

#### 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
Current Range		DC Voltage Range	24V	48V
Rated Power			6.25A	3.125A
Rated Power		Current Range	0 ~ 6.25A	0 ~ 3.125A
Peak Power   Note   Ripple & Noise (Max.)   Note   2240mVp-p   480mVp-p			150W	150W
Peak Power   Note   Ripple & Noise (Max.)   Note   2240mVp-p   480mVp-p		Peak Current	9.45A	4.8A
Ripple & Noise (Max.)   Noise   240mVp-p   480mVp-p   480mVp-p   -2 + 48%				
Voltage Adj. Range	Output		, , ,	480mVp-p
Voltage Tolerance	Output	,		
Line Regulation		<u> </u>		
Load Regulation				
Setup, Rise Time				
Hold Time (Typ.)   16ms / 230VAC, 16ms / 115VAC at full load				
Voltage Range				
Input				
Power Factor (Typ.)   0.9 / 230VAC, 0.98 / 115VAC at full load				
Efficiency (Typ.)   87%   87%   87%   87%   AC Current (Typ.)   2.6A / 115VAC, 1.3A / 230VAC				
AC Current (Typ.)   2.6A / 115VAC, 1.3A / 230VAC     Inrush Current (Typ.)   33A / 115VAC, 1.3A / 230VAC     Leakage Current	Input	( ) ,	·	87%
Inrush Current (Typ.)   33A / 115VAC, 65A / 230VAC	•			
Leakage Current				
Protection  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 is films: (If fault condition remains after 5times recovery, PSU will shut down. User must re-power on to rec 29 ~ 33V				
Protection  Protection  Over Voltage  Over Temperature  DC OK Relay Contact Ratings (Max.)  DC OK Relay Contact Ratings (Max.)  Burking Temp.  Working Temp.  Note.5  Vibration  Safety Standards  Withstand Voltage  Safety Standards  Withstand Voltage  Safety Standards  Note.4  EMI Conduction & Radiation  Note.4  EMI Conduction & Radiation  Local Current  Certified EN55022 (CISPR22)  Harmonic Current  DC OK Relay Contact Ratings (Max.)  Safety & EMC  Withstand Voltage  Note.5  Others  Mote.4  All parameters NOT specially mentoined are measured at 230Wkz of box with a view with a circum special with a contact and manual care measured at 230Wkz of pack with a circum size were minated with a 0.1uff & 47uf parallel capacitor.  Auto-rate Capture (Vibration)  Consider Contact Ratings (Max.)  Auto-rate Capture (Max.)  Auto-rate Capture (Max.)  Safety Standards  Contined UL 508 / EN 60950-1  Withstand Voltage  I/P-O/P, I/P-FG; O/P-FG: 2121VDC, O/P-FG: 707VDC, O/P-DC OK: 707VDC  Isolation Resistance  I/P-O/P, I/P-FG: O/P-FG: 2121VDC, O/P-FG: 707VDC, O/P-DC OK: 707VDC  Biolation Resistance  I/P-O/P, I/P-FG: O/P-FG: 2121VDC, O/P-FG: 707VDC, O/P-DC OK: 707VDC  Solution (Contact Current)  Auto-rate Capture (Certified EIC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 55024; EN 61000-6-1; EN 61204-3; Meet SEMI  Dimension (WxHxD)  Solution (WxHxD)  Solution (WxHxD)  Solution (WxHxD)  All parameters NOT specially mentoined are measured at 230VAC input, rated load and 25°C of ambient temperature.  Reminer (Auto-rated with a 0.1uff & 47uf parallel capacitor.				105 ~ 150% for more than 3 secs
Protection  Over Voltage  Over Voltage  Over Voltage  Over Temperature  Over Temperature  DC OK Relay Contact Ratings (Max.)  Frotection type: Latch-off mode  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.)  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  20 * 20 * 20 * 20 * 20 * 20 * 20 * 20				
Protection type: Latch-off mode  Over Temperature  Over Temperature  Over Temperature  DC OK Relay Contact Ratings (Max.)  Working Temp.  Note.5  10 ~ +70°C (Refer to de-rating curve)  Working Humidity  20 ~ 95% RH non-condensing  Storage Temp. & 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  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  Rote.4  EMS Immunity  Certified EN61000-3-2, -3-3; EN61000-6-3  Note.4  EMS Immunity  Certified EC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 55024; EN 61000-6-1; EN 61204-3; Meet SEMI  MTBF  62.725K HRS Certified MIL-HDBK-217F  Dimension (WxHxD)  55.5x125.2x99.8 mm / 2.185x4.929x3.929 inch  Packing  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 200Mtz of bandwidth by using a 12° twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.		Over Load	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)	
Protection type: Latch-off mode	Desta d'an	O	29 ~ 33V	56 ~ 65V
Protection type: Shut down o/p voltage, recovers automatically after temperature goes down  DC OK Relay Contact Ratings (Max.)  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 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: 2121VDC, O/P-FG: 700W Ohms / 500VDC / 25°C / 70% RH  Safety & EMC  Harmonic Current Certified EN61000-3-2, -3-3; EN61000-6-3  Note.4 EMS Immunity Certified IEC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 55024; EN 61000-6-1; EN 61204-3; Meet SEMI  MTBF 62.725K HRS Certified MIL-HDBK-217F  Others Dimension (WxHxD) 55.5x125.2x99.8 mm / 2.185x4.929x3.929 inch  Packing 0.9kg; 12pcs / 11.8kg / 1.32CUFT  1. All parameters NOT specially mentioned are measured at 200Mtz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.	Protection	Over voltage	Protection type: Latch-off mode	
Protection type: Shut down o/p voltage, recovers automatically after temperature goes down  DC OK Relay Contact Ratings (Max.)  Working Temp. Note.5		O To	Protection type: Latch-off mode  95 ±5°C (TSW: detect on heatsink of power diode)	
