

10-100W Low Profile DIN Rail Mount Power Supplies



Industrial



Test



Semi-Fab



The low profile DRL DIN rail power supply series provide a reliable solution for many industrial applications and building automation. With double insulation and safety Class II input, connection to earth is not required. The NEC Class 2 compliant output, in accordance with UL 1310, allows operation where output currents are to be limited under fault conditions. Available in four power ranges, the DRL series provide a choice of 12, 15 and 24 output voltages.

Features	Benefits
• High Efficiency, up to 90%	• Lower Operating Costs, Improved Thermal Performance
• UL1310 Class 2 Compliant	• Suitable for Building Automation requiring NEC Class 2
• Low No Load Power Consumption	• Energy Saving
• Long E-Capacitor Life (>8 years @ 40°C, 75% Load, 230VAC)	• Long Field Life
• Class II, Wide Range Input (85-264VAC)	• Global Application, No Earth Required

Specification

Model		DRL10	DRL30	DRL60	DRL100
Input					
Input Voltage range	V	85 - 264VAC, 120 - 373VDC* (Withstands 300VAC for 5 seconds)			
Input Frequency	Hz				
Inrush Current at 230VAC (typ) (Cold Start)	A	40A	50A	60A	60A
Power Factor (115/230VAC)	-	0.56/0.42	0.6/0.4	0.5/0.43	0.5/0.43
Harmonics	-	Meets IEC61000-3-2 Class A			
Input Current (110/230VAC)	A	0.18 / 0.12A	0.6 / 0.4A	1.2 / 0.8A	2.0 / 1.1A
No Load Power Consumption	W	<0.3W	<0.3W	<0.5W	<0.5W
Hold Up Time (typ) at 115VAC Input	ms	20	20	20	15
Efficiency	-	See Model Selector Table			
Conducted & Radiated EMI	-	EN55032-B Conducted, EN55032-A Radiated			
Immunity	-	EN61000-4-2 (M 3) , -3 (M 3), -4 (M 4), -5 (M 3), -6 (M 3), -8 (M 4), -11 (class 3)			
Line Dip	-	SEMI-F47 (>200VAC input)			
Safety Agency Certifications	-	UL508 Listed, IEC/UL/CSA/EN62368-1, IEC/UL/CSA/EN60950-1, UL1310 Class 2 (1), CE Mark			
Output					
Line Regulation	mV	12 - 15V Outputs: 120mV; 24V Output: 240mV			
Load Regulation	mV	12 - 15V Outputs: 120mV; 24V Output: 240mV			
Ripple & Noise	mV	12 - 15V Outputs: 120mV; 24V Output: 240mV			
Minimum Load	-	No minimum load required			
Overcurrent Protection	-	>105% Hiccup mode with auto recovery			
Overvoltage Protection	V	See Model Selector Table			
Indicators & Signals	-	Green LED indicates DC is OK			
Parallel Operation	-	Not available			
Series operation	-	Possible, see installation manual			

Specification		DRL10	DRL30	DRL60	DRL100
Environmental					
Operating Temperature (-25°C start-up)	°C	DRL10, 30, 60: -20° to +71°, derate linearly from 100% to 60% load from 55° to 71° DRL100: -20° to +71°, derate linearly from 100% to 60% load from 51° to 71°			
Storage Temperature	°C	DRL100 (<115VAC): -20° to +71°, derate linearly from 100% to 40% load from 40° to 71° -40° to +85°			
Operating Humidity (non condensing)	%RH	5 - 95%RH			
Cooling	-	Convection			
Altitude	m	3,000m			
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			
Other					
Weight (Typ)	g	65	120	200	280
Size (WxHxD)	mm	18 x 91 x 55.6	36 x 91 x 55.6	54 x 91 x 55.6	72 x 91 x 55.6
Case Material	-	Flame Retardant Polycarbonate (UL94 V-0)			
DIN Rail type (if applicable)	-	Suitable for mounting on DIN Rail TS-35/7.5 or TS35/15			
MTBF - Telcordia SR-332 issue 3**	Hours	1,401,366	704,390	369,824	437,110
Warranty	yrs	3 years			

