HDR Power Supply Series

60 W small form factor power supplies for DIN-rail mounted products

Features and Benefits

- DIN-rail mounted power supply
- Slim form factor that is ideal for cabinet installation
- Universal AC power input
- High power conversion efficiency

Certifications

Introduction

The HDR-60-24 Power Supply Series has been specifically designed for industrial applications. The small form factor makes it ideal for installation in limited spaces, and the devices have been built to operate between -30 to 70°C. The devices have a plastic housing and support AC input ranges from 85 to 264 VAC and conform to the EN 61000-3-2 standard, which the European Union uses to regulate harmonic current. Furthermore, the devices are equipped with constant current mode for overload protection.

Specifications

Output Power Parameters	
Wattage	60 W
Voltage	24 VDC
Current Rating	0 to 2.5 A
Ripple and Noise	150 mVp-p
Voltage Adjustment Range	21.6 to 29 VDC
Setup/Rise Time at Full Load	500 ms, 50 ms at 230 VAC 500 ms, 50 ms at 115 VAC
Typical Hold Up Time at Full Load	30 ms at 230 VAC 12 ms at 115 VAC

Input Power Parameters	
Voltage Range	100 to 240 VAC (50 to 60 Hz) 120 to 370 VDC
Typical Efficiency	90%
Typical Current	0.8 A @ 230 VAC, 1.2 A @ 115 VAC
Inrush Current (cold start)	60 A @ 230 VAC, 30 A @ 115 VAC

Overload Protection

Rated Output Power	105 to 160%
Protection Type	Constant current limiting, recovers automatically after fault condition is removed

Overvoltage Protection

Overvoltage Range	30 to 36 V
Protection Type	Shut down operating voltage, repower on to recover

Physical Characteristics

Housing	Plastic
Dimensions	52.5 x 90 x 54.5 mm (2.07 x 3.54 x 2.15 in)
Weight	230 g (0.5 lb)

Environmental Limits

Operating Temperature	-30 to 70°C (-22 to 158°F)
Max. Operating Temperature at Full Load	45°C (113°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	20 to 90% (non-condensing)

Standards and Certifications

Safety	UL 508, EN 62368-1, UL 62368-1, IEC 62368-1
EMC	EN 55032/24, EN 61000-3-2 Class A, EN 61000-3-3
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 6000 MHz: 10 V/m IEC 61000-4-4 EFT: Power: 2 kV IEC 61000-4-5 Surge: Power: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF IEC 61000-4-11

MTBF

Time	927,560 hrs
Standards	MIL-HDBK-217F

Warranty

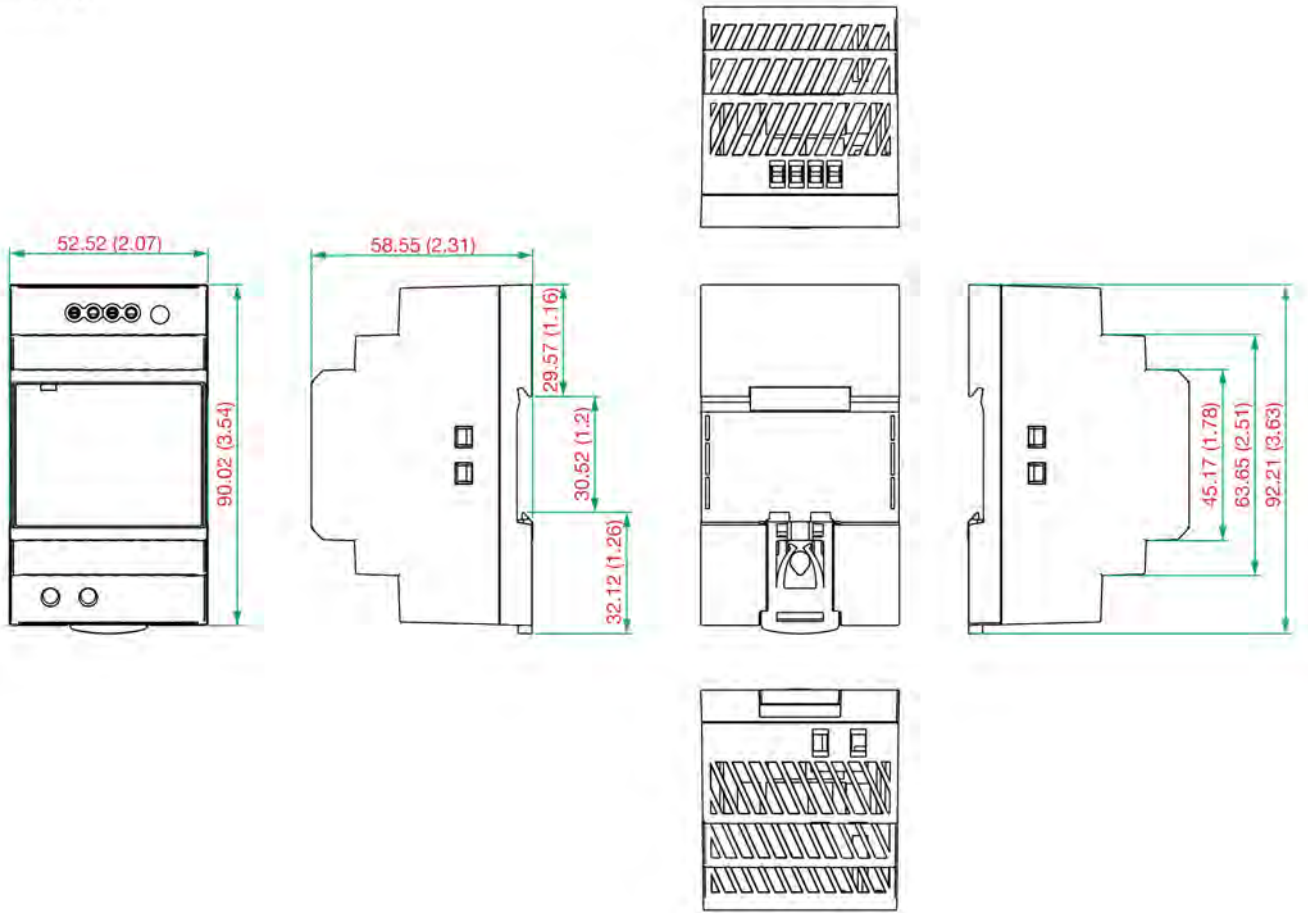
Warranty Period	3 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x HDR Power Supply Series power supply

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	Input Voltage	Wattage	Weight (Packaged)	Package Dimensions
HDR-60-24	85 to 264 VAC 47 to 63 Hz 120 to 370 VDC	60 W	267 g (0.59 lb)	58 x 98 x 66 mm (2.23 x 3.86 x 2.60 in)

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