Industrial Test Renewable Broadcast

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

Features	Benefits
• 150% Peak Power, 4 sec	• Better Start-up of Capacitive & Inductive Loads
• Efficiency up to 94%	• Cooler Applications - Improved Thermal Performance
• Ultra Compact Footprint	• Saves Space on Rail and Cabinet Cost
• ErP Referenced Design	• Better "Environmental Footprint"
• Remote On/Off	• For Intelligent System Implementation
• Remote Programming	• Wide Range of Applications



Specifications

MODELS		DRF-120-24-1	DRF-240-24-1	DRF-480-24-1
AC Input voltage range	VAC	85-264		
Input frequency	Hz	47-63		
Inrush cold (typ)	A	20		40
Power factor (typ) (115/230)	-	0.98/0.95	0.98/0.95	0.98/0.92
Input current (typ) (2)	A	1.2/0.6	2.4/1.2	4.7/2.5
Output voltage	V	24		
Output current	A	5	10	20
Peak output current (1)	A	7.5	15	30
Peak output power (1)	W	180	360	720
Line regulation	mV	<96		
Load regulation	mV	<240		
Ripple and noise (2 & 3)	mV	<240		
Over current protection (4)	-	>105% peak output current		
Over voltage protection (5)	V	30-35.5		
Hold up time (230VAC)	ms	20		
Efficiency (typ) (230VAC)	%	91	94	
Average efficiency (230VAC)	%	88.6	92.4	92
Standby input power (230VAC)	W	<0.5	<0.5	<0.75
Parallel operation (6)	-	Possible		
Series operation (6)	-	Possible		
LED indicators	-	DC OK signal - green (Vout > 80% rated output voltage): Peak power mode - red		
DC OK relay (24V model only)	-	Relay contact 30V/1A		
Operating temperature	°C	-25°C to +70°C(60 to 70°C derate linearly to 75% load)		
Storage temperature	°C	-40°C to +85°C		
Operating humidity	-	5-95% RH (non condensing)		
Cooling	-	Convection		
Withstand voltage	-	I/P to FG:1.5kVAC (20mA), I/P to O/P 3kVAC (20mA), O/P to FG: 500VAC (100mA) for 1 min		
Isolation resistance	MΩ	I/P to FG, IP to O/P and O/P to FG: >100MOhms (500VDC) at 25°C & 70%RH		
Vibration	-	Non-operating,10-55Hz(sweep for 1 min.):19.6 m/s^2 constant, X,Y,Z axis 1 hour each		
Shock	-	<196m/s^2		
Safety agency approvals (7)	-	IEC/EN/UL60950-1, CE, UL508 listed, ATEX, IEC Ex, GL		
Emissions	-	EN55022 Class B, CISPR22-B		
Immunity	-	EN61000-4-2,-3,-4,-5,-6,-8,-11		
Weight (typ)	g	600	900	1300
Size (HxWxD)	mm	36.5 x 123.4 x 115	49 x 123.4 x 115	82 x 123.4 x 115
Case material	-	Metal		
Warranty	yrs	5		

See Page 2 for Notes

Notes from page 1

1. Operating period at peak output current is 4 sec, max duty cycle<35% &< rated output power
2. At 115/230VAC, Ta = 25°C, nominal output voltage, rated output power
3. Ripple & noise is measured at 20MHz using 300mm twisted pair of load wires terminated with 0.1µF film cap & 47µF electrolytic cap
4. Constant current (CC) limit for >101% of peak output current. CC limit with auto recovery within 4 sec, unit will shutdown at >4sec
5. Output will shutdown, manual reset by mains cycle off/on or CNT on/off
6. Refer to instruction manual
7. Select /HL model for ATEX, IEC Ex and GL (Germanischer Lloyd) approvals (see optional models table)

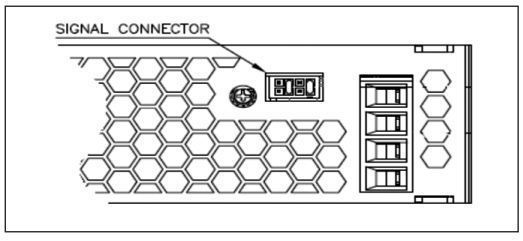
Model Selector

Model	Output Voltage	Output Adjust Range (V)	Max Output Current (A)	Max Output Power (W)	Efficiency at 115/230VAC (%)
DRF120-24-1	24	24-28	5	120	89/91
DRF240-24-1	24	24-28	10	240	92.5/94
DRF480-24-1	24	24-28	20	480	92.5/94

