

HIGHLIGHTS

- 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, OCP, OVP
- Two selectable peak load modes
- Built-in DC OK Relay contact
- Built-in Remote ON/ OFF function
- 3 years warranty



Mechanical Drawings:

Terminal Pin No. Assignment (TB1)

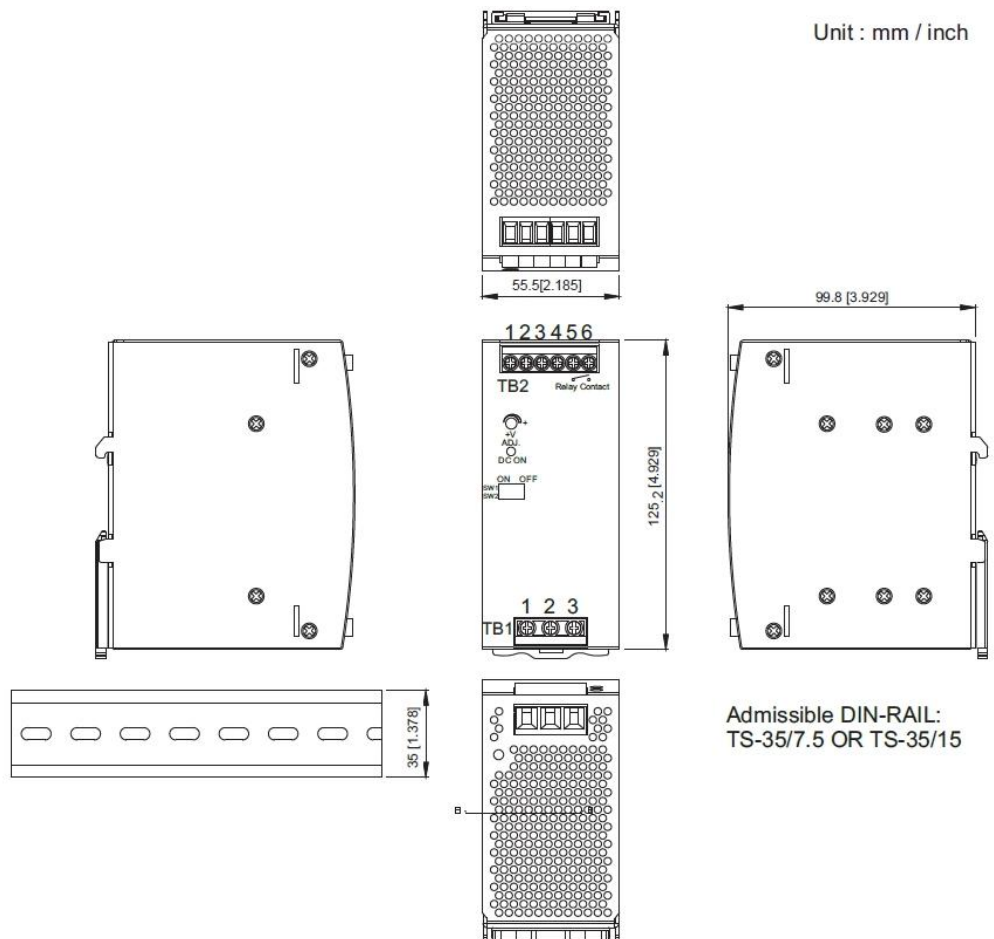
Pin NO.	Assignment
1	FG ⚡
2	AC/L
3	AC/N

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



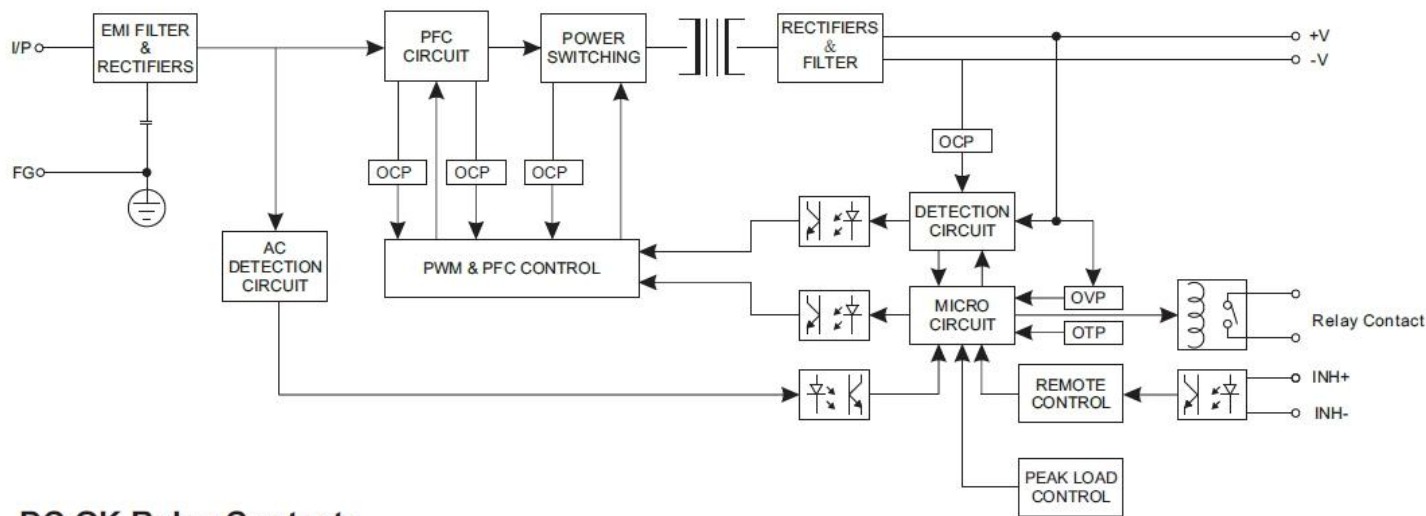
MODEL	PART NUMBER	OUTPUT	VOLTAGE	ADJ. RANGE (VOLTS)	LOAD REGULATION	RATED / PEAK CURRENT (A)	RATED POWER (W)	RIPPLE & NOISE (P-P)	EFFICIENCY	MTBF (HRS.)
DL480-24	400307-01-3	V1	24	-5 ~ +5%	±1%	20 / 30	480	240mV	93%	
DL480-48	400307-02-1	V1	48	-5 ~ +5%	±1%	10 / 15	480	480mV	94%	

