VXT-EPS-75-24

1U Ultra-Thin Enclosed Switching Power Supply

24V DC | 3.2A | 76.8W

Product Overview

The VXT-EPS-75-24 is a 76.8W single output enclosed switching power supply with a 1U ultra-thin 30mm low-profile design. With universal AC input (85-264VAC), metal mesh housing for superior heat dissipation, and fanless operation, it is ideal for industrial automation, LED lighting, and embedded system applications.

Key Features

✓ Universal AC input: 85-264VAC (47-63Hz)
✓ DC input capable (120-373VDC)
✓ High efficiency up to 89% (typical)
✓ 1U ultra-thin profile: only 30mm height
✓ Metal mesh housing for superior heat dissipation
✓ Fanless operation: -30°C to +70°C
✓ Ultra-low no-load consumption (< 0.3W)
✓ Overload, overvoltage & short circuit protection
✓ 5G vibration resistance
✓ Output voltage adjustable via trim pot (±10%)
✓ Compact size: 99 x 97 x 30 mm

Applications

Industrial Automation • LED Lighting & Signage • CCTV & Security Systems • Embedded Systems • PLC & Control Panels • CNC Machines • Packaging Machinery • Building Automation • Telecom Equipment

Technical Specifications

OUTPUT	
DC Output Voltage	24V DC
Rated Output Current	3.2A
Rated Output Power	76.8W
Ripple & Noise (max)	< 150mV p-p
Voltage Accuracy	±1%
Output Voltage Adj. Range	±10% (via trim pot)
Load Regulation	±0.5%
Line Regulation	±0.5%
Start Up Time	< 1000ms @ 230VAC / < 2000ms @ 115VAC (full load)
Hold Up Time (typical)	30ms @ 230VAC / 12ms @ 115VAC (full load)
INPUT	
Input Voltage Range	85 - 264VAC / 120 - 373VDC
Input Frequency	47 - 63 Hz

Input Current (typical)	< 1.4A @ 115VAC / < 0.85A @ 230VAC
Efficiency (typical)	> 89% @ 230VAC full load
Inrush Current	Cold start: 65A @ 230VAC

PROTECTION

Overload Protection	110% - 130% rated output, hiccup mode, auto recovery
Overvoltage Protection	115% - 145% rated output, output shuts down, auto restart and recovery
Short Circuit Protection	Output voltage drops to undervoltage point, output closes

ENVIRONMENT

Operating Temperature	-30°C to +70°C
Operating Humidity	20% - 90% RH (non-condensing)
Storage Temperature	-40°C to +85°C
Storage Humidity	10% - 95% RH (non-condensing)

SAFETY & EMC

Withstand Voltage	I/P - O/P: 4kVAC / I/P - FG: 2kVAC / O/P - FG: 1.25kVAC (1 minute)
Isolation Resistance	I/P - O/P, I/P - FG, O/P - FG: 500VDC / 100MΩ @ 25°C 70% RH
Leakage Current	< 1mA @ 240VAC
Safety Standards	EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1, GB4943

MECHANICAL

Dimensions (L x W x H)	99 x 97 x 30 mm
Net Weight / Gross Weight	250g / 272g
Mounting	Screw mounting / Enclosed chassis
Casing Material	Metal mesh enclosed housing
Output Connections	Screw terminals (-V, +V)
Input Connections	Screw terminals (L, N, Earth)

Ordering Information

Model Number	Output	Power
VXT-EPS-75-24	24V DC / 3.2A	76.8W

Notes

1. All specifications are measured at 230VAC input, rated load, and 25°C ambient temperature unless otherwise noted.
2. Ripple & noise measured using 12" twisted pair with 0.1μF and 47μF capacitors in parallel at terminal, 20MHz bandwidth.
3. Starting time measured under cold start. Fast and frequent startup/shutdown may increase starting time.
4. When operating altitude is higher than 2000 meters, derate operating temperature by 5°C per 1000 meters.
5. No-load power consumption is less than 0.3W.
6. Specifications are subject to change without prior notice. Please contact Voxintech for latest specifications.

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