Signal Connector Pin Assignment

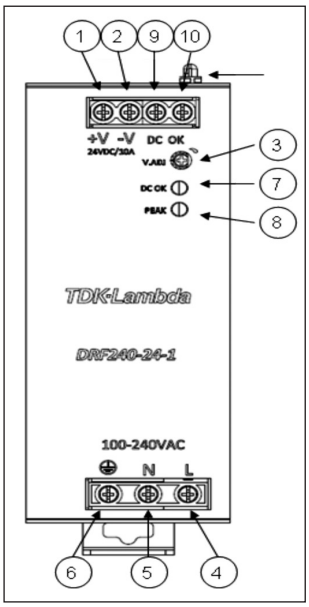
PIN	Function	Detail
1	CB	For parallel operation cut the link between pins 1 & 2 for droop mode current share
2	CB-COM	
3	N/C	No Connection
4	N/C	
5	CNT+	Remote ON/OFF control, when CNT+ is pulled to TTL low the power supply turns ON, otherwise it turns OFF
6	CNT-	
7	PV	Programming voltage range 5 - 6V presets the output to 24 - 28V
8	COMM	

DRF120 example*



***Signal connectors are found on the topside of the unit.**
See product outline drawings for locations

Terminal Explanation



Connection

1 +V: +Output terminal

2 –V: –Output terminal