Output	Peak Power	720W (3sec.) Two selectable peak load mode								Note 6
	Voltage Tolerance	±1%								Note 3
	Setup, Rise Time	800ms, 100ms / 230VAC / 115VAC at full load								
	Hold Up Time (Typ.)	> 16ms / 230VAC, > 16ms / 115VAC at full load								
Input	Voltage Range	88 ~ 264VAC, 124 ~ 373VDC								
	Frequency Range	47 ~ 63Hz								
	Power Factor (Typ.)	< 0.96 / 230VAC, < 0.98 / 115VAC at full load								
	AC Current (Typ.)	5.0A / 115VAC, 2.5A / 230VAC								
	Inrush Current (Typ.)	33A / 115VAC, 65A / 230VAC								
	Leakage Current	< 1mA / 240VAC								
Protection	Over Current	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	DL480-24: 29 ~ 33V / DL480-48: 56 ~ 65V (Protection type: latch-off mode)								
	Over Temperature	95 ±5°C (TSW: detect on heat sink of power diode) Protection type: Shut down o/p voltage, recovers automatically after temperature goes down								
Environment	Working Temp.	-25 ~ +70°C (Refer to de-rating curve)								Note 5
	Working Humidity	20 ~ 95% RH non-condensing								
	Storage Temp. & Humidity	-40 ~ +85°C, 10 ~ 95% RH								
	T emp. Coefficient	±0.03% / °C (0 ~ 50°C)								
	Vibration	10 ~ 500Hz, 2G 10 min. / 1cycle, period for 60 min. 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 EN 61000-3-2, -3-3, -6-3								
	EMS Immunity	Certified IEC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 55024; EN 61000-6-1; EN 61204-3;								Note 4
Physical Characteristics	Dimension (W x H x D)	86.3 x 124.8 x 123.35 mm / 3.4 x 4.9 x 4.9 inch								
	Packing	1.45kg each; 8pcs / 12kg per box								

Notes:

- All parameters NOT specifically mentioned are measured at 230VAC input, rated load and 25°C ambient temperature.
- Ripple & noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
- Tolerance includes setup time tolerance, line regulation and load regulation
- The power supply is considered a component which will be installed into a complete equipment unit. The final unit must be re-tested to insure that it still meets EMC directives.
- 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.
- 3 seconds or 20% duty cycle Max. The average output power should not exceed the rate power.
- De-rating may apply in low input voltage. Please check the de-rating curve for more details.

Block Diagram:



DC OK Relay Contact:

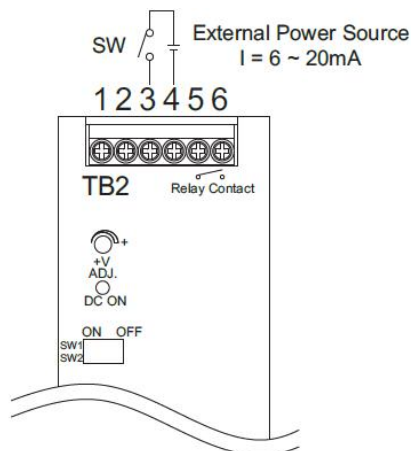
Contact Close	When the output voltage reaches the adjusted output voltage.
Contact Open	When the output voltage drop below 45% rated output voltage.
Contact Ratings(max.)	30V/1A resistive load

Remote ON / OFF:

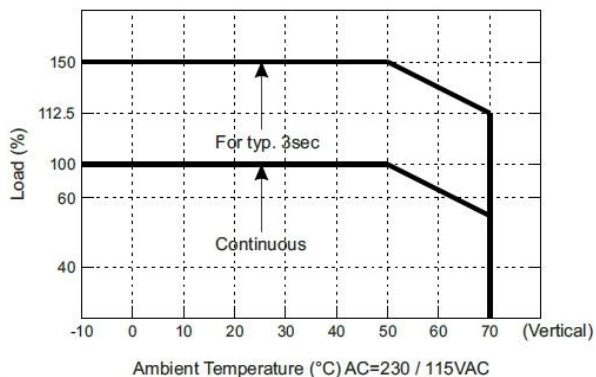
The PSU can be turned ON/OFF by using the "Remote Control" function.