Notes

See website for detailed specifications, test methods and installation manuals

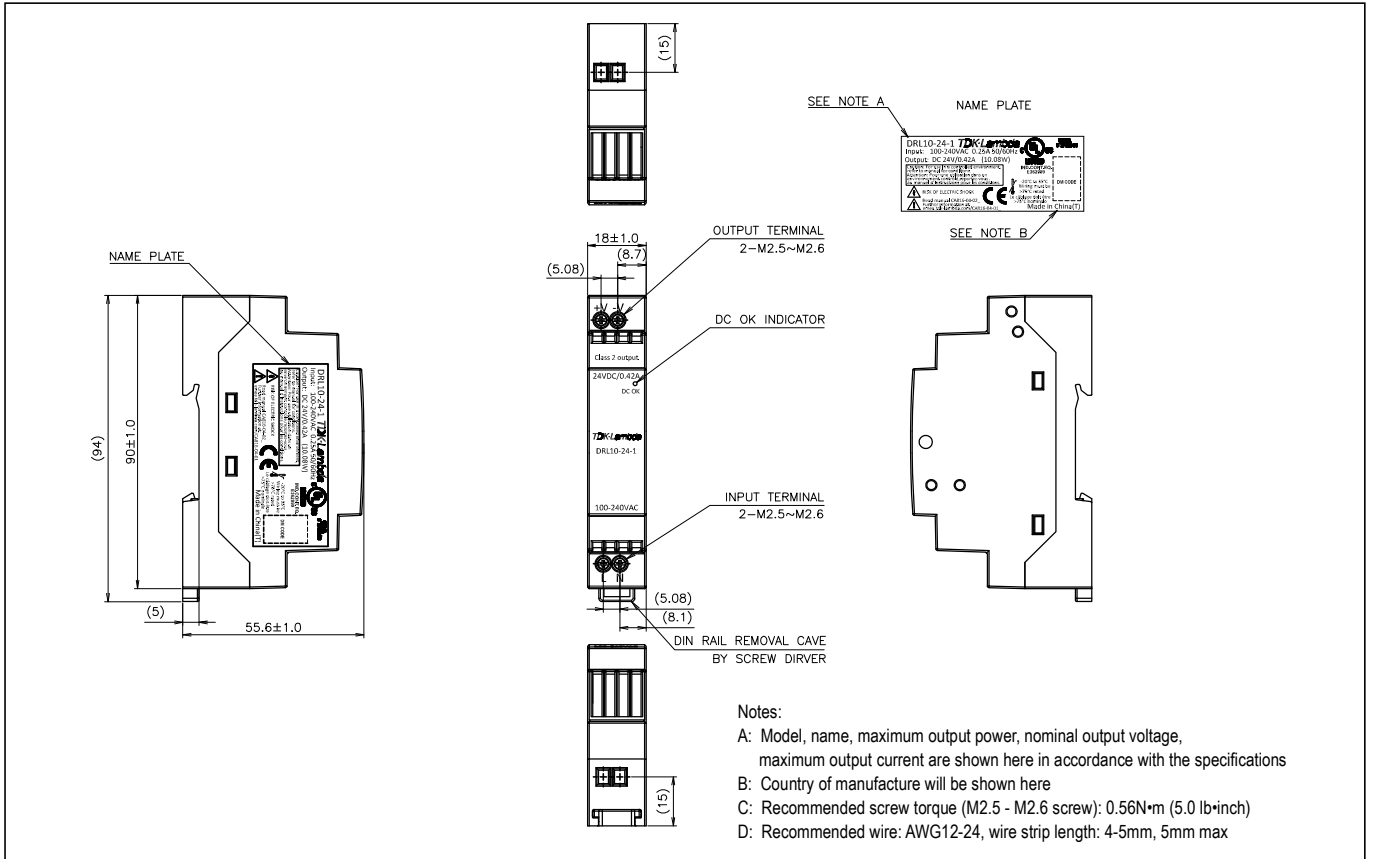
(1) NEC Class 2 in accordance with UL1310. Excludes DRL100-24-1 model