Ratings (Max.)		Over remperature		utomatically after temperature goes down
Environment   Storage Temp. & Humidity   20 ~ 95% RH non-condensing   40 ~ +85°C, 10 ~ 95% RH		DC OK Relay Contact 60VDC / 0.3A 30VDC / 1A 30VAC / 0.5A resistive load	load	
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 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 IEC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 55024; EN 61000-6-1; EN 61204-3; Meet SEMI  MTBF  62.725K HRS Certified MIL-HDBK-217F  Dimension (WxHxD)  55.5x125.2x99.8 mm / 2.185x4.929x3.929 inch  Packing  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.		Working Temp. Note.5	-10 ~ +70°C (Refer to de-rating curve)	
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 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 MTBF 62.725K HRS Certified MIL-HDBK-217F  Others Dimension (WxHxD) 55.5x125.2x99.8 mm / 2.185x4.929x3.929 inch  Packing 0.9kg; 12pcs / 11.8kg / 1.32CUFT  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.		Working Humidity	20 ~ 95% RH non-condensing	
Temp. Coefficient    ±0.03% / °C (0 ~ 50°C)     Vibration	Environment	Storage Temp. & Humidity	,	
Mounting: Certified IEC 60068-2-6  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  Safety & EMC EMI Conduction & Radiation Certified EN55022 (CISPR22)  Harmonic Current Certified EN61000-3-2, -3-3; EN61000-6-3  Note.4 EMS Immunity Certified IEC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 55024; EN 61000-6-1; EN 61204-3; Meet SEMI MTBF 62.725K HRS Certified MIL-HDBK-217F Others Dimension (WxHxD) 55.5x125.2x99.8 mm / 2.185x4.929x3.929 inch Packing 0.9kg; 12pcs / 11.8kg / 1.32CUFT  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.	Environment	Temp. Coefficient	±0.03% / °C (0 ~ 50°C)	
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  Safety & EMC EMI Conduction & Radiation Certified EN55022 (CISPR22)  Harmonic Current Certified EN61000-3-2, -3-3; EN61000-6-3  Note.4 EMS Immunity Certified IEC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 55024; EN 61000-6-1; EN 61204-3; Meet SEMI  MTBF 62.725K 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  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.		Vibration		in. each along X, Y, Z axes;
Isolation Resistance   I/P-O/P, I/P-FG, O/P-FG: >100M Ohms / 500VDC / 25°C / 70% RH		Safety Standards	Certified UL 508 / EN 60950-1	
Safety & EMC  Harmonic Current  Certified EN55022 (CISPR22)  Harmonic Current  Certified EN61000-3-2, -3-3; EN61000-6-3  Note.4  EMS Immunity  Certified IEC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 55024; EN 61000-6-1; EN 61204-3; Meet SEMI  MTBF  62.725K 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  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.		Withstand Voltage		7VDC, O/P-DC OK: 707VDC
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  MTBF  62.725K 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  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.		Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: >100M Ohms / 500VDC	/ 25°C / 70% RH
Note.4 EMS Immunity Certified IEC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 55024; EN 61000-6-1; EN 61204-3; Meet SEMI  MTBF 62.725K 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  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.	Safety & EMC	EMI Conduction & Radiation	Certified EN55022 (CISPR22)	
Others    MTBF   62.725K HRS Certified MIL-HDBK-217F		Harmonic Current	Certified EN61000-3-2, -3-3; EN61000-6-3	
Others  Dimension (WxHxD)  55.5x125.2x99.8 mm / 2.185x4.929x3.929 inch  Packing  0.9kg; 12pcs / 11.8kg / 1.32CUFT  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.	Note.4	EMS Immunity	Certified IEC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 55024	4; EN 61000-6-1; EN 61204-3; Meet SEMI F47
Packing  0.9kg; 12pcs / 11.8kg / 1.32CUFT  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.		MTBF	62.725K HRS Certified MIL-HDBK-217F	
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.	Others	Dimension (WxHxD)	55.5x125.2x99.8 mm / 2.185x4.929x3.929 inch	
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.		Packing	0.9kg; 12pcs / 11.8kg / 1.32CUFT	
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 mee  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 poin 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.	Note	Ripple & noise are measured at 20MHz of 3. Tolerance: includes setup time tolerance. The power supply is considered a composition of the control of the	of bandwidth by using a 12" twisted pair-wire terminated wit, line regulation and load regulation.  In the regulation and load regulation.  In the final equipment. The final equipment. The final equipment in the final equipment in the final equipment. The final equipment in the left and right side are recover, 15mm clearance is recommended.  In the final equipment is recommended.	th a 0.1uF & 47uF parallel capacitor.  I equipment must be re-confirmed that it still meets

