

10-100W Low Profile DIN Rail Mount Power Supplies

Features

- ◆ Low Profile for Building Automation
- ◆ Class II Double Insulation
- ◆ High Efficiency (Up to 90%)
- ◆ ErP Compliant Design
- ◆ Low No Load Power Consumption
- ◆ Class 2 Models to UL1310
- ◆ SEMI F47 Compliant



Key Market Segments & Applications



Specifications		DRL10	DRL30	DRL60	DRL100
Input Voltage range	V	85 - 264VAC, 120 - 373VDC* (Withstands 300VAC for 5 seconds)			
Input Frequency	Hz	47 - 63Hz			
Inrush Current at 230VAC (typ) (Cold Start)	A	40A	50A	60A	60A
Power Factor (115/230VAC)		Meets IEC61000-3-2 Class A			
Input Current (110/230VAC)	A	0.56 / 0.42	0.58 / 0.45	0.5 / 0.43	0.5 / 0.47
Line & Load Regulation	-	0.18 / 0.12			
Ripple & Noise	-	See model selector			
Overcurrent Protection	-	See model selector			
Overvoltage Protection	-	>1.05% Hiccup with auto recovery			
Hold Up Time (typ) at 115VAC Input	ms	20ms	20ms	20ms	15ms
Efficiency	-	See model selector			
No Load Power Draw	W	<0.3W	<0.3W	<0.5W	<0.5W
LED Indicator	-	Green LED indicates DC is OK			
Operating Temperature (-25°C start-up)	°C	DRL10, 30, 60: -20 to +71°C, derate linearly to 60% load from 55 to 71°C DRL100: -20 to +71°C, derate linearly to 60% load from 51 to 71°C DRL100 (<115VAC): -20 to +71°C, derate linearly to 40% load from 40 to 71°C			
Storage Temperature	-	40 to +85°C			
Operating Humidity (non condensing)	%RH	5 - 95%RH			
Parallel Operation	-	Not available			
Series operation	-	Possible			
Cooling	-	Convection			
Withstand Voltage (For 1 minute)	VAC	Input to Output 3kVAC			
Isolation Resistance	MΩ	>100MΩ at 25°C, 70%RH & 500VDC			
Vibration (Operating)	-	IEC 60068-2-6, Sine Wave, 10-500Hz, 19.6m/s ² (2G peak) 10 min per cycle, 60 min for all X,Y,Z directions			
Shock	-	IEC 60068-2-27, Half Sine Wave, 39.2m/s ² (4G) for a duration of 22ms 3 shocks for each 3 directions, 9 times in total			
Safety Agency Certifications	-	UL508 Listed, UL/CSA/EN60950-1, UL1310 Class 2 (1), CE Mark			
Conducted & Radiated EMI	-	EN55022-B Conducted, EN55022-A Radiated			
Immunity	-	EN61000-4-2 (Ivl 3) , -3 (Ivl 3), -4 (Ivl 4), -5 (Ivl 3), -6 (Ivl 3), -8 (Ivl 4), -11 (class 3)			
Line Dip (200-240VAC)	-	SEMI F47 Compliant			
Weight (Typ)	g	65	120	200	280
Size (WxHxD)	in	0.71x3.58x2.19	1.42x3.58x2.19	2.13x3.58x2.19	2.83x3.58x2.19
	mm	18x91x55.6	36x91x55.6	54x91x55.6	72x91x55.6
Case material	-	Flame Retardant Polycarbonate (UL94 V-0)			
Warranty	yrs	Three years			

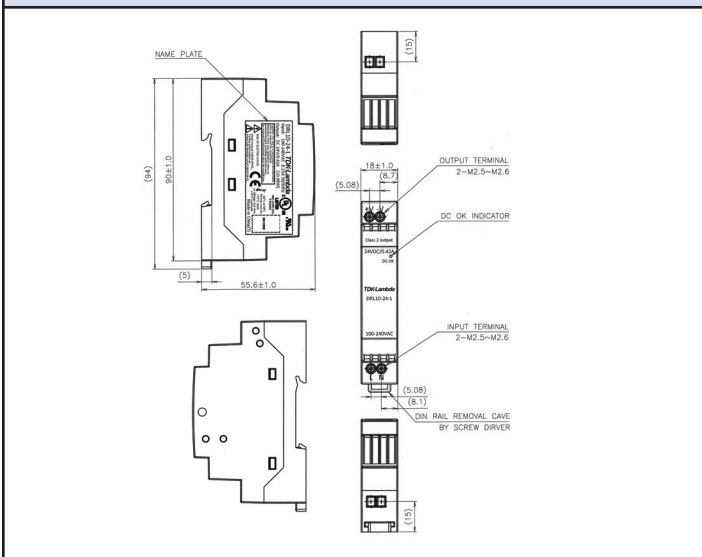
(1) NEC Class 2 in accordance with UL1310. Excludes DRL60-12-1 and DRL100-24-1 models

* Safety certified for AC input only

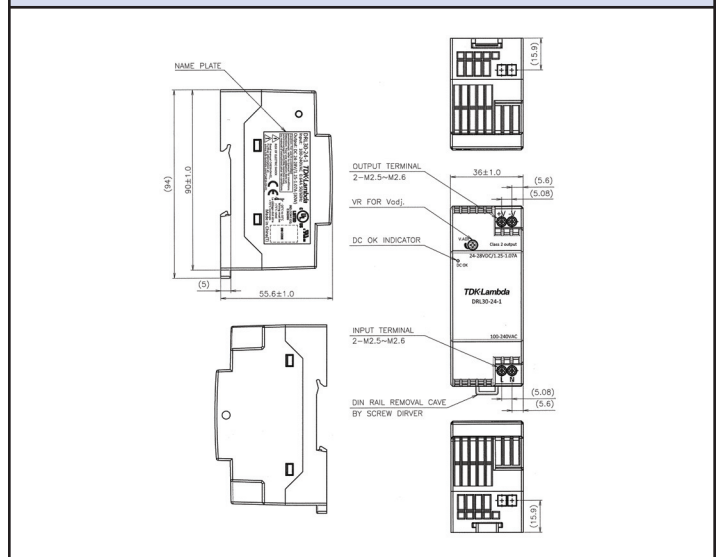
Output Ratings

Model	Output Voltage (V)	Adjust Range (V)	Max Current (A)	Max Power (W)	Load Reg (mV)	Line Reg (mV)	Ripple & Noise (mV)	Overvoltage V	Efficiency (%) (115/230VAC)
DRL10-12-1	12V	-	0.84A	10.08W	120mV	120mV	120mV	13.8 - 16.2V	85 / 85
DRL30-12-1	12V	12 - 15V	2.1A	25.2W	120mV	120mV	120mV	16 - 19V	87 / 88
DRL60-12-1	12V	12 - 15V	4.5A	54W	120mV	120mV	120mV	16 - 19V	87 / 87
DRL10-24-1	24V	-	0.42A	10W	240mV	240mV	240mV	29 - 35V	87 / 87
DRL30-24-1	24V	24 - 28V	1.25A	30W	240mV	240mV	240mV	29 - 35V	88 / 90
DRL60-24-1	24V	24 - 28V	2.5A	60W	240mV	240mV	240mV	29 - 35V	89 / 90
DRL100-24-1	24V	24 - 28V	4.2A	100.8W	240mV	240mV	240mV	29 - 35V	88 / 90

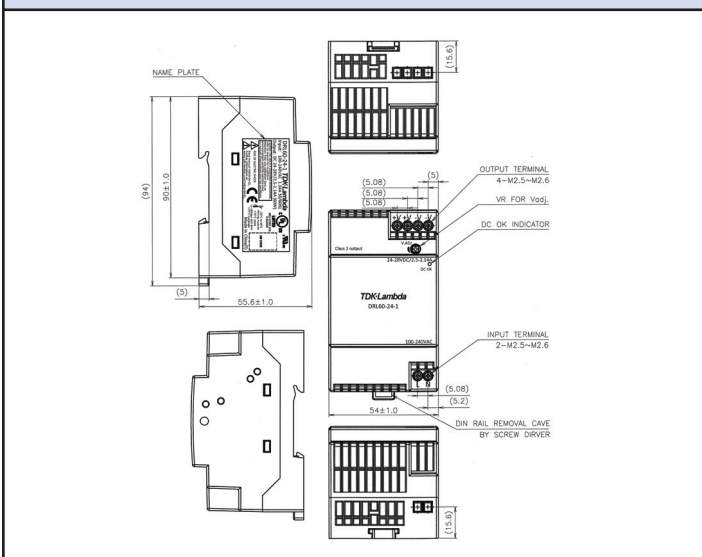
DRL10 Outline Drawing



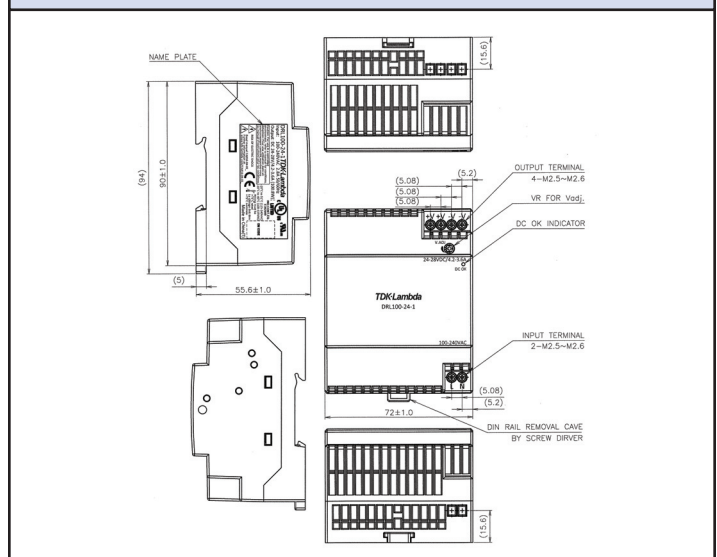
DRL30 Outline Drawing



DRL60 Outline Drawing



DRL100 Outline Drawing



For Additional Information, please visit us.tdk-lambda.com/lp/products/drl-series.htm