

Features:

- Universal AC input / Full range
- Installed on DIN rail TS-35 / 7.5 or 15
- Built-in active PFC function, PF > 0.95
- 150% peak load capability
- Protection: SCP, OLP, OVP, OTP
- Two selectable peak load modes
- Built-in DC OK Relay contact
- Built-in Remote ON / OFF function
- 3 years warranty



| MODEL | | DV-150-24 | DV-150-48 |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Output | DC Voltage Range | 24V | 48V |
| | Rated Current | 6.25A | 3.125A |
| | Current Range | 0 ~ 6.25A | 0 ~ 3.125A |
| | Rated Power | 150W | 150W |
| | Peak Current | 9.45A | 4.8A |
| | Peak Power | Note.6 225W (3sec.) Two selectable peak load mode | |
| | Ripple & Noise (Max.) | Note.2 240mVp-p | 480mVp-p |
| | Voltage Adj. Range | -2 ~ +8% | -2 ~ +8% |
| | Voltage Tolerance | Note.3 ±1.0% | ±1.0% |
| | Line Regulation | ±0.5% | ±0.5% |
| | Load Regulation | ±1.0% | ±1.0% |
| | Setup, Rise Time | 700ms, 30ms / 230VAC / 115VAC at full load | |
| Hold Time (Typ.) | 16ms / 230VAC, 16ms / 115VAC at full load | | |
| Input | Voltage Range | 88 ~ 264VAC, 124 ~ 373VDC | |
| | Frequency Range | 47 ~ 63Hz | |
| | Power Factor (Typ.) | 0.9 / 230VAC, 0.98 / 115VAC at full load | |
| | Efficiency (Typ.) | 87% | 87% |
| | AC Current (Typ.) | 2.6A / 115VAC, 1.3A / 230VAC | |
| | Inrush Current (Typ.) | 33A / 115VAC, 65A / 230VAC | |
| | Leakage Current | < 1mA / 240VAC | |
| Protection | Over Load | Hiccup mode: when the rated output power is within 105 ~ 150% for more than 3secs. Constant current limit: > 150% rated power / short circuit Auto-recovery: If O/P drop to 40% of the rated output voltage, PSU will shut down and auto-recover 5times (If fault condition remains after 5times recovery, PSU will shut down. User must re-power on to recover) | |
| | Over Voltage | 29 ~ 33V | 56 ~ 65V |
| | | Protection type: Latch-off mode | |
| | Over Temperature | 95 ±5°C (TSW: detect on heatsink of power diode) | |
| | | Protection type: Shut down o/p voltage, recovers automatically after temperature goes down | |
| DC OK Relay Contact Ratings (Max.) | 60VDC / 0.3A, 30VDC / 1A, 30VAC / 0.5A resistive load | | |
| Environment | Working Temp. | Note.5 -10 ~ +70°C (Refer to de-rating curve) | |
| | Working Humidity | 20 ~ 95% RH non-condensing | |
| | Storage Temp. & Humidity | -40 ~ +85°C, 10 ~ 95% RH | |
| | Temp. Coefficient | ±0.03% / °C (0 ~ 50°C) | |
| | Vibration | Component: 10 ~ 500Hz, 2G 10min. / 1cycle, 60min. each along X, Y, Z axes; Mounting: Certified IEC 60068-2-6 | |
| Safety & EMC | Safety Standards | Certified UL 508 / EN 60950-1 | |
| | Withstand Voltage | I/P-O/P: 4242VDC, I/P-FG: 2121VDC, O/P-FG: 707VDC, O/P-DC OK: 707VDC | |
| | Isolation Resistance | I/P-O/P, I/P-FG, O/P-FG: >100M Ohms / 500VDC / 25°C / 70% RH | |
| | EMI Conduction & Radiation | Certified EN55022 (CISPR22) | |
| | Harmonic Current | Certified EN61000-3-2, -3-3; EN61000-6-3 | |
| EMS Immunity | Certified IEC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 55024; EN 61000-6-1; EN 61204-3; Meet SEMI F47 | | |
| Others | MTBF | 62.73K HRS Certified MIL-HDBK-217F | ---- |
| | Dimension (WxHxD) | 55.5x125.2x99.8 mm / 2.185x4.929x3.929 inch | |
| | Packing | 0.9kg; 12pcs / 11.8kg / 1.32CUFT | |
| Note | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor. 3. Tolerance: includes setup time tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 5. Installation clearance: 40mm from top, 20mm from bottom, 5mm from the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended. 6. 3 seconds or 20% duty cycle Max. The average output power should not exceed the rate power. 7. De-rating may apply in low input voltage. Please check the derating curve for more details. | | |

Mechanical Drawings:

