

## 120-480W, 24V Output DIN Rail Mount Power Supplies

### Features

- ◆ Very Compact Size
- ◆ High Efficiency (Up to 94%)
- ◆ 150% Peak Power Capability for 4s
- ◆ ErP Compliant Design
- ◆ Low Standby Power Draw
- ◆ Remote On/Off
- ◆ Remote Voltage Adjustment
- ◆ Hazardous Location Option (/HL)



### Key Market Segments & Applications



Specifications		DRF120	DRF240	DRF480
Input Voltage Range	V	85 - 264VAC, 125 - 370VDC*		
Input Frequency	Hz	47 - 63Hz		
Inrush Current (typ) (Cold Start)	A	20		
Power Factor (115/230VAC) (Meets EN61000-3-2)	-	0.98 / 0.95	0.98 / 0.95	0.98 / 0.92
Input Current (115/230VAC)	A	1.2 / 0.6	2.4 / 1.2	4.7 / 2.5
Line Regulation	mV	<96mV		
Load Regulation	mV	<240mV		
Ripple & Noise (1)	mV	<240mV		
Overcurrent Protection	-	>105% of peak current rating. Shutdown after 4 seconds		
Overvoltage Protection	-	30 - 35.5V. Cycle input voltage or remote on/off to reset		
Hold Up Time (230VAC input)	ms	> 20ms		
Efficiency (115 / 230VAC)	%	89 / 91	92.5 / 94	92.5 / 94
Standby Power Draw	W	<0.5W	<0.5W	<0.75W
LED Indicators	-	Green LED = DC is OK (>80% Nom). Red LED = Peak Load Operation		
DC OK relay	-	Relay contact 30V/1A		
Remote On / Off	-	When signal is low, the output is On		
Remote Voltage Adjust	-	5 - 6V voltage programs output from 24 - 28V		
Operating Temperature	°C	-25 to +70°C. Start up at -40°C (Derate linearly to 75% load above 60°C)		
Storage Temperature	°C	-40 to +85°C		
Operating Humidity (non condensing)	%RH	5 - 95%RH		
Parallel Operation	-	Droop Mode - Refer to Installation Manual		
Series Operation	-	Possible		
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)	-	10-55Hz (sweep for 1 min); 19.6m/s <sup>2</sup> (2G) Constant; X,Y,Z each 1 hour		
Shock	-	<196m/s <sup>2</sup>		
Safety Agency Certifications (2)	-	UL508 Listed, IEC/UL/EN60950-1†, CE Mark ATEX, IEC Ex, GL, Class 1 Div 2, Group A, B, C, D		
Conducted & Radiated EMI Immunity	-	EN55032-B Radiated & Conducted EN61000-4-2 (contact lvl 2, air lvl 3), -3 (lvl 3), -4 (lvl 3) -5 (norm mode lvl 3, com mode lvl 4), -6 (lvl 3), -8 (lvl 4), -11		
Weight (Typ)	g	600	900	1300
Size (WxHxD)	in	1.44 x 4.86 x 4.53	1.93 x 4.86 x 4.53	3.23 x 4.86 x 4.53
Mounts on TS-35/7.5 or -35/15 rail	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	Five years		

(1) See installation manual

(2) See options table

\*Safety certified for AC input only

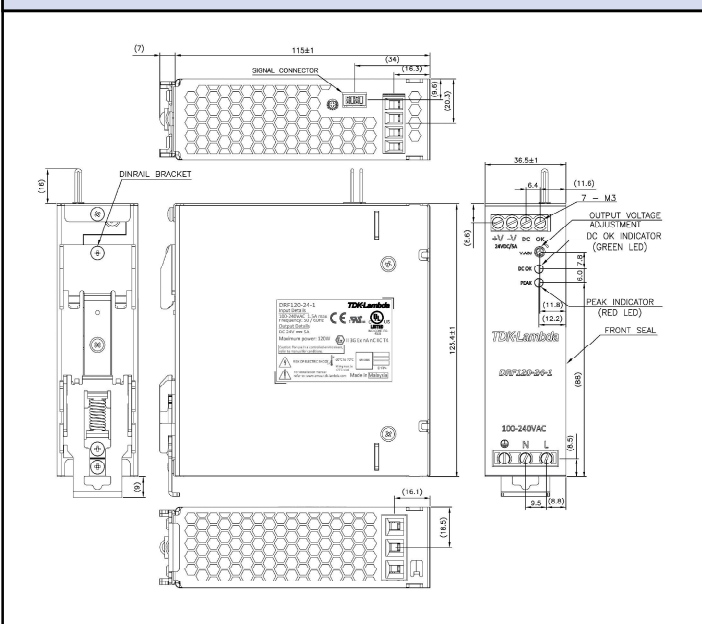
(3) Operating period at peak output current is 4 sec, max duty cycle <35% & < rated output power

† Certification to the IEC62368-1 standard in progress (2018)

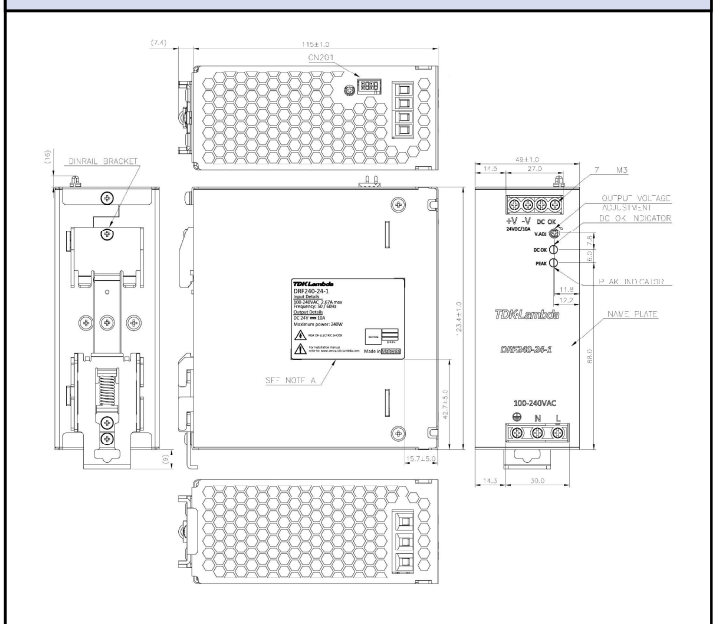
## Model Selector

Model	Output Voltage	Adjust Range	Max Current	Max Power	Peak Output Current (3)	Peak Output Power (3)
DRF120-24-1	24V	24 - 28V	5A	120W	7.5A	180W
DRF240-24-1	24V	24 - 28V	10A	240W	15A	360W
DRF480-24-1	24V	24 - 28V	20A	480W	30A	720W

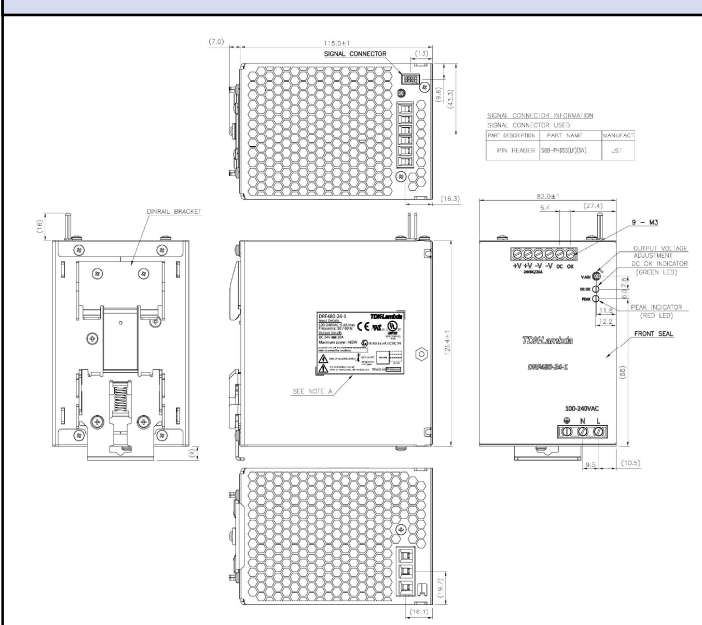
## Outline DRF120-24-1



## Outline DRF240-24-1



## Outline DRF480-24-1



## Options

Suffix	Description
/HL	ATEX, IEC EX, GL Certification (Incl pcb coating) Class 1 Div 2, Group A, B, C, D

For Additional Information, please visit [us.tdk-lambda.com/lp/products/dr-f-series.htm](http://us.tdk-lambda.com/lp/products/dr-f-series.htm)