3 V.ADJ: Output voltage adjust trimmer
The output voltage rises when a trimmer is turned clockwise

4 L: AC Input terminal. Live line (fuse in line)

5 N: AC Input terminal. Neutral line

6 –V: Protective Earth
Connect to safety ground of apparatus or equipment

7 DC OK:
Green LED lights when output voltage is > 80% of rated output voltage

8 PEAK:
Red LED lights when unit is in peak power mode

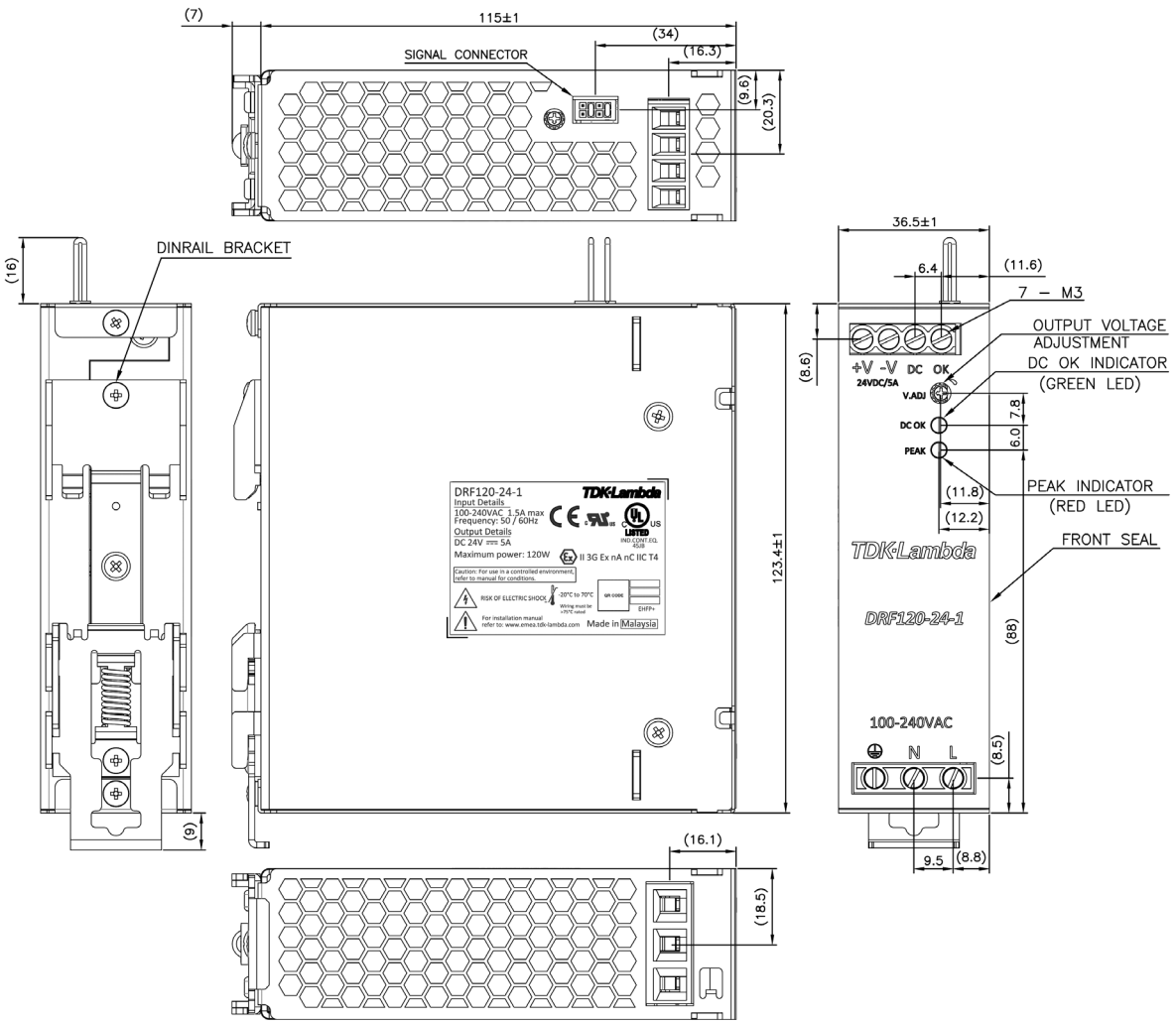
9 DC OK: Relay contact

10 DC OK: Relay contact

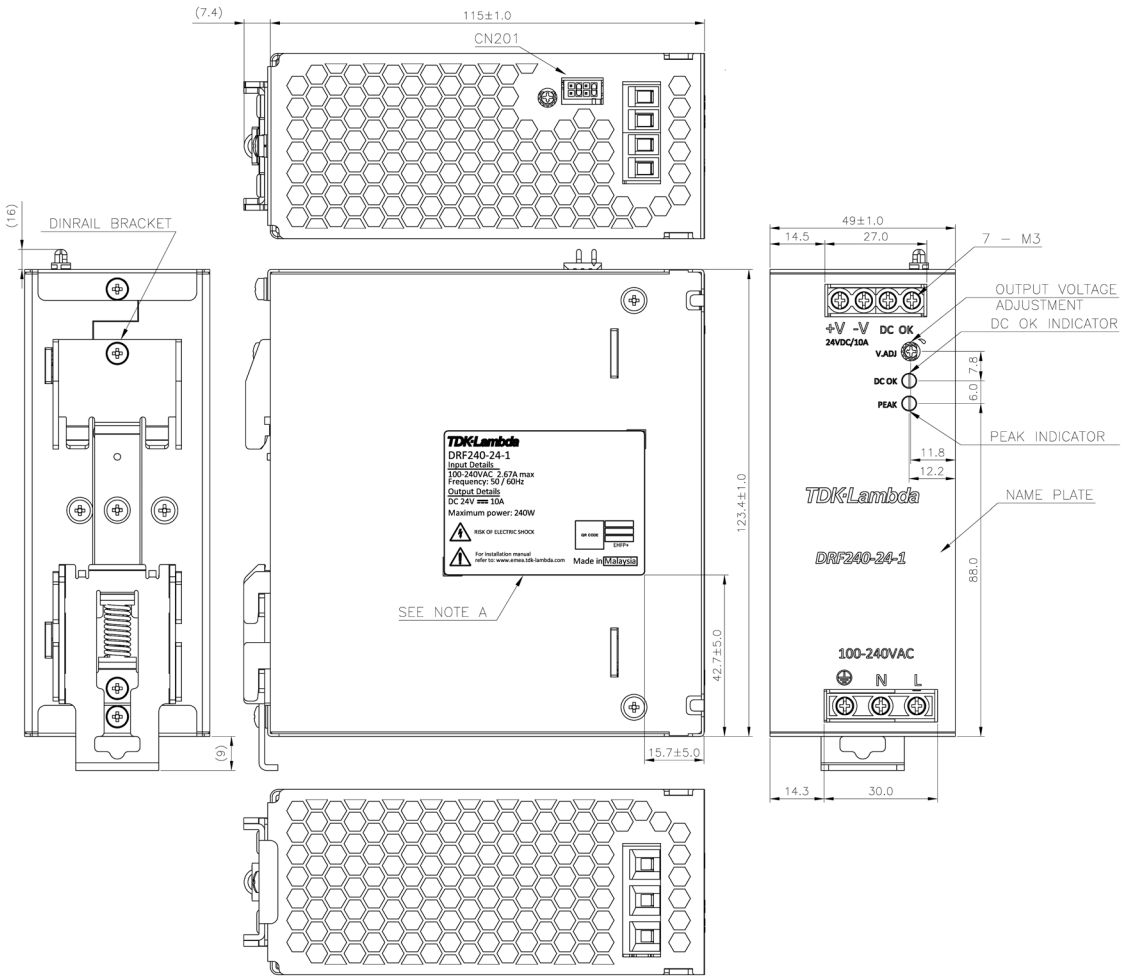
Optional Models

Suffix	Description
/HL	Conformally Coated (ATEX, IEC EX, GL)

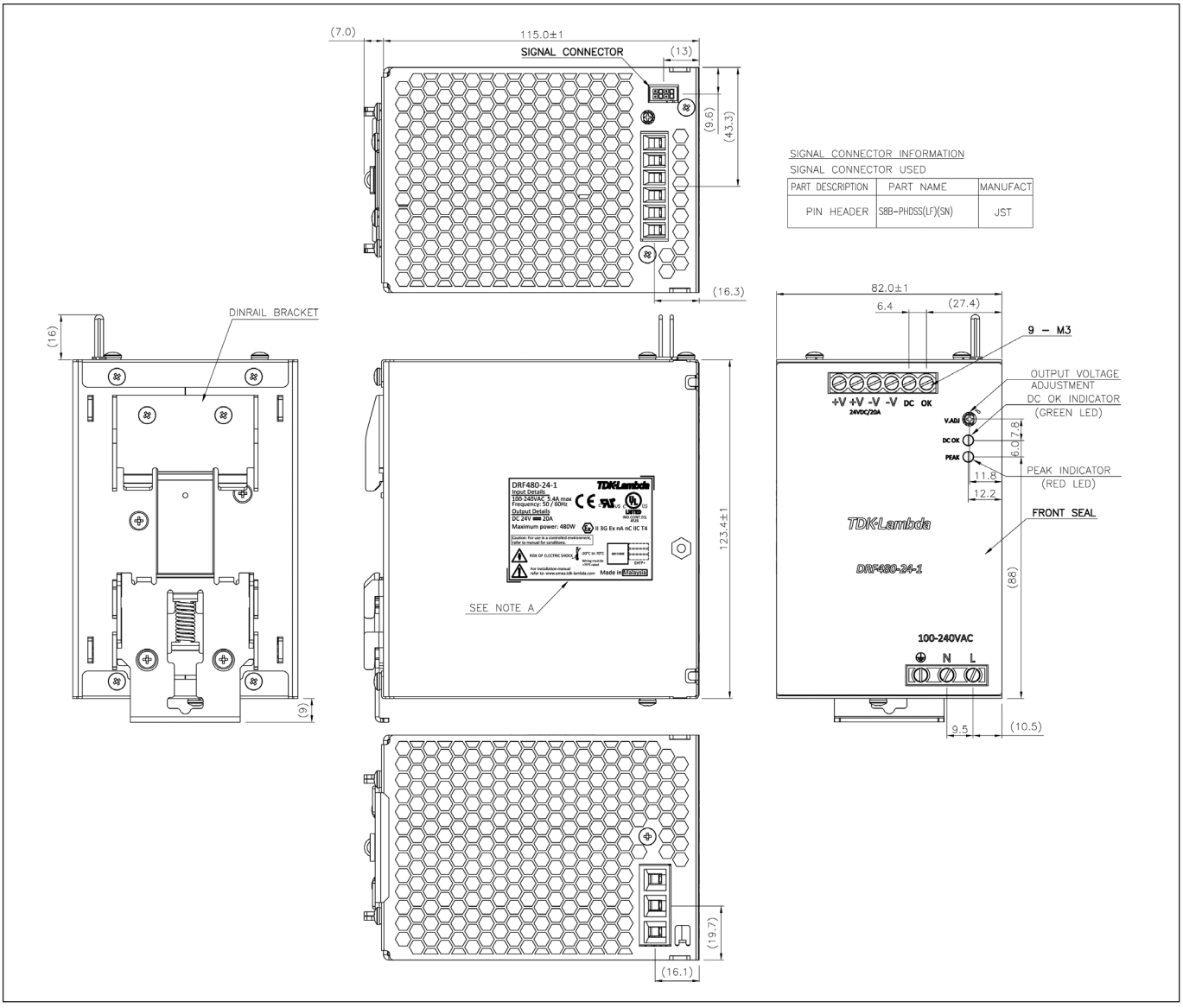
DRF120-24-1 Outline Drawing



DRF240-24-1 Outline Drawing



DRF480-24-1 Outline Drawing



SIGNAL CONNECTOR INFORMATION

SIGNAL CONNECTOR USED

PART DESCRIPTION	PART NAME	MANUFACT
PIN HEADER	S8B-PHDSS(LF)(SN)	JST



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ZAC des Delaches
CS 41077
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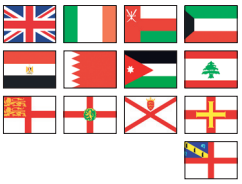
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