Unit : mm / inch

Terminal Pin No. Assignment (TB1)

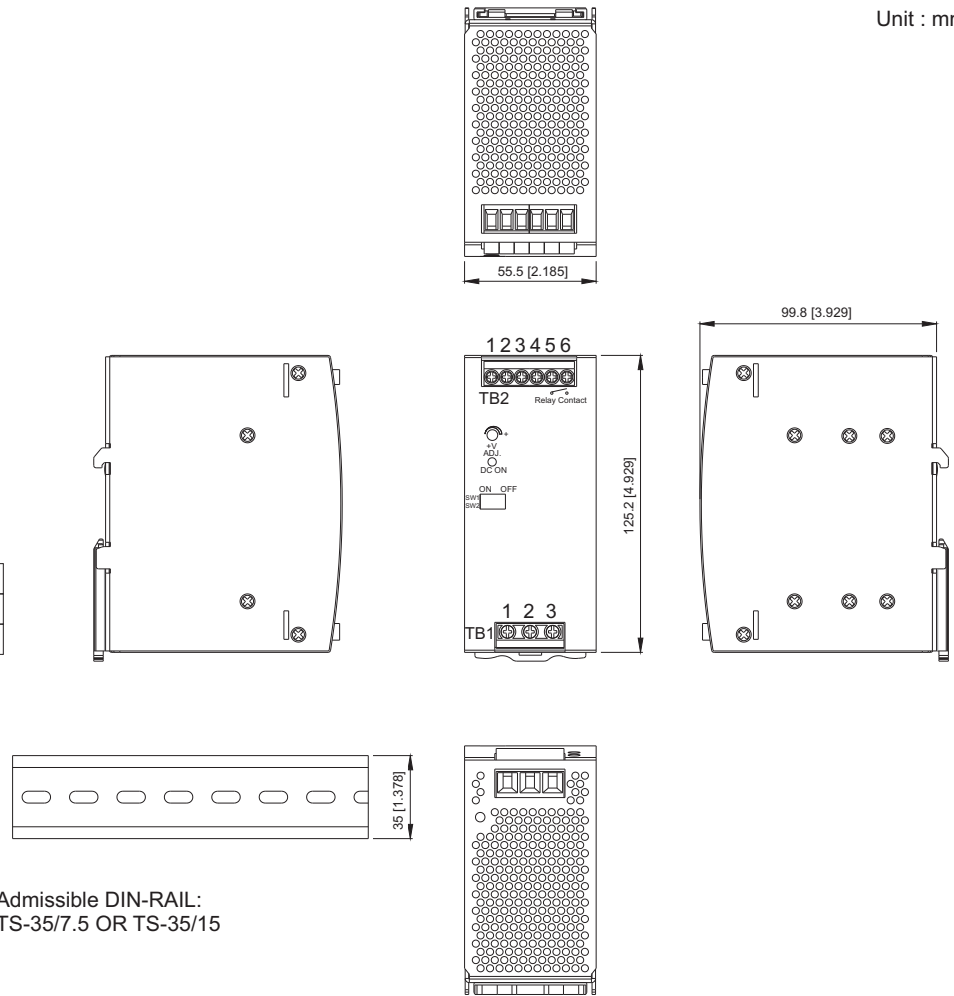
| Pin NO. | Assignment |
|---------|------------|
| 1 | FG ⊕ |
| 2 | AC/L |
| 3 | AC/N |

Terminal Pin No. Assignment (TB2)

| Pin NO. | Assignment |
|---------|---------------|
| 1 | DC+ |
| 2 | DC- |
| 3 | INH+ |
| 4 | INH- |
| 5,6 | Relay Contact |