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

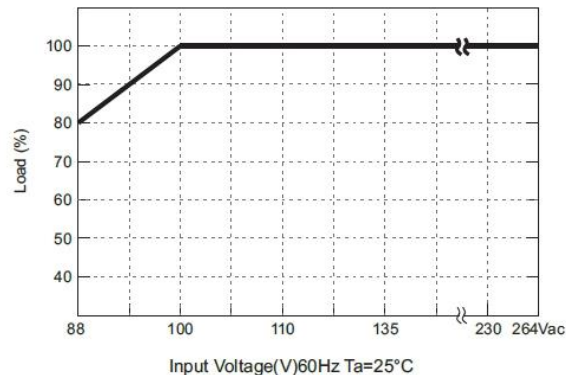
(Default Setting)



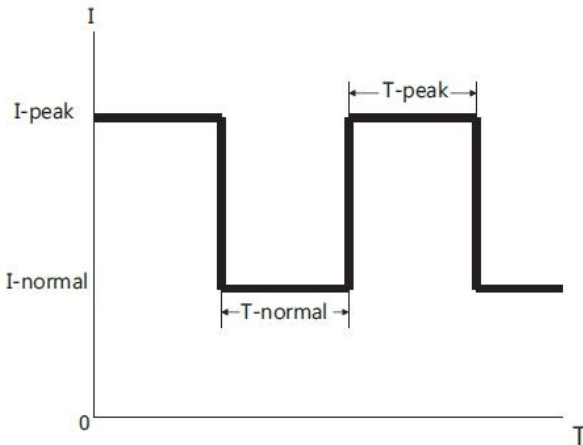
De-rating Curve:



Output derating VS input voltage:

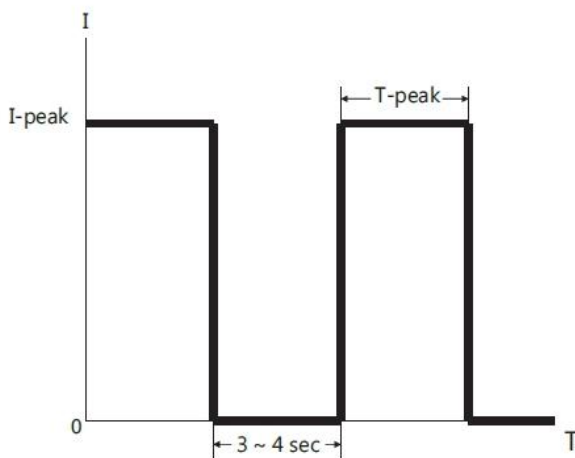


Peak Load SW1 ON (Mode1) Default setting:

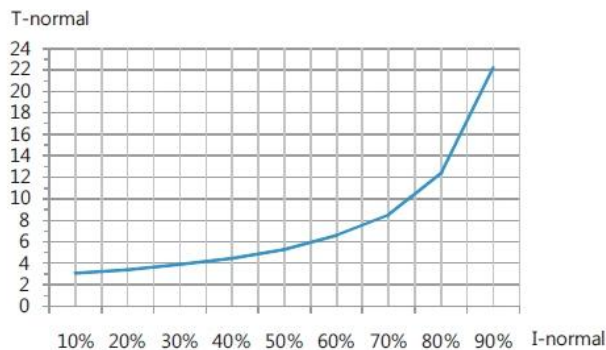


T-peak presents while the unit is working within 110%~150% Rating output power. See curve "B" for the variation in T-peak between output current and holdup time. If T-peak is more than the time setting in curve "B", the output current will drop to the constant current limit (I-normal) that is 105% rating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

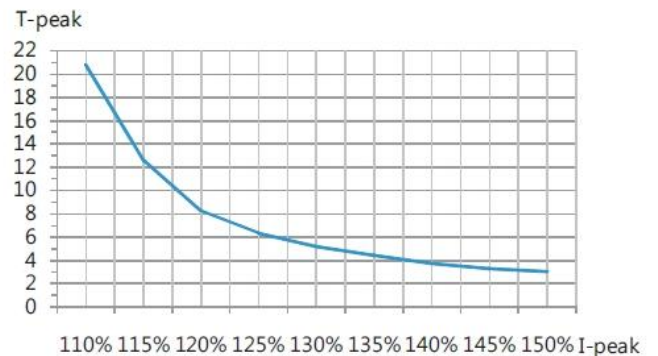
Peak Load SW1 OFF (Mode2):



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