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Data Sheet

August 13, 2026

LAMBDA / TDK

Lambda / TDK / EMI EMHP50

Lambda EMI EMHP50 50 V Class High Power SCR DC Supply Family EMHP50 denotes a 50 V class Lambda EMI EMHP cabinet. The live TDK EMHP grid lists 40 V and 60 V rows (for example EMHP 40-450 and EMHP 60-330 at 20 kW) rather than a 50 V row. Identity is still the EMHP SCR family: CV/CC, 0.1% regulation, 0.05% stability, 440/480 Vac 3-phase 60 Hz. Read exact voltage and current from the faceplate; do not assume 40 V or 60 V. Low-voltage high-current EMHP bulk DC; magnet and plating cabinets. EMHP50 denotes a 50 V class Lambda EMI EMHP cabinet. The live TDK EMHP grid lists 40 V and 60 V rows (for example EMHP 40-450 and EMHP 60-330 at 20 kW) rather than a 50 V row. Identity is still the EMHP SCR family: CV/CC, 0.1% regulation, 0.05% stability, 440/480 Vac 3-phase 60 Hz. Read exact voltage and current from the faceplate; do not assume 40 V or 60 V. Low-voltage high-current EMHP bulk DC; magnet and plating cabinets.

**MODEL****Lambda / TDK
EMHP50****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****EMHP50****LISTING**<https://aumictechlabs.com/products/emhp50-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The EMHP50 is a high-power DC power supply engineered for demanding industrial and research applications requiring regulated bulk power delivery. Built on regulated SCR phase control topology, it delivers fully programmable constant voltage and constant current output with automatic crossover functionality. The unit has exceptional line and load regulation of $\pm 0.1\%$

within rated limits, with output stability maintained to $\pm 0.05\%$ over 8-hour periods. Transient response recovers to within 1% of final value in 200 ms following line variations of $\pm 10\%$ or load swings between 50% and 100% of rating. Technical Specifications Topology: Regulated SCR phase control Control Mode: Constant Voltage / Constant Current with automatic crossover Regulation: $\pm 0.1\%$ line and load (within rated limits); $\pm 0.05\%$ stability over 8 hours Transient Response: Recovery to 1% final value within 200 ms ($\pm 10\%$ line or 50–100% load variation) Temperature Coefficient: $0.02\%/^{\circ}\text{C}$ of maximum rating (voltage and current) Cooling: Forced air Output Metering: Fully metered with mode indicator lights RFI Protection: Built-in Interlock Control: Contactor on/off Physical: Lifting eye-bolt provisions Key Features Remote programming via external resistance, voltage, or current reference Optional digital programming via IEEE 488 or RS232 (factory consultation required) Wide output rating combinations up to 3000 A_{dc} and 600 V_{dc} within power class limits Available in three physical sizes: Size 1 (up to 20 kW), Size 2 (up to 30 kW), Size 3 (up to 60 kW) Example configurations range from 10–600 V_{dc} with corresponding current ratings and ripple specifications from 50 mV to 400 mV RMS Typical Applications High-current electroplating, materials testing, battery charging, anodizing, research laboratories, and industrial process control requiring stable, regulated DC power with tight load response. Compatibility & Integration Non-standard output ratings and models exceeding 60 kW available through factory consultation. Note: TDK-Lambda recommends Genesys™ or GENESYS+™ series for new designs.

Features & description

From manufacturer datasheet

Features

- 50 V class EMHP listing (confirm faceplate; table neighbors are 40 V and 60 V)

EMHP50 Characteristics / Specifications

PARAMETER	VALUE
Model	EMHP50
Manufacturer	Lambda EMI / TDK-Lambda
Instrument Type	High Power SCR DC Power Supply
Series	EMHP
Alias	EMHP50; EMHP 50; Lambda EMI EMHP 50 V class
Rated Output Voltage	50 V class listing; confirm 0 to 50 Vdc vs 40/60 V neighbors on the nameplate
Neighbor 40 V 20 kW	EMHP 40-450, 0-450 A, 80 mVrms
Neighbor 60 V 20 kW	EMHP 60-330, 0-330 A, 100 mVrms
Output Mode	CV/CC automatic crossover
Regulation	0.1%
Stability	0.05%
AC Input Standard	440/480 Vac three phase 60 Hz
Operating Temperature	0 to 50 C
Cooling	forced air
Protection	OVP, OTP, OCP
Remote Program	resistance, voltage, current
Digital Optional	RS-232 / IEEE-488
Rated Power	20 to 90 kW cabinet class
Table Note	live TDK EMHP grid has 40 V and 60 V, not a 50 V row
Interlock	contactor on/off
RFI	built-in
Mechanical	Size 1/2/3 per kW Notes Do not invent a 50 V ampere rating. Confirm faceplate voltage (50 vs 40/60) and current.

EMHP50 Specifications

PARAMETER	VALUE
Applications	Low-voltage high-current EMHP bulk DC