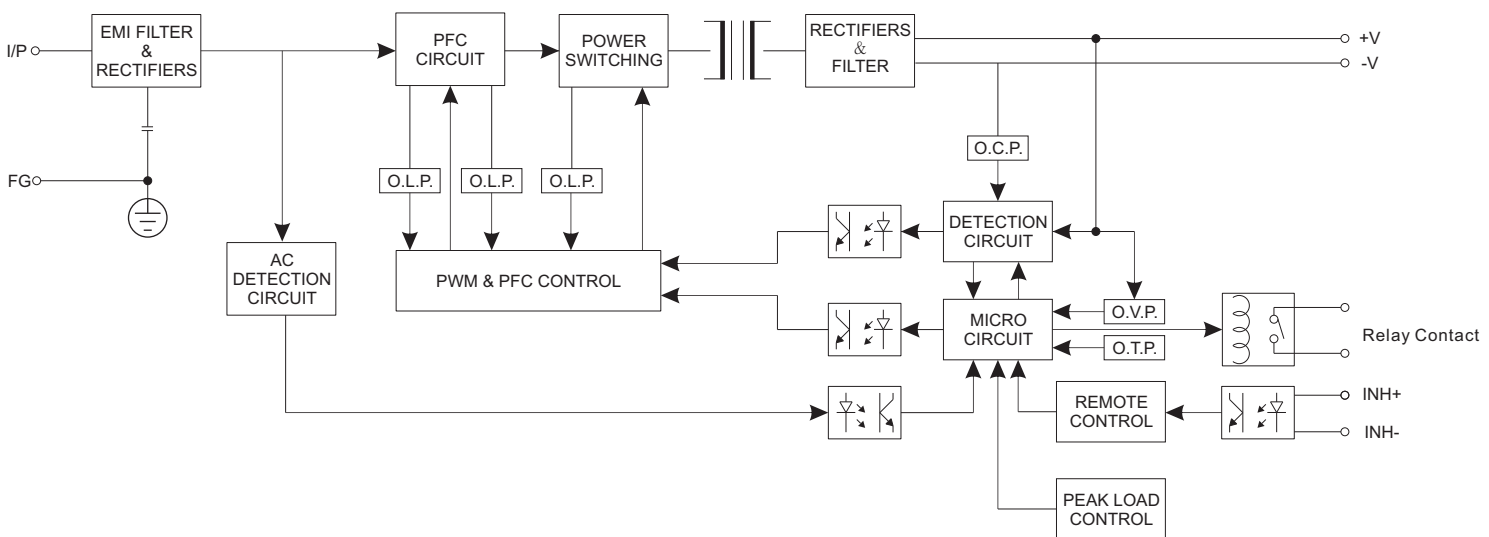
Switch No. Assignment

| SW NO. | Assignment |
|--------|-----------------------|
| SW1 | PEAK LOAD SETTING |
| SW2 | REMOTE ON/OFF SETTING |



Admissible DIN-RAIL:
TS-35/7.5 OR TS-35/15

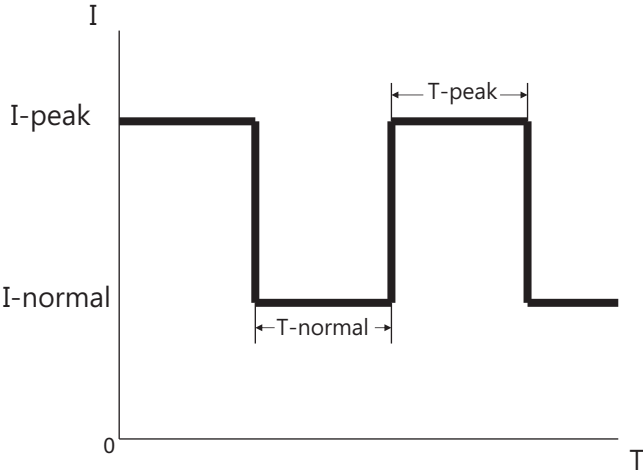
Block Diagram:



DC OK Relay Contact:

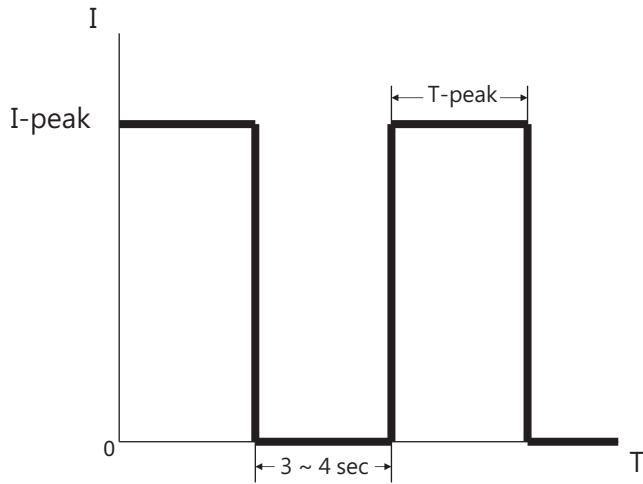
| | |
|-----------------------|--------------------------------------------------------------|
| Contact Close | When the output voltage reaches the adjusted output voltage. |
| Contact Open | When the output voltage drop below 45% rated output voltage. |
| Contact Ratings(max.) | 30V/1A resistive load |

Peak Load SW1 ON (Mode1) Default setting:

