

15W to 100W Single Output DIN Rail Mount Power Supplies

Features	Benefits
• Compact Footprint	• Saves Space on Rail & Cabinet Cost
• Efficiency up 91%	• Cooler Applications - Improved Thermal Performance
• ErP Compliant Design	• Better "Environmental Footprint"



Specification		DRB15	DRB30	DRB50	DRB100
ITEMS					
AC input voltage range	VAC	85-264 (withstand 300VAC for 5 sec)			
Input frequency	Hz	47-63			
DC Input range	VDC	120 - 373			
Inrush cold (typ)	A	35A	40A	50A	40A
Power factor (typ) (110/230VAC)		0.55/0.42	0.56/0.46	0.6/0.5	0.98/0.93
Input current (typ)	A	0.27/0.17	0.55/0.33	0.9/0.55	1.2/0.6
Output voltage	V	24	12 / 24	5 / 12 / 15 / 24 / 48	24
Output current	A	0.63	2.5 / 1.25	6 / 3.4 / 3.4 / 2.1 / 1.05	4.2
Line regulation	mV	240	120 / 240	50 / 150 / 150 / 240 / 480	240
Load regulation	mV	240	120 / 240	50 / 150 / 150 / 240 / 480	240
Ripple & noise (max) (typ)	mV	20	40 / 30	30 / 20 / 20 / 30 / 40	30
Over current protection		Hiccup with auto recovery			
Over voltage protection (1)		5V: 115%-135%, 12V: 133%-156%, 24V: 125%-140%, 48V: 112%-142% (latch mode)			
Hold up time (230VAC)	ms	20 @100VAC, full load, 25°C			
Efficiency (typ) (230VAC)	%	90	88 / 90	80 / 90 / 90 / 91	91
Average efficiency (230VAC)	%	88	87/89	5V:n/a, 12V:88, 24V:87, 48V:87	87
No load power	W	<0.3	<0.3	<0.3	<0.5
Parallel operation		Not available			
Serial operation		Possible			
LED indicators		DC OK signal - green			
Operating temperature (2, 3, 5)	°C	-20°C to +70°C (see derating curves)			
Storage temperature	°C	-40°C to +85°C			
Operating humidity		5-95% RH (non condensing)			
Operating altitude	m	3,000			
Cooling (4)		Convection			
Withstand voltage		Input - Output : 3.0kVAC (20mA), Input - FG : 1.5kVAC (20mA) Output - FG : 500VAC (100mA) 1 min.			
Isolation resistance	MΩ	Input-FG, Input-Output & Output-FG: More than 100MΩ (500VDC) at 25°C and 70%RH			
Vibration		Non-operating, 10-55Hz(sweep for 1 min.): 19.6 m/s ² (2G) Constant, X,Y,Z each 1hr			
Shock		294m/s ² (30G) 11ms half sine			
Safety agency approvals (6) (7)		UL60950-1, CSA22.2 No.60950-1 (2nd edition), EN60950-1, UL508, UL1310 class 2			
Emissions		EN55022, CISPR22 class B			
Immunity		EN61000-4-2,-3,-4,-5,-6,-8,-11			
Weight (typ)	g	85	95	175	300
Size (W x H x D)	mm	18 x 75 x 90	21x75x90	30x75x90	45x75x100
Case material		Flame Retardant Polycarbonate (UL94 V-0)			
Warranty	yrs	3			

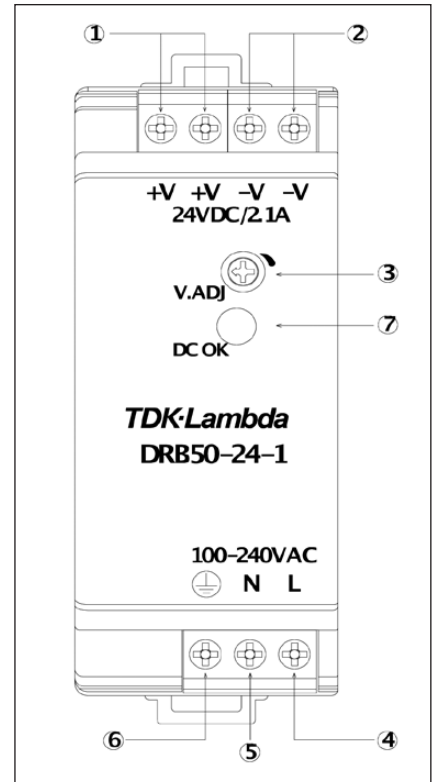
- Notes: 1 Output will shutdown, manual reset required (power off then on) 2 Refer to output derating curves 7 See model selector
 3 For UL508 operating temperature refers to surrounding air temperature 4 See installation instructions for mounting orientation
 5 Low temperature start up: -40°C typical 6 Consult Sales Office for use under DC input conditions

