



120W - 480W Single Output DIN Rail Mount Power Supplies



Features	Benefits
• High Efficiency	• Saves Energy & Cost
• Narrow Width	• More Space in Control Equipment
• Curve B, Conducted & Radiated EMI	• Easier System Integration
• Up to 7 Year eCap-Life	• Prolonged Lifetime Expectation

Specification					
Model		DRB120-24-1	DRB240-24-1	DRB480-24-1	DRB480-48-1
Input Voltage Range	VAC	85 - 264 (withstands 300VAC for 5s)		90 - 264 ⁽¹⁾	
Input Frequency	Hz	47 - 63			
Inrush Current (Cold Start)	A	55A (Typical at 230VAC)		<40A (at 264VAC)	
Power Factor (115/230VAC) ⁽²⁾	-	0.98 / 0.92		0.98 / 0.96	
Input Current (115/230VAC)	A	1.2 / 0.7 (115/230VAC)	2.4 / 1.4 (115/230VAC)	5 / 2.5 (115/230VAC)	
Leakage Current 264VAC 63Hz	mA	<1		<1.7	
Line Regulation	%	<0.1			
Load Regulation	%	<1			
Ripple and Noise	%	<1			
Temperature Coefficient	%/°C	<±0.02			
Overcurrent Protection	A	>6.06	>12.12	21 - 29	10.5 - 15
Overvoltage Protection ⁽³⁾	V	30 - 35	30 - 35	30V ±2%	57V ±4%
Overtemperature Protection	-	Yes			
Hold Up Time	ms	20	20	>16	>16
No-load Power Consumption	W	<1	<1.5	<5	<5
Efficiency (120 / 230VAC)	%	See Model Selector			
Average efficiency (230VAC)	%	>87			
LED Indicator	-	Green LED = DC is OK			
DC OK Signal	-	Optocoupler; ON when Vout >80% of nominal output. 50V, 5mA maximum (20mA for DRB480)			
Operating Temperature	°C	DRB120/240: -25°C to +70°C. Start up at -40°C. (Derate linearly to 50% load from 55°C to 70°C) DRB480: -20°C to +70°C. Start up at -40°C. (Derate linearly to 62.5% load from 50°C to 70°C)			
Storage Temperature	°C	-40°C to +85°C			
Humidity (non condensing)	% RH	5 - 95%RH (Operating and storage)			
Parallel operation	-	No			
Series operation ⁽⁴⁾	-	Yes			
Cooling	-	Convection			
Withstand Voltage (for 1 minute)	VAC	Input to Output 3kVAC, Input to GND 1.5kVAC, Output to GND 500VAC			
Isolation Resistance	MΩ	>100MΩ at 25°C, 70%RH & 500VDC			
Vibration (Non operating)	-	120/240W: 2G, 10 to 55Hz, 480W: 2G, IEC 60068-2-6, 10 to 500Hz			
Shock	-	120/240W: 20G, IEC 60068-2-27, half-sine, 22ms, 3 x each axis on DIN rail, 480W: 5G			
Safety agency certifications	-	UL508, IEC/EN/UL/CSA60950-1, CE Mark (LVD, EMC, RoHS2) In addition, for the DRB120 & 240: 120/240W: EN/UL/CSA62368-1, IEC/EN62477-1 OVC III (CB Report)			
Conducted & radiated EMI	-	EN55011-B, EN55032-B, CISPR11-B, CISPR22-B, EN61204-3 Class A			
Immunity	-	EN61000-4-2 (lvl 3), -3 (lvl 3), -4 (lvl 3), -5 (lvl 3), -6 (lvl 3), -8 (lvl 4), -11			
Line dips	-	SEMI -F47 (200VAC input)			
Weight (typ)	g	500	750	1000	1000
Size (W x H x D)	mm	35 x 124 x 125	41 x 124 x 125	84 x 124 x 125	
Case material	-	Metal			
Warranty	yrs	3			

Notes: (1) Derate linearly to 92.5% load from 100 to 90VAC (2) EN61000-3-2 Class A (3) Cycle input voltage to reset (4) See installation manual

Model Selector

Model	Output Voltage (V)	Output Adjust Range (V)	Max Output Current (A)	Max Output Power (W)	Peak Output Current (5)	Peak Output Power (5)	Efficiency (120 / 230VAC)
DRB120-24-1	24V	24 - 28V	5A	120W	6A	144W	91 / 93% (Typ)
DRB240-24-1	24V	24 - 28V	10A	240W	12A	288W	91 / 93% (Typ)
DRB480-24-1	24V	24 - 26.4V	20A	480W	-	-	>90 / 92%
DRB480-48-1	48V	48 - 52.8V	10A	480W	-	-	>90 / 92%

Notes: (5) <10s, Duty Cycle < 35%

Outline Drawing DRB120