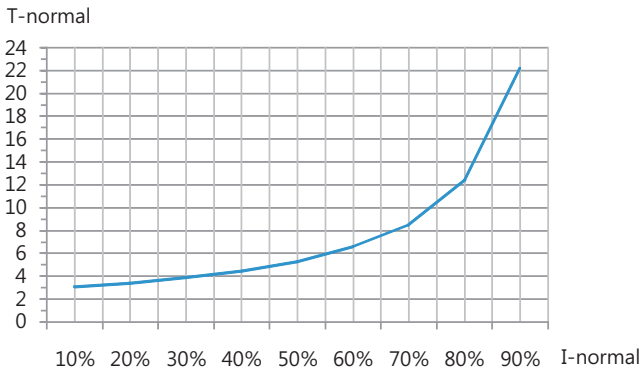


T-peak presents while the unit is working within 110%~150% Rating output power. See curve " B " for the variation in T-peak between output current and holdup time. If T-peak is more than the time setting in curve "B", the output current will drop to the constant current limit (I-normal) that is 105% rating power, meanwhile, I-normal and T-normal will be presenting. See curve "A" for the timing back to I-Peak of T-normal and this Mode can use for easy 2-stage battery charger.

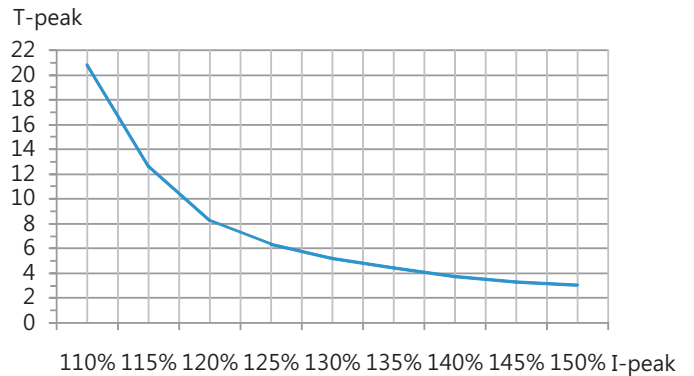
Peak Load SW1 OFF (Mode2):



T-peak presents while the unit is working within 110%~150% Rating output power. See curve " B " for the variation in T-peak between output current and holdup time. If T-peak is more than the time setting in curve "B", the output voltage will be shut down for 3~4 sec, then auto-recovery.



CURVE A



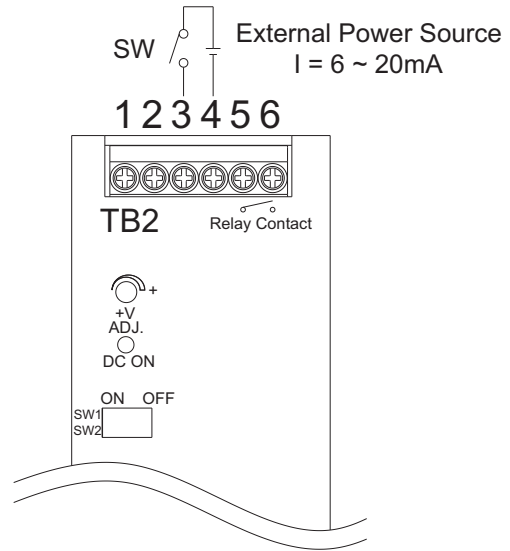
CURVE B

Remote ON / OFF:

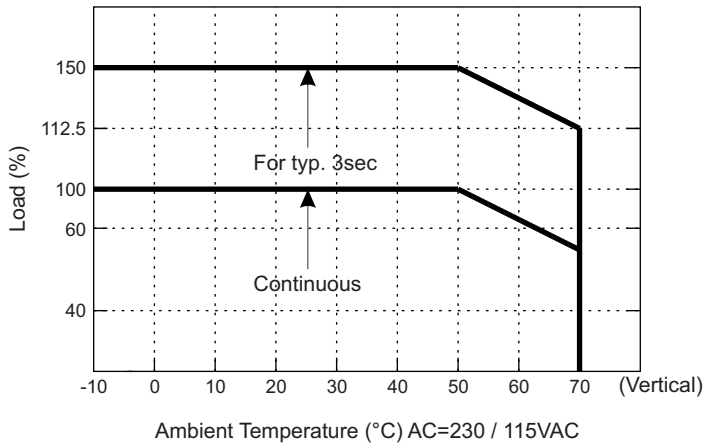
The PSU can be turned ON/OFF by using the "Remote Control" function.

| SW2 | INH+(3 PIN)/ INH-(4 PIN) | Output Status |
|-----|--------------------------|---------------|
| OFF | SW ON (>2.5V) | ENABLE |
| OFF | SW OFF (<0.8V) | DISABLE |
| ON | SW ON (>2.5V) | DISABLE |
| ON | SW OFF (<0.8V) | ENABLE |

(Default Setting)



De-rating Curve:



Output derating VS input voltage:

