

# DIN RAIL POWER SUPPLIES

## DR Series



DR-240-24V shown smaller than actual size.

- Universal AC Input (85 to 264 Vac)
- DC Compatible Input (120 to 370 Vdc)
- Protections: Short Circuit/ Overload/ Over Voltage/Over Temperature
- Cooling By Free Air Convection
- UL 508 (Industrial Control Equipment) Approved
- CE Marked
- LED Indicator for Power On
- 100% Full Load Burn-In Test
- Built-In EMI Filter and Low Ripple Noise

The DR series of power supplies provides a reliable DC power source for any industrial control system. These economical and reliable power supplies for industrial devices (PLCs, stepper drives, sensors, switches) are designed for use in harsh industrial environments. Combining rugged, compact enclosures, incorporating all international standards and approvals, and offering short-circuit, over-load, over-voltage, and over-temperature protection, the DR series makes your power supply choice a simple one. These high quality power supplies have passed a 100% full load burn-in test, and are UL/CUL listed, TUV/CB certified, and CE marked. Models are available with output ratings from 75 to 240 W, with 24 Vdc output. Customers can choose from a full range of input voltages (85 to 264 Vac and 120 to 370 Vdc compatible) making the DR series unbeatable.



DR-120-24V shown smaller than actual size.

## SPECIFICATIONS

**Nominal Output Voltage:** 24V

**Rated Output Current:**

**DR-75-24:** 3.2 A

**DR-120-24:** 5.0 A

**DR-240-24:** 10.0 A

**Rated Output Power:**

**DR-75-24:** 76.8 W

**DR-120-24:** 120 W

**DR-240-24:** 240 W

**Efficiency (Typical):**

**DR-75-24:** 80%

**DR-120-24, DR-240-24:** 84%

**Input Voltage Range:**

**DR-75-24, DR-240-24:**

85 to 264 Vac (47 to 63 Hz) or  
120 to 370 Vdc

**DR-120-24:** 88 to 132 Vac/

176 to 364 Vac (by switch)

(47 to 63 Hz) or 248 to 370 Vdc

**Input Current (Typical):**

**DR-75-24:** 1.6 A @ 115V,

0.96 A @ 230V

**DR-120-24:** 2.6 A @ 115V,

1.6 A @ 230V

**DR-240-24:** 2.8 A @ 115V,

1.4 A @ 230V

**Inrush Current (Typical):**

**DR-75-24:** 20 A @ 115 Vac,

40 A @ 230 Vac, cold start

**DR-120-24:** 20 A @ 115 Vac,

40 A @ 230 Vac, cold start

**DR-240-24:** 27 A @ 115 Vac,

45 A @ 230 Vac, cold start

**Output Voltage Range:** 24 to 28V

**Ripple and Noise:**

**DR-75-24:** 150 mV p-p

**DR-120-24, DR-240-24:** 80 mV p-p

**Line Regulation:** 0.5%

**Load Regulation:** 1.0%

**Temperature Coefficient:** 0.03%/°C  
(0 to 50°C)

**Over Load Protection:** 105 to 150%  
rated output power, constant current  
limiting, auto recovery

**Over Voltage Protection:**

**DR-75-24:** 121 to 141% rated  
output voltage

**DR-120-24:** 120 to 140% rated  
output voltage

**DR-240-24:** 30 to 36V

**Over Temp Protection:**

**DR-75-24:** 85°C, ±5°C

**DR-120-24:** 90°C, ±5°C

**DR-240-24:** 100°C, ±5°C

**Hold-Up Time (Typical):**

**DR-75-24:** 60 ms/230 Vac, 12 ms/  
115 Vac at full load

**DR-120-24:** 36 ms/230 Vac, 32 ms/  
115 Vac at full load

**DR-240-24:** 24 ms/230 Vac, 24 ms/  
115 Vac at full load



DR-240-24V shown smaller than actual size.

**Leakage Current:**

**DR-75-24:** <1 mA @ 240 Vac

**DR-120-24, DR-240-24:** <3.5 mA @  
240 Vac

**Operating Temperature:**

**DR-75-24, DR-120-24:** -10 to 60°C  
(14 to 140°F)

**DR-240-24:** -10 to 70°C  
(14 to 158°F)

**Operating Humidity:** 20 to 90% RH  
(non-condensing)

**Storage Temperature:** -20 to 85°C  
(-4 to 185°F)

**Storage Humidity:** 10 to 95% RH  
(non-condensing)

**Vibration:** 10 to 500 Hz, 2G 10 min/  
1 cycle, period for 60 min each along  
X, Y, Z axes; mounting: compliance to  
IEC60068-2-6

**Safety:**

**DR-75-24:** UL508, TUV EN60950-1  
approved

**DR-120-24, DR-240-24:** UL508,  
UL60950-1, TUV EN60950-1  
approved

**Withstand Voltage:** I/P-O/P: 3K Vac,  
I/P-FG: 1.5K Vac, O/P-FG: 0.5K Vac  
(1 minute)

**Isolation Resistance:** I/P-O/P, I/P-FG,  
O/P-FG: 100M Ω/500 Vdc

**EMI:** Compliance to EN55011, EN55022  
(CISPR22) Class B

**Harmonic Current:** Compliance to  
EN61000-3-2, -3

**EMS Immunity:** Compliance to  
EN61000-4-2,3,4,5,6,8,11, ENV50204,  
EN55024, EN61000-6-2 (EN50082-2),  
heavy industry level, criteria A

**Weight (Typical):**

**DR-75-24:** 600 g (21.075 oz)

**DR-120-24:** 790 g (27.75 oz)

**DR-240-24:** 1200 g (42.33 oz)

**Dimensions:**

**DR-75-24:**  
55.5 W x 125.2 H x 100 mm D  
(2.185 x 4.93 x 3.94")

**DR-120-24:**  
65.5 W x 125.2 H x 100 mm D  
(2.58 x 4.93 x 3.94")

**DR-240-24:**  
125.5 W x 125.2 H x 100 mm D  
(4.94 x 4.93 x 3.94")

## To Order

MODEL NO.	DESCRIPTION
<b>DR-75-24V</b>	DIN rail power supply, 24 Vdc, 3.125 A
<b>DR-120-24V</b>	DIN rail power supply, 24 Vdc, 5 A
<b>DR-240-24V</b>	DIN rail power supply, 24 Vdc, 10 A

**Ordering Example:** DR-75-24V, DIN rail power supply, 24 Vdc, 3.125 A.