* Safety certified for AC input only

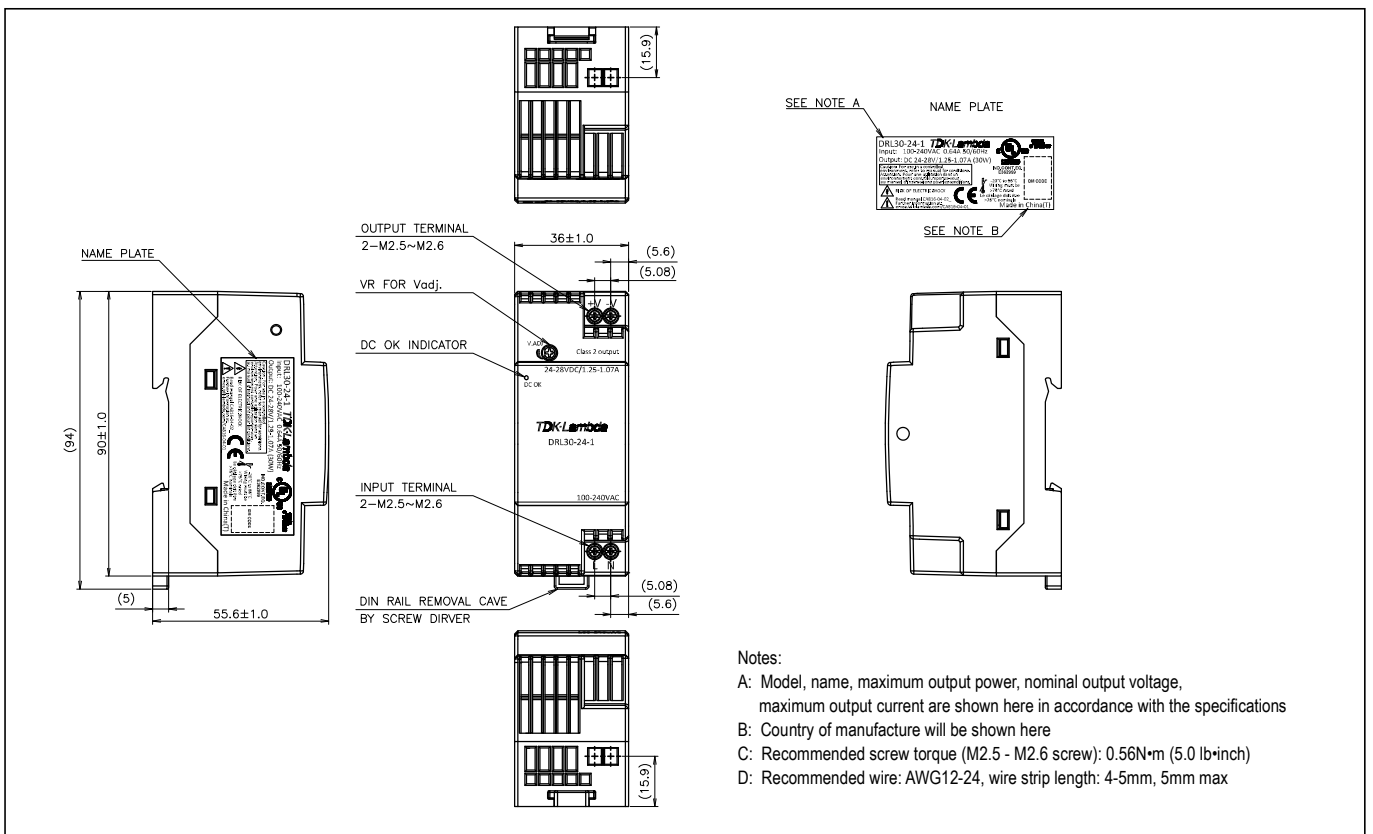
**24V output model, 55°C ambient, full load, 230VAC input