Model Selector

Model	Output Voltage	Output Adjust Range (V)	Max Output Current (A)	Max Output Power (W)	Efficiency at 115/230 VAC (%)
DRB15-24-1*	24	24-28	0.63	15.12	87/90
DRB30-12-1*	12	12-15	2.5	30	86/88
DRB30-24-1*	24	24-28	1.25	30	88/90
DRB50-5-1	5	5-5.5	6	30	79/80
DRB50-12-1*	12	12-15	3.4	51	88/90
DRB50-15-1*	15	12-15	3.4	51	88/90
DRB50-24-1*	24	24-28	2.1	50.4	88/90
DRB50-48-1*	48	48-52.8	1.05	50.4	90/91
DRB100-24-1	24	24-28	4.2	100.8	90/91

* Note: Output NEC Class 2 in accordance with UL1310

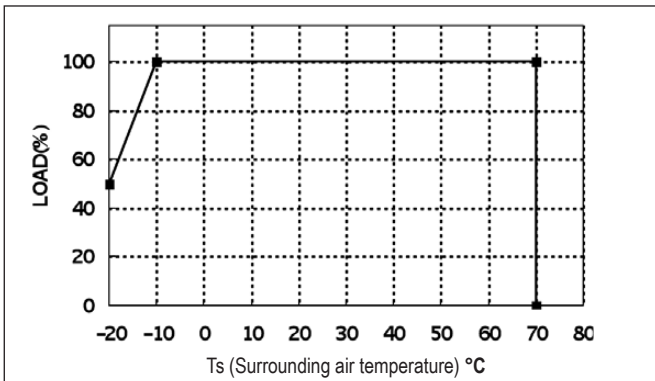
Terminal Explanation Example



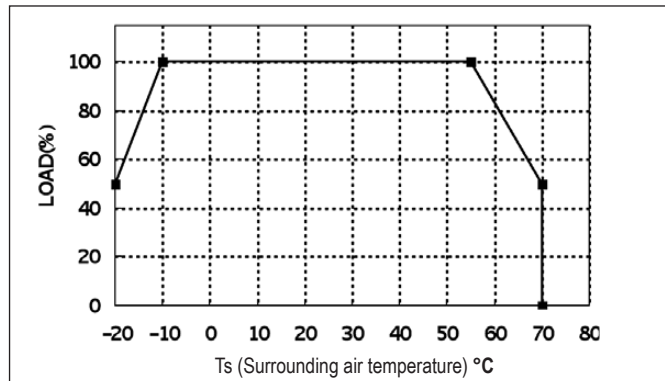
Connection

Pin	Description
1	+V: + Output terminal
2	-V: - Output terminal
3	V. adj: Output voltage adjust trimmer. The output voltage rises when the trimmer is turned clockwise
4	L: AC Input terminal live line (fuse in line)
5	N: AC Input terminal neutral line
6	E: Protective earth connect to safety ground of apparatus or equipment
7	DC OK: Green LED lights when output voltage on

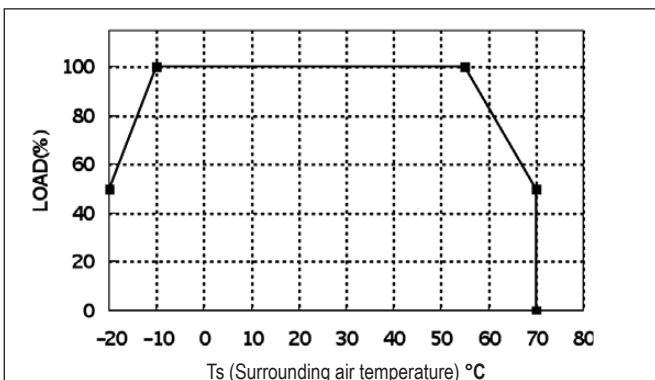
Output Derating DRB15 Series



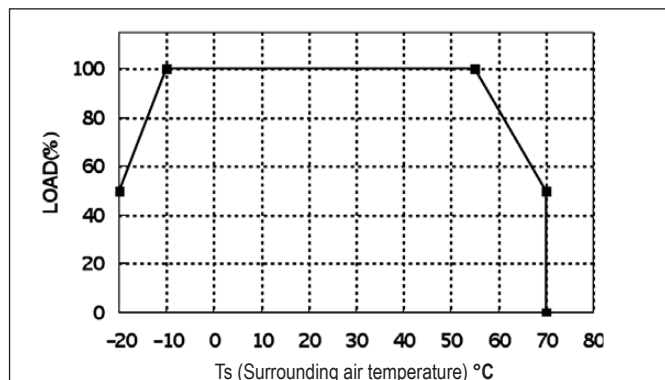
Output Derating DRB30 Series



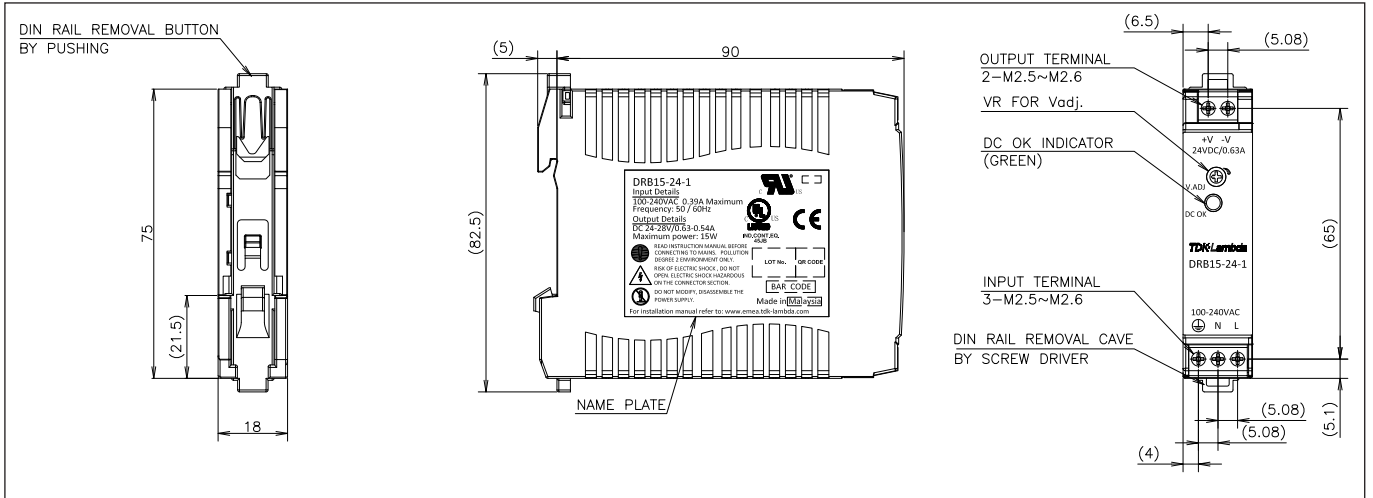
Output Derating DRB50 Series



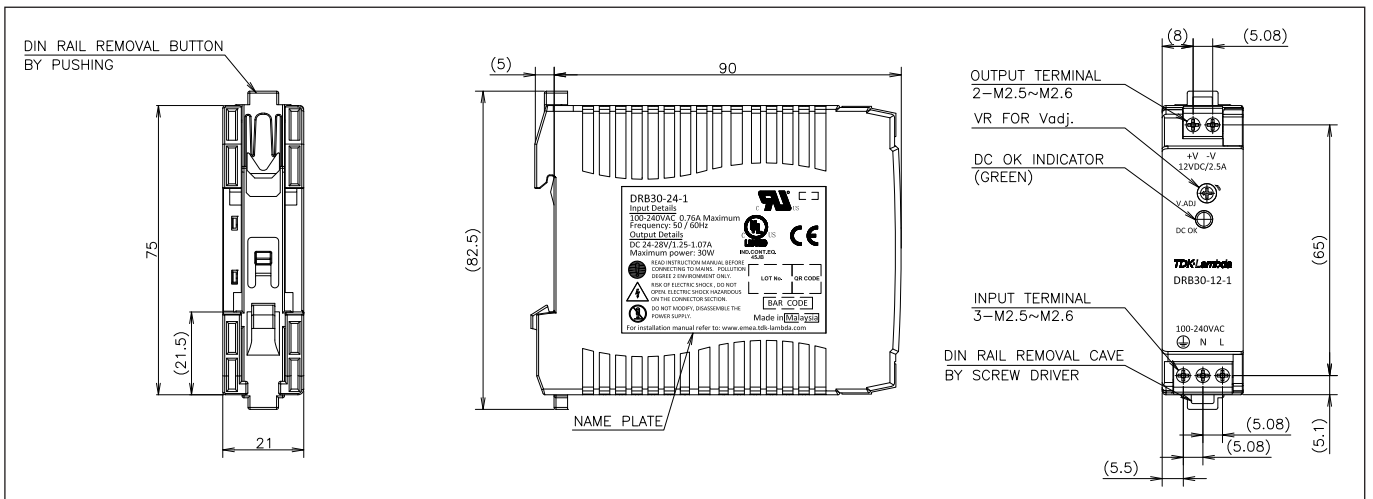
Output Derating DRB100 Series



