

# AC-DC DIN Rail

## 50-200 Watts DRF Series



## THE XPERTS IN POWER

- Input 187-528 VAC 1Ø
- Adjustable Output
- High Peak Current Capability
- Overvoltage Protection
- Overcurrent Protection
- International Safety Approvals

### Specification

#### Input

- Input Voltage* • 187-528 VAC single phase (264-746 DC)
- Input Frequency* • 47-63 Hz
- Input Current* • 1.1 A max @ 240 VAC
- Inrush Current* • 25/50 A typical @ 240/480 VAC cold start +25 °C
- Power Factor* • 0.98/0.93 typical at 240/480 VAC for DRF200
- Leakage Current* • 0.75 mA max (1.5 mA DRF200)

#### Output

- Output Voltage* • 24 VDC nominal
- Output Voltage Adjustment* • ±10%
- Minimum Load* • No minimum load required
- Start Up Time* • 800 ms max with 240 VAC
- Hold Up Time* • 10 ms (100 ms DRF200) typical at 240 VAC & 100% load
- Drift* • ±100 mV max
- Line Regulation* • 96 mV max
- Load Regulation* • 150 mV 0-100% load, 480 mV max 0-peak load
- Ripple & Noise* • 680 mV pk-pk max 20 MHz bandwidth & 100% load
- Overvoltage Protection* • 115-150% of nominal rating, recycle input to reset 240 VAC & 100% load
- Overcurrent Protection* • >105% of peak current, auto recovery
- Temperature Coefficient* • 0.04%/°C
- Thermal Protection* • Recycle input to reset

#### General

- Efficiency* • 82% typical at 240 VAC
- Isolation* • 3000 VAC Input to Output  
2000 VAC Input to Ground  
500 VAC Output to Ground
- Switching Frequency* • 120 kHz PWM, 50 kHz PFC (DRF200)

#### Environmental

- Operating Temperature* • -10 °C to +70 °C (+60 °C DRF200)  
Contact Technical Sales for derating
- Storage Temperature* • -20 °C to +75 °C
- Humidity* • 20-90% non condensing
- Shock* • 20 G, 11 ms once on the X axis
- Vibration* • 2 G 10-55 Hz 3 axis

#### EMC & Safety

- Emissions* • EN55022 Level A conducted  
EN55022 Level A radiated
- ESD Susceptibility* • EN61000-4-2 Level 2 (Level 4 DRF200)
- Radiated Susceptibility* • EN61000-4-3 Level 3
- EFT/Burst* • EN61000-4-4 Level 4
- Surge* • EN61000-4-5 Level 3
- Safety Approvals* • UL1950, cUL, EN60950, EN50178

# OUTPUT VOLTAGE & CURRENT RATINGS

DRF

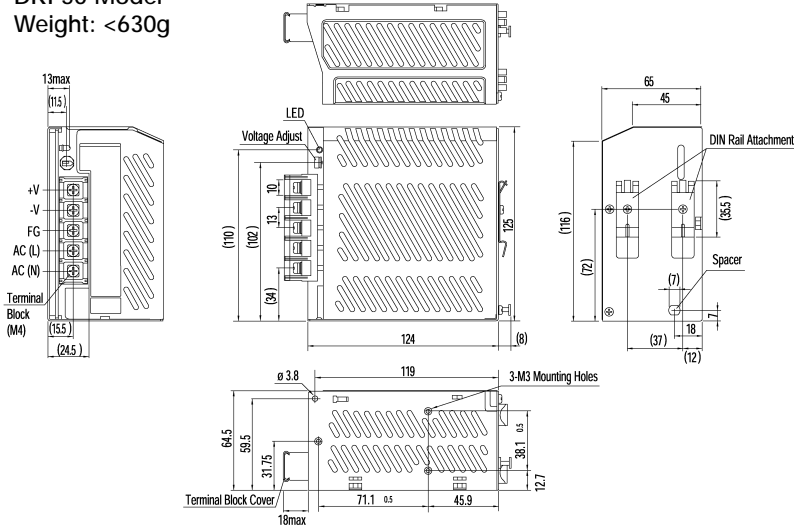
Output Voltage	Output Current		Model Number
	Nominal	Peak(1)	
21.6 - 26.4 V	2.1 A	6.7 A	DRF50US24-N1
21.6 - 26.4 V	3.1 A	10.0 A	DRF75US24-N1
21.6 - 26.4 V	8.4 A	42.0 A	DRF200PS24-N1

**Notes**

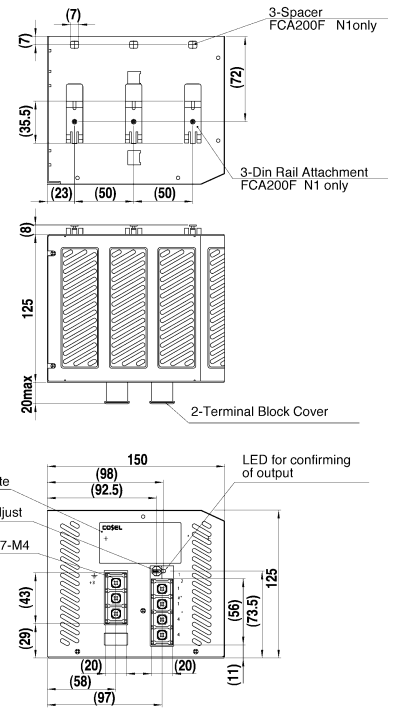
1. Peak current for 150 ms in every 30 second period. Only available with an input voltage of 240 to 528 VAC.

## Mechanical Details

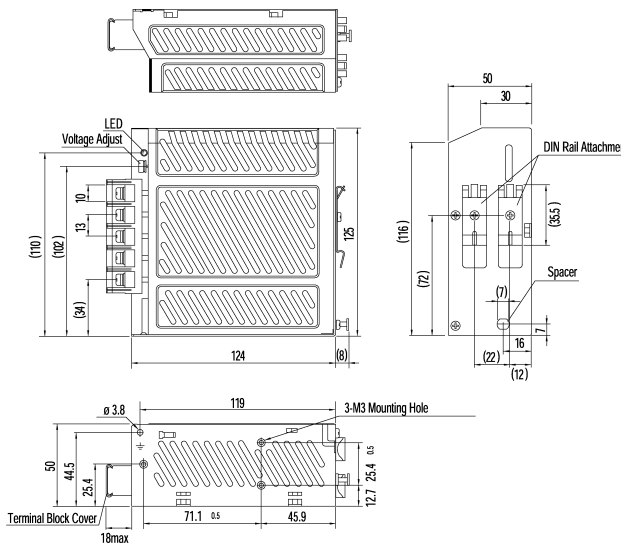
**DRF50 Model**  
Weight: <630g



**DRF200 Model**  
Weight: <1700g



**DRF75 Model**  
Weight: <750g



## Peak Loading Curves

NOTE: ( ) for DRF200 models