Unit: mm / inch



### **Mechanical Drawings:**

Terminal Pin No. Assignment (TB1)

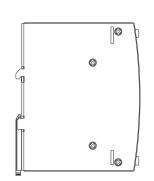
Pin NO.	Assignment
1	FG 🖶
2	AC/L
3	AC/N

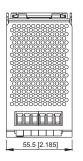
#### Terminal Pin No. Assignment (TB2)

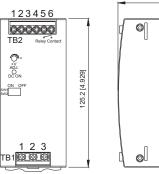
Pin NO.	Assignment
1	DC+
2	DC-
3	INH+
4	INH-
5,6	Relay Contact

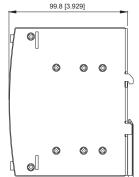
Switch No. Assignment

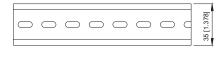
SW NO.	Assignment
SW1	PEAK LOAD SETTING
SW2	REMOTE ON/OFF SETTING



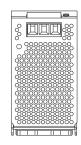




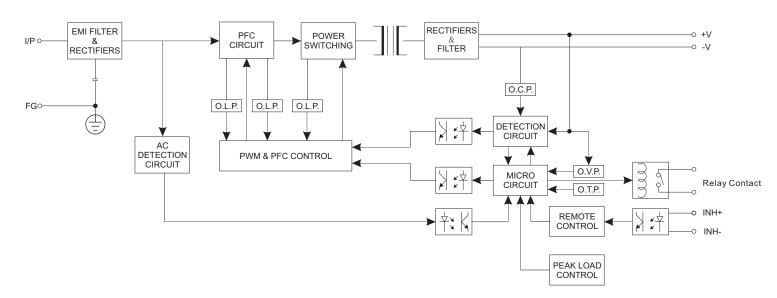




Admissible DIN-RAIL: TS-35/7.5 OR TS-35/15



### **Block Diagram:**

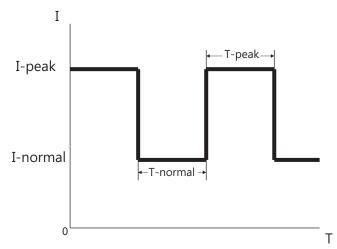


## **DC OK Relay Contact:**

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

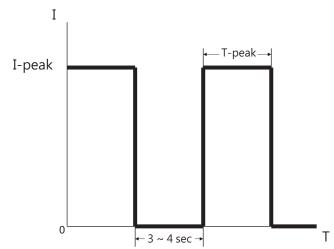


### Peak Load SW1 ON (Mode1) Default setting:

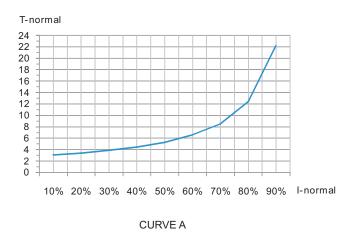


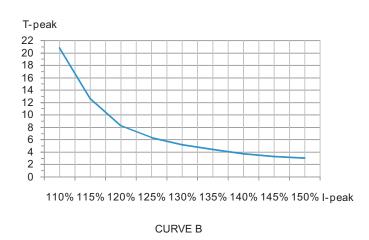
T-peak presents while the unit is working within 110%~150% Rating output power. See curve "B" for the variation in T-peak between output current and holdup time. If T-peak is more than the time setting in curve "B", the output current will drop to the constant current limit (I-normal) that is 105% rating 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.





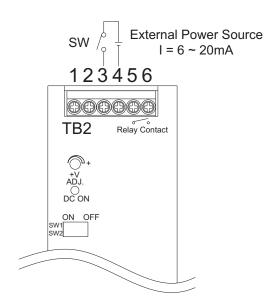


#### Remote ON / OFF:

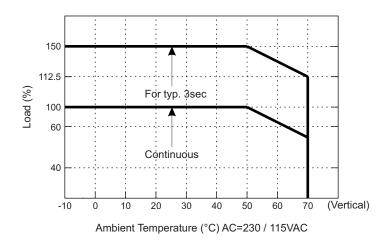
The PSU can be turned ON/OFF by using the "Remote Control" function.

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

ult Setting)



#### **De-rating Curve:**



# Output derating VS input voltage:

