MINIM BIN WITH POWER SUPPLY

(with 24 pin Amphenol Connectors)

TYPE: MB 403

Technical Data



FEATURES:

- □ Compact, rugged, light weight and portable.
- ☐ Significant saving in cost and conserves bench space.
- Provides space for EIGHT single width modules.
- □ Power supply provides +/-12V @1.5A and +/-24V @0.75A.

NUCLEONIX *MINIM INSTRUMENTATION BIN* is a standard Minibin designed to power Standard Nuclear Instrumentation Modules with 24-pin type of power connectors.

It provides mounting space for 8 standard module widths of the 8 ¾ inch high type. The eight corresponding module connectors are provided with necessary wiring for distribution of all standard power supply voltages, +/-12V and +/-24V DC.

A compact Power Supply Unit is fitted on the rear side of the bin. It has all the circuits built-in to generate +/-12V @1.5A, +/-24V @0.75A. These D.C. regulated supplies are distributed to the eight amphenol Connectors of the MINIM bin. The power supply is conservatively rated to power any combination of modules that the bin will physically accommodate. The input voltage can be 230V AC +/-10%, the DC output power levels that are furnished to the mating bin are +/-12V at 1.5A each and +/-24V at 0.75A each. Each DC output voltage is adjustable over a +/-5% minimum range. All the outputs are regulated and short circuit protected by current limiting.

SPECIFICATIONS

STANDARD INSTRUMENTATION BIN

Interchangeability: Mechanical tolerance as per standards provided, enable interchangeability of all standard modules.

Panel dimensions: Standard rack 8 ¾ inches high and 8 single bits wide excluding, control panel.

Depth behind panel: Approximately 10.9 inches.

BIN connectors: 8 standard connectors 26-190-24 (Amphenol) wired in parallel for standard voltages.

Installed wiring: All the eight connectors are wired for +12V,-12V,+24V and -24V and high quality GND, 230V A.C @ 50Hz.

Construction: Bin is constructed with side aluminum flanges with casted handles, top and bottom grilled steel rod mesh with two side channel supports, module guides and a connector plate at the back.

Mechanical dimensions: 11.75" width x 11.00" depth upto connector plate x 8.75" height.

POWER SUPPLY UNIT

Power supply module: This is a compact enclosure seated at the rear side of the bin which generates and provides DC supplies to all the bussed power connectors of the bin

Input voltage: 230V AC @ 50Hz, +/-10% variation allowed.

DC output: +12V DC at 1.5A, -12V at 1.5A; +24V DC at 0.75A, -24V at 0.5A, 72 watts maximum output

Regulation: Better than + 0.3%

Noise and ripple: Less than 10mV (rms) as observed at the power supply output connector level.

Voltage adjustments: +/- 5% minimum range

Circuit protection: Input AC lines fused. Output is protected against short circuit and power supply recovers fully on removing the short circuit.

Application: This is essentially used as part of minim based gamma ray spectrometer GR611M.

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