



#### ■ Features :

- AC input range selectable by switch
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508(industrial control equipment)approved
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at 55KHz
- 3 years warranty

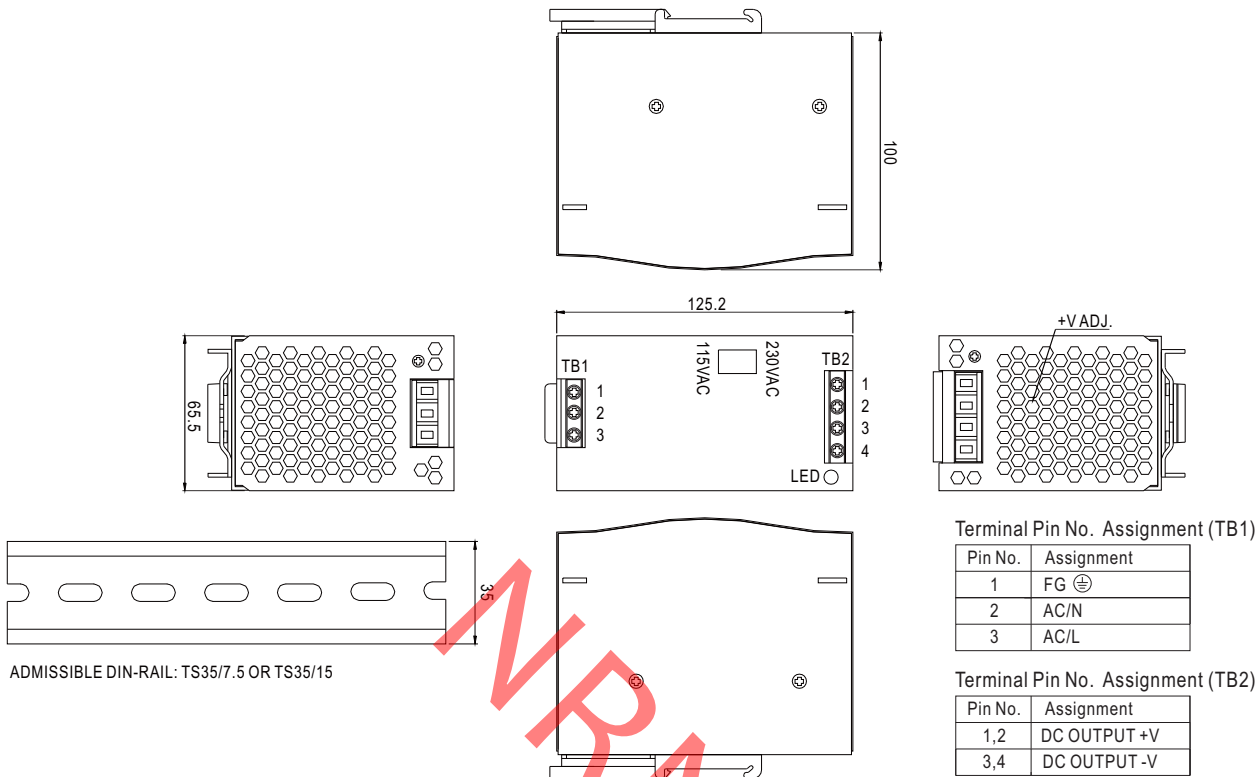


#### SPECIFICATION

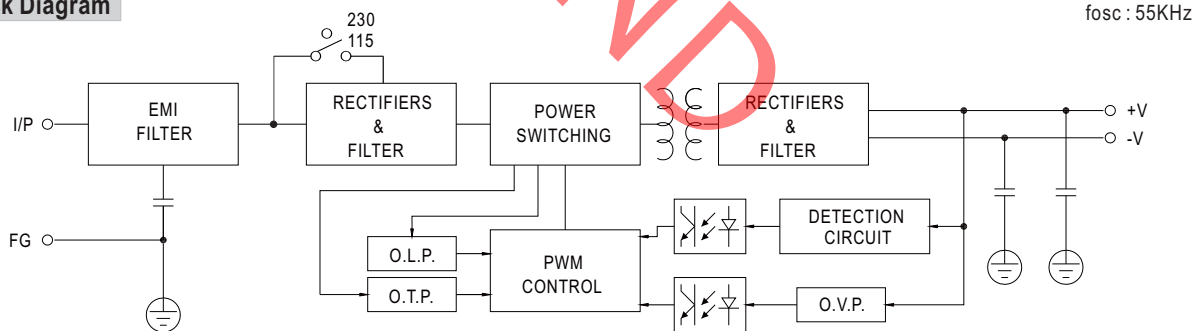
| MODEL                 |                              | DR-120-12                                                                                                                       | DR-120-24                       | DR-120-48       |
|-----------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------|
| OUTPUT                | DC VOLTAGE                   | 12V                                                                                                                             | 24V                             | 48V             |
|                       | RATED CURRENT                | 10A                                                                                                                             | 5A                              | 2.5A            |
|                       | CURRENT RANGE                | 0 ~ 10A                                                                                                                         | 0 ~ 5A                          | 0 ~ 2.5A        |
|                       | RATED POWER                  | 120W                                                                                                                            | 120W                            | 120W            |
|                       | RIPPLE & NOISE (max.) Note.2 | 80mVp-p                                                                                                                         | 80mVp-p                         | 100mVp-p        |
|                       | VOLTAGE ADJ. RANGE           | 12 ~ 14V                                                                                                                        | 24 ~ 28V                        | 48 ~ 53V        |
|                       | VOLTAGE TOLERANCE Note.3     | ±2.0%                                                                                                                           | ±1.0%                           | ±1.0%           |
|                       | LINE REGULATION              | ±0.5%                                                                                                                           | ±0.5%                           | ±0.5%           |
|                       | LOAD REGULATION              | ±1.0%                                                                                                                           | ±1.0%                           | ±1.0%           |
|                       | SETUP, RISE TIME             | 500ms, 70ms/230VAC                                                                                                              | 500ms, 70ms/115VAC at full load |                 |
| INPUT                 | HOLD UP TIME (Typ.)          | 36ms/230VAC                                                                                                                     | 32ms/115VAC at full load        |                 |
|                       | VOLTAGE RANGE                | 88 ~ 132VAC/176 ~ 264VAC by switch                                                                                              | 248 ~ 370VDC                    |                 |
|                       | FREQUENCY RANGE              | 47 ~ 63Hz                                                                                                                       |                                 |                 |
|                       | EFFICIENCY (Typ.)            | 80%                                                                                                                             | 84%                             | 85%             |
|                       | AC CURRENT (Typ.)            | 2.6A/115VAC 1.6A/230VAC                                                                                                         |                                 |                 |
|                       | INRUSH CURRENT (Typ.)        | COLD START 20A/115VAC 40A/230VAC                                                                                                |                                 |                 |
| PROTECTION            | LEAKAGE CURRENT              | <3.5mA / 240VAC                                                                                                                 |                                 |                 |