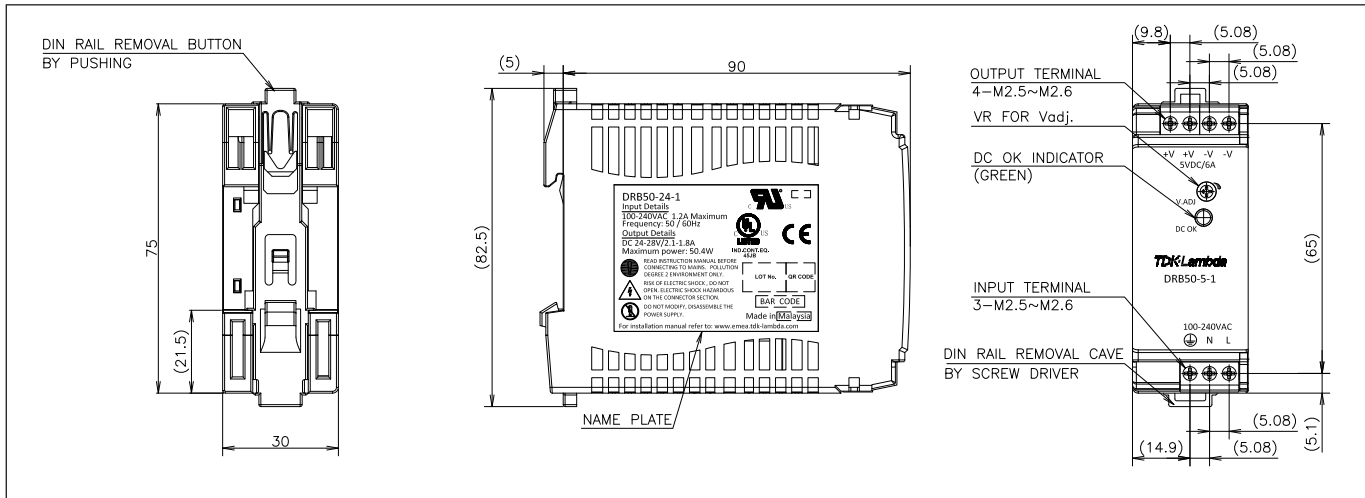
Outline Drawing DRB15 Series



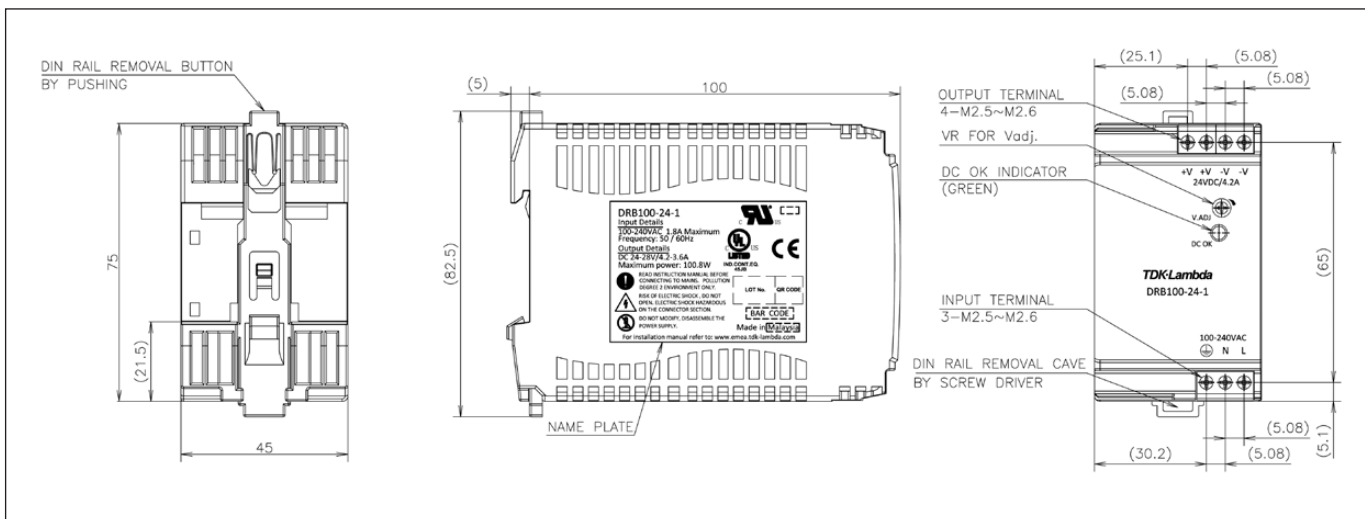
Outline Drawing DRB30 Series



Outline Drawing DRB50 Series



Outline Drawing DRB100 Series





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