

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

Features

- ◆ High Efficiency
- ◆ Narrow Width
- ◆ Curve B, Conducted & Radiated EMI
- ◆ Up to 7 Year eCap-Life
- ◆ 3 Year Warranty



Key Market Segments & Applications

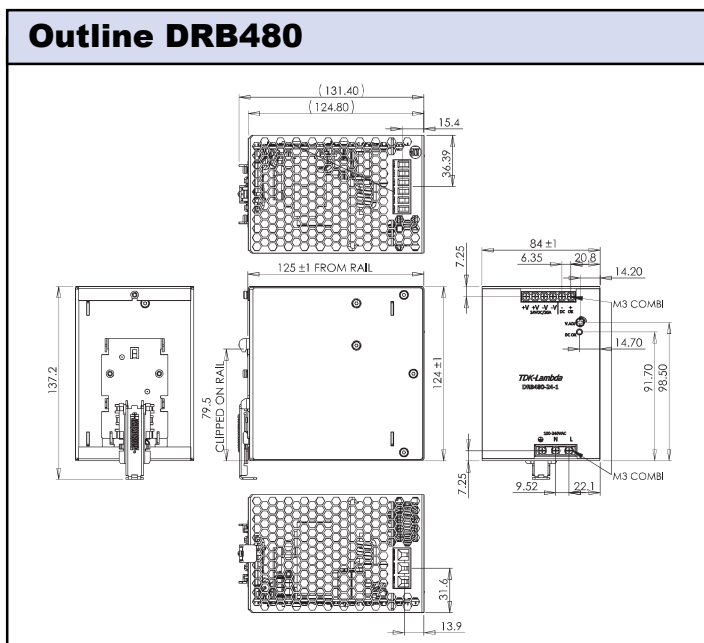
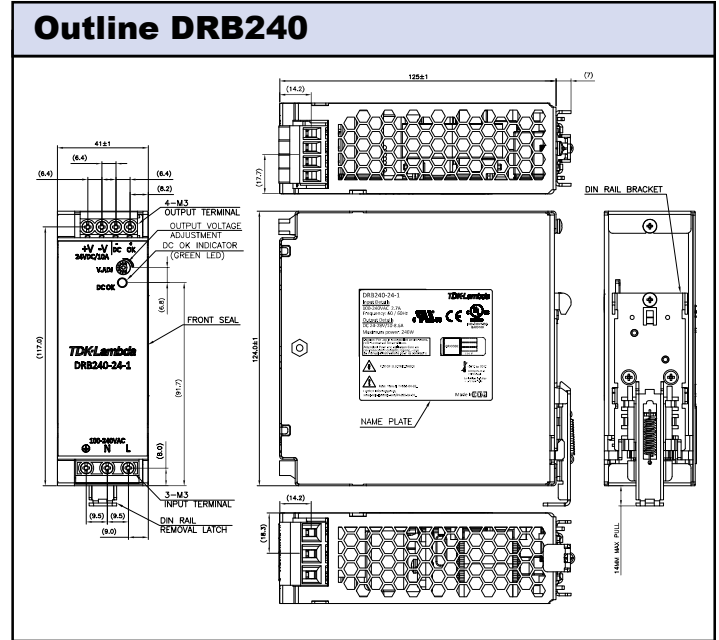
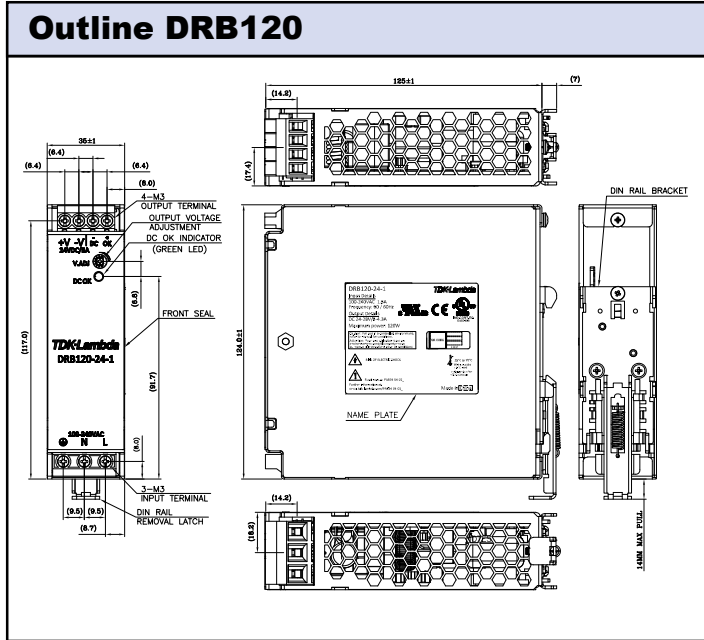


Specifications		DRB120-24-1	DRB240-24-1	DRB480-24-1	DRB480-48-1
Input Voltage Range	VAC	85 - 264 (withstands 300VAC for 5s)		90 - 264 ⁽¹⁾	
Input Frequency	Hz	47 - 63			
Inrush Current (Cold Start)	A	55A (Typical at 230VAC)		<40A (at 264VAC)	
Power Factor (115/230VAC) ⁽²⁾	-	0.98 / 0.92		>0.98 / 0.96	
Input Current	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) Also 120/240W: UL/CSA62368-1, Built to meet EN62368-1, IEC/EN62477-1 OVC III			
Conducted & radiated EMI	-	EN55011-B, EN55032-B, CISPR11-B, CISPR22-B, EN61204-3 Class A			
Immunity	-	EN61000-4-2 (Ivl 3), -3 (Ivl 3), -4 (Ivl 3), -5 (Ivl 3), -6 (Ivl 3), -8 (Ivl 4), -11			
Line Dips	-	SEMI-F47 (200VAC input)			
Weight (typ)	g	500	750	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	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%



For Additional Information, please visit <https://product.tdk.com/info/en/products/power/index.html>

