

#### 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 (Open Collector Signal)**
- **Built-in Remote ON / OFF function**
- 3 years warranty







MODEL		DV-480-24	DV-480-48
	DC Voltage Range	24V	48V
	Rated Current	20A	10A
	Current Range	0 ~ 20A	0 ~ 10A
	Rated Power	480W	480W
	Peak Current	30A	15A
	Peak Power Note.6	720W (3sec.)	
Output	Ripple & Noise (Max.) Note.2	240mVp-p	480mVp-p
	Voltage Adj. Range	-5 ~ +5%	
	Voltage Tolerance Note.3	±1.0%	±1.0%
	Line Regulation	±0.5%	±0.5%
	Load Regulation	±1.0%	±1.0%
	Setup, Rise Time	800ms, 100ms / 230VAC / 115VAC at full load	
	Hold Time (Typ.)	16ms / 230VAC, 16ms / 115VAC at full load	
	Voltage Range	88 ~ 264VAC, 124 ~ 373VDC	
	Frequency Range	47 ~ 63Hz	
	Power Factor (Typ.)	0.96 / 230VAC / 115VAC at full load	
Input	Efficiency (Typ.)	93%	94%
	AC Current (Typ.)	5.0A / 115VAC, 2.5A / 230VAC	
	Inrush Current (Typ.)	33A / 115VAC, 65A / 230VAC	
	Leakage Current	< 1mA / 240VAC	
	-	Hiccup mode: when the rated output power is within	105 ~ 150% for more than 3secs.
	Over Load	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	
Protection		5times (If fault condition remains after 5times recovery, PSU will shut down. User must re-power on to recover)	
11010011011	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	
		-25 ~ +70°C (Refer to output load de-rating curve)	
	Working Humidity	20 ~ 95% RH non-condensing	
Environment	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: 70		7VDC, 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 EN 55022 (CISPR22); EN 61000-6-3	
	Harmonic Current	Certified EN61000-3-2, -3-3	
Note.4	EMS Immunity	Certified IEC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 61000	0-6-1; EN 61204-3
Others	Dimension (WxHxD)	86.3x124.8x123.35 mm / 3.398x4.913x4.856 inch	
Others	Packing	1.45kg; 8pcs / 12kg	
Note	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>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.</li> <li>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.</li> <li>3 seconds or 20% duty cycle Max. The average output power should not exceed the rate power.</li> <li>De-rating may apply in low input voltage. Please check the derating curve for more details.</li> </ol>		

Unit: mm



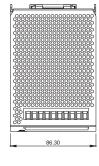
## Mechanical Specification:

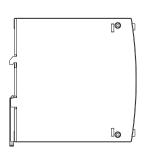
Terminal Pin No. Assignment (TB1)

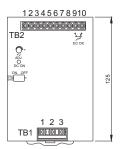
Pin NO.	Assignment	
1	FG 🖶	
2	AC/L	
3	AC/N	

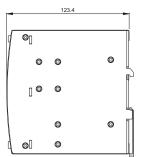
#### Terminal Pin No. Assignment (TB2)

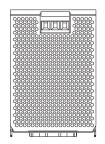
Pin NO.	Assignment	
1-3	DC+	
4-6	DC-	
7	INH+	
8	INH-	
9,10	DC OK Singal	

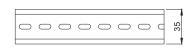










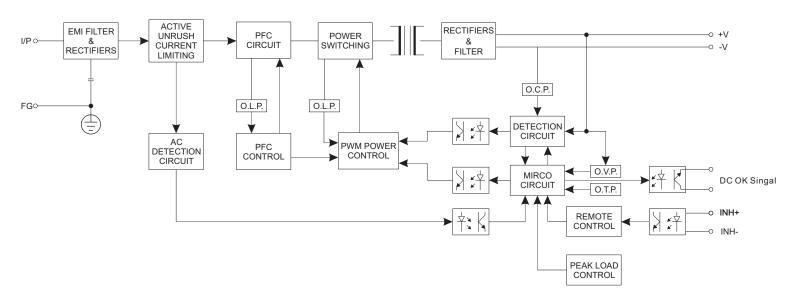


Switch No. Assignment

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

### Admissible DIN-RAIL: TS35/7.5 OR TS35/15

## Block Diagram:

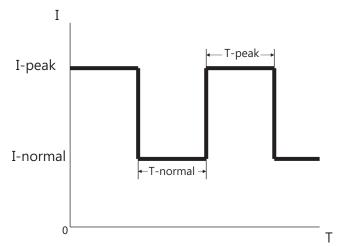


# **DC OK Singal Contact:**

Contact Ratings(max.)	CTR : MIN. 50% at $\rm I_F$ = 5mA, $\rm V_{CE}$ = 5V
Isolation Voltaage	Between input and output Viso = 3750Vrms

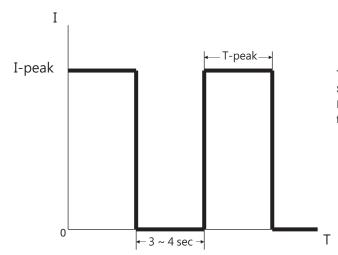


## Peak Loading SW1 ON (Mode1) Default setting:

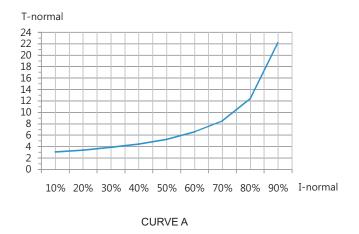


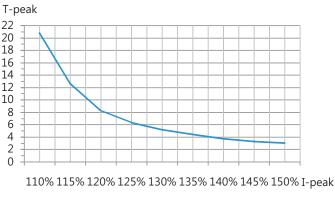
T-peak presents while the unit is working within 110%~150% Rating output power. See curve "B" for the variation in T-peak btw output current and holdup time. If T-peak is more than the time setting in curve "B", the output current will drop to the constant current limited (I-normal) that is 105% rating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

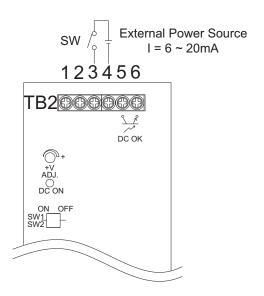


#### Remote ON / OFF:

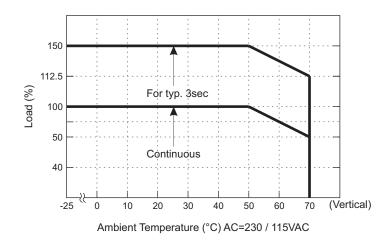
The PSU can be turned ON/OFF by using the "Remote Control" function.

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	(Defaul

ult Setting)



# ■ De-rating Curve:



# Output derating VS input voltage:

