

WDR240 Series

240 W AC/DC Switching Power Supply – DIN rail

CoolPower
Solutions

- Single and two phase wide input range 180 ~ 550VAC
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in active PFC circuit compliance to EN61000-3-2
- High efficiency 91% and low power dissipation
- UL 508 (industrial control equipment) approved
- Built-in DC OK relay contact



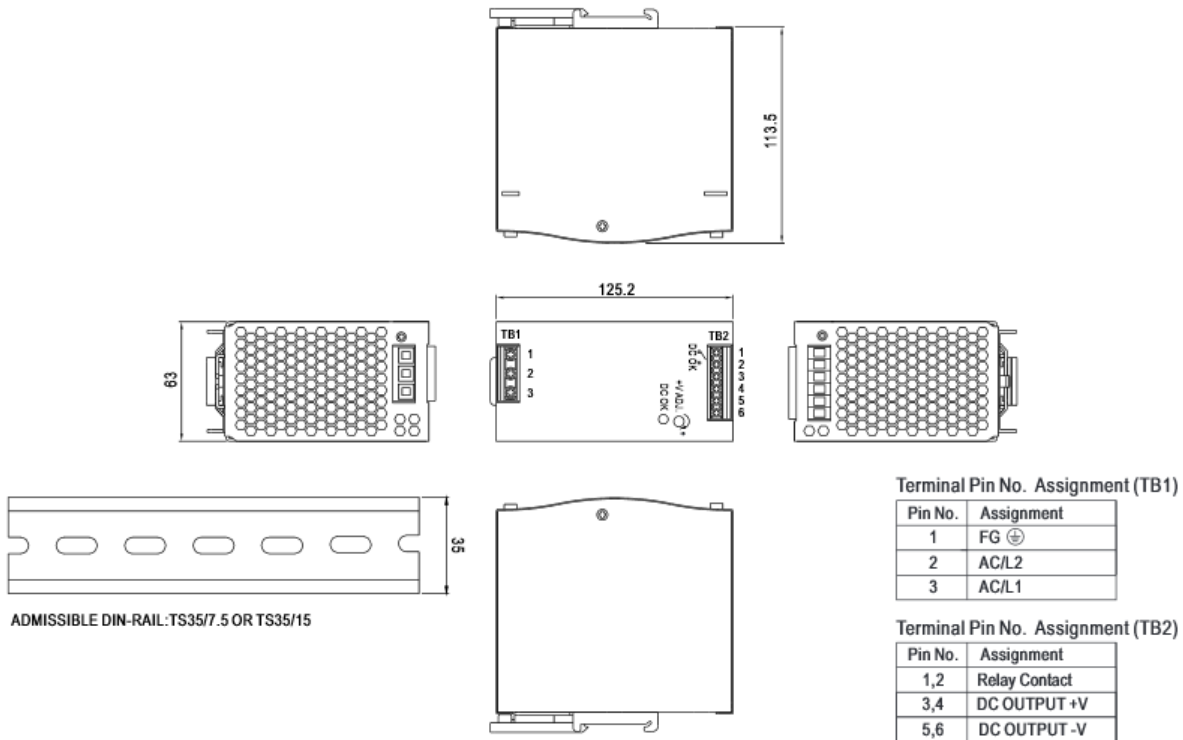
Electrical specifications

Model No.		WDR240-24	WDR240-48
Max Output Wattage (W)		240W	240W
Input	Voltage	180 ~ 550VAC or 254-780 VDC	
	Frequency (Hz)	47-63 Hz	
	Power Factor	PF \geq 0,84/400VAC, PF0,84/230VAC	
	Current	1 A (400 VAC) / 2 A (230 VAC)	
	Inrush Current	Cold start 50 A typ	
	Leakage Current	<3,5 mA /530 VAC	
Output	Voltage (V.DC.)	24V	48V
	Voltage Adjustable Range (Note 6)	24 - 28V	48 - 55V
	Voltage Tolerance (Note 3)	\pm 1%	\pm 1%
	Rated Current	10 A	5 A
	Line Regulation	\pm 0,5%	\pm 0,5%
	Load Regulation	\pm 1%	\pm 1%
	Ripple % Noise (max) (Note 2)	150mV _{p-p}	150mV _{p-p}
	Efficiency (typ)	91%	91%
	Hold-up Time	18 ms / 400 VAC; 18 ms / 230 VAC at full load	
	Setup, Rise Time	800 ms, 150 ms / 400 VAC; 1500 ms, 150 ms / 230 VAC	
Protection	Over Load	105 ~ 130% rated output power	
		Constant current limiting, until will shut down after 3s. auto-recovery after 1min if the fault condition is removed	
	Over Voltage	29 ~ 33V	56 ~ 65V
		Protection type : Shut down o/p voltage, auto-recovery after 1min if the fault condition is removed	
Over Temperature	90 \pm 5°C (TSW) detect on heatsink of power switch		
	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down		
Function	DC OK relay contact	60Vdc/0,3A, 30Vdc/1A, 30Vac/0,5A resistive load	
Environment	Operating Temperature (Note 5)	-30°C...+70°C (with derating)	
	Storage Temperature	-40°C...+85°C, 10 – 95% RH	
	Temperature coefficient	\pm 0.03%/°C (0...50°C)	
	Humidity	20 - 95% RH	
	MTBF	141 100 h @ 25°C (MIL-HDBK-217F)	
Physical	Dimension (W x H x D)	63 x 125,2 x 113,5 mm	
	Weight	1060 g	
	Cooling Method	Free air convection	
Safety	Safety standards	UL508 approved, IEC60950-1 CB approved by SIQ, design refer to GL ;(meet EN60204-1)	
	Withstand Voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC O/P-DC OK: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 EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2, -3	
	EMC Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A	

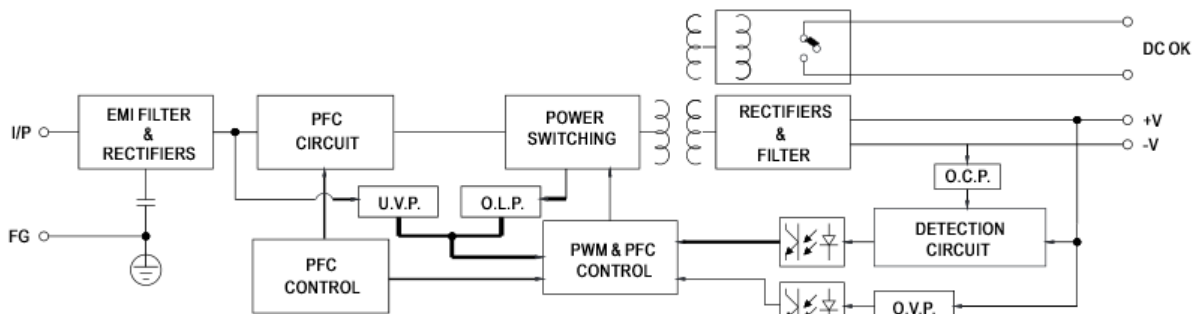
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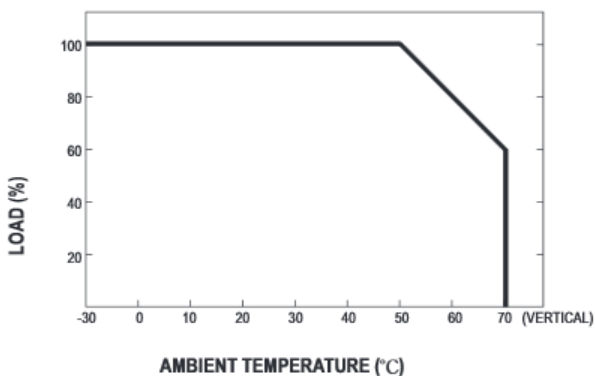
Mechanical Specifications



Block Diagram



Derating Curve



Output derating vs input voltage