|                       | OVERLOAD                     | 105 ~ 150% rated output power                                                                                                   |                                 |                 |
|                       | Protection type :            | Constant current limiting, recovers automatically after fault condition is removed                                              |                                 |                 |
|                       | OVER VOLTAGE                 | 15 ~ 16.5V                                                                                                                      | 29 ~ 33V                        | 58 ~ 65V        |
| ENVIRONMENT           | Protection type :            | Shut down o/p voltage, re-power on to recover                                                                                   |                                 |                 |
|                       | OVER TEMPERATURE             | 85°C±5°C (TSW1)                                                                                                                 | 90°C±5°C (TSW1)                 | 90°C±5°C (TSW1) |
|                       | Protection type :            | Shut down o/p voltage, recovers automatically after temperature goes down                                                       |                                 |                 |
|                       | WORKING TEMP.                | -10 ~ +60°C (Refer to "Derating Curve")                                                                                         |                                 |                 |
| SAFETY & EMC (Note 4) | WORKING HUMIDITY             | 20 ~ 90% RH non-condensing                                                                                                      |                                 |                 |
|                       | STORAGE TEMP., HUMIDITY      | -20 ~ +85°C, 10 ~ 95% RH                                                                                                        |                                 |                 |
|                       | TEMP. COEFFICIENT            | ±0.03%/°C (0 ~ 50°C)                                                                                                            |                                 |                 |
|                       | VIBRATION                    | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6                              |                                 |                 |
| OTHERS                | SAFETY STANDARDS             | UL508, UL60950-1, TUV EN60950-1, EAC TP TC 004 approved                                                                         |                                 |                 |
|                       | WITHSTAND VOLTAGE            | I/P-O/P:3KVAC I/P-FG:2.0KVAC O/P-FG:0.5KVAC                                                                                     |                                 |                 |
|                       | ISOLATION RESISTANCE         | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH                                                                       |                                 |                 |
|                       | EMC EMISSION                 | Compliance to EN55011, EN55032 (CISPR32) Class B, EN61000-3-2, -3, EAC TP TC 020                                                |                                 |                 |
| NOTE                  | EMC IMMUNITY                 | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2 (EN50082-2), heavy industry level, criteria A, EAC TP TC 020 |                                 |                 |
|                       | MTBF                         | 432.1Khrs min. MIL-HDBK-217F (25°C)                                                                                             |                                 |                 |
|                       | DIMENSION                    | 65.5*125.2*100mm (W*H*D)                                                                                                        |                                 |                 |
|                       | PACKING                      | 0.79Kg; 20pcs/16.5Kg/1.29CUFT                                                                                                   |                                 |                 |

## Mechanical Specification

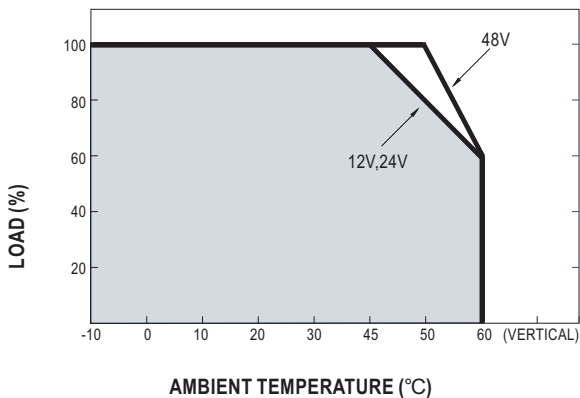
Case No. 921A Unit:mm



## Block Diagram



## Derating Curve



## Static Characteristics (24V)

