|                                    | VIBRATION  | 10 - 55Hz, 19.6m/s <sup>2</sup> (2G), 3minutes period, 60minutes each along X, Y and Z axis  |                               |             |             |             |             |          |        |
|                                    | IMPACT   | 196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis                                 |                               |             |             |             |             |          |        |
| SAFETY AND NOISE REGULATIONS       | AGENCY APPROVALS   | UL60950-1, CSA C22.2 No.234, EN60950-1 Complies with DEN-AN and IEC60950-1                   |                               |             |             |             |             |          |        |
|                                    | CONDUCTED NOISE  | Complies with FCC-B, VCCI-B  |                               |             |             |             |             |          |        |
| OTHERS                             | CASE SIZE/WEIGHT   | 44.5 × 93 × 175mm (W × H × D) / 900g max (without cover)                                     |                               |             |             |             |             |          |        |
|                                    | COOLING METHOD   | Convection   |                               |             |             |             |             |          |        |

\*1 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.  
 \* Avoid prolonged use under over-load.  
 \* Parallel operation with other model is not possible.  
 \* Derating is required when operated with case cover.

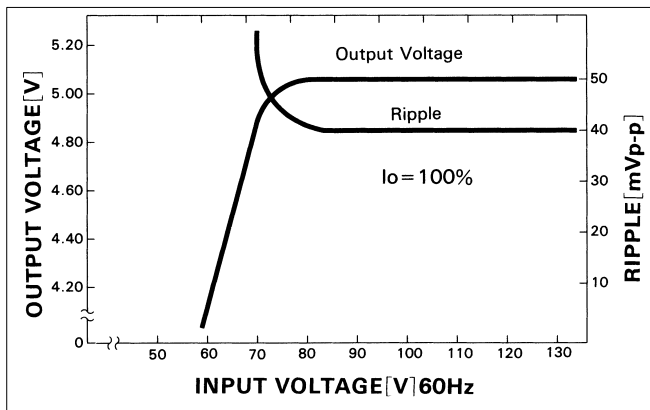
External view

R

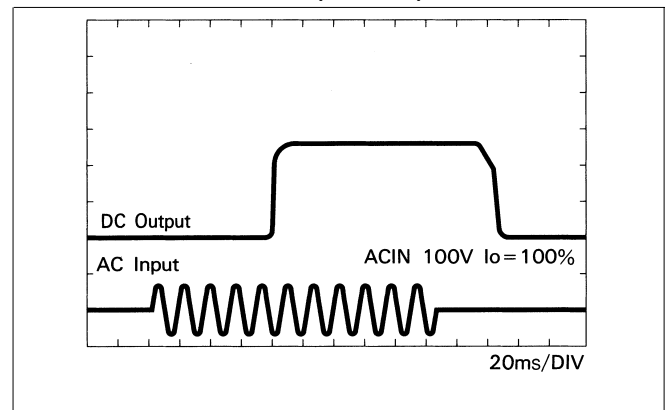


Performance data

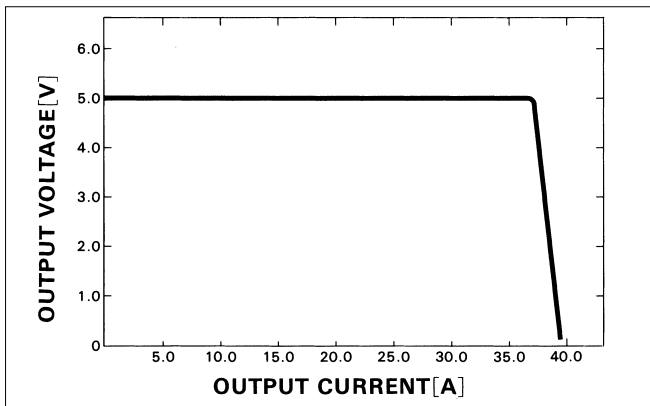
■ STATIC CHARACTERISTICS (R150U-5)



■ RISE TIME & FALL TIME (R150U-5)



■ OVERCURRENT CHARACTERISTICS (R150U-5)



■ DERATING CURVE