Model Selector						
Model	Output Voltage (V)	Adjust Range (V)	Max Current (A)	Max Power (W)	Efficiency (115/230VAC) (%)	UL1310 Class 2
DRL10-12-1	12V	-	0.84A	10.08W	85 / 85	Yes
DRL30-12-1	12V	12 - 15V	2.1A	25.2W	87 / 88	Yes
DRL60-12-1	12V	12 - 15V	4.5A	54W	87 / 87	Yes
DRL30-15-1	15V	12 - 15V	1.68A	25.2W	87 / 88	Yes
DRL60-15-1	15V	12 - 15V	3.6A	54W	87 / 87	Yes
DRL10-24-1	24V	-	0.42A	10W	87 / 87	Yes
DRL30-24-1	24V	24 - 28V	1.25A	30W	88 / 90	Yes
DRL60-24-1	24V	24 - 28V	2.5A	60W	89 / 90	Yes
DRL100-24-1	24V	24 - 28V	4.2A	100.8W	88 / 90	No
DRL100-24-1/C2	24V	-	3.67A	88W	88 / 90	Yes

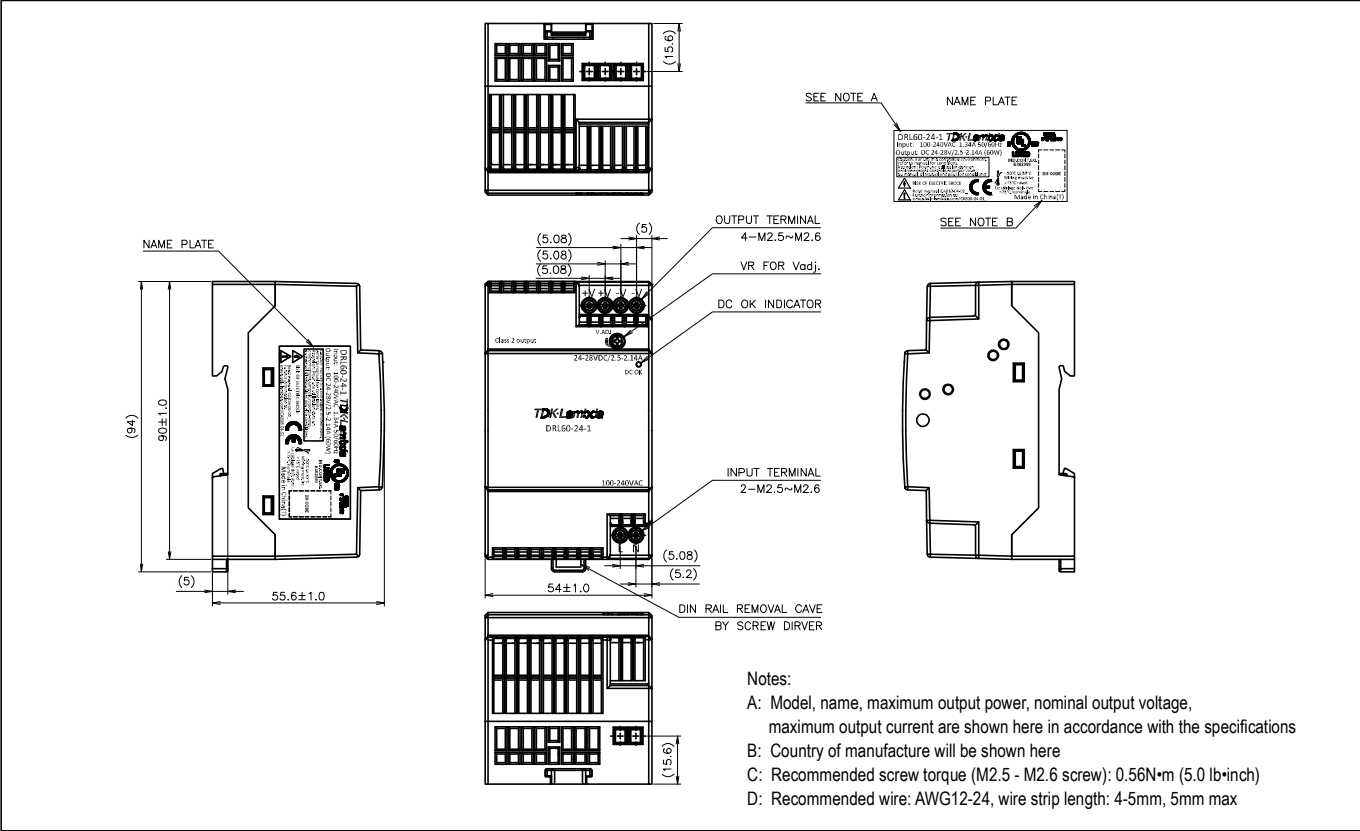
Outline Drawing DRL10-1



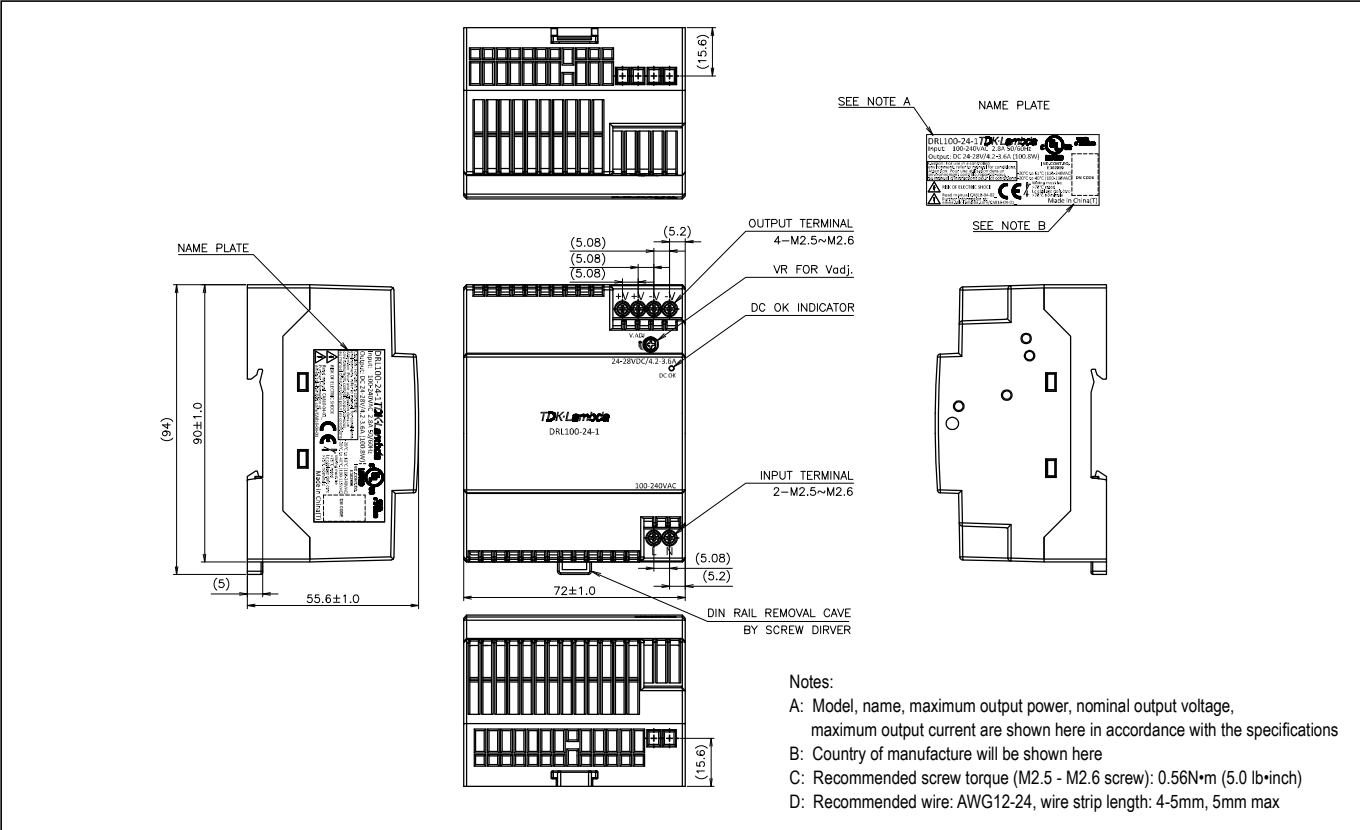
Outline Drawing DRL30-1



Outline Drawing DRL60-1



Outline Drawing DRL100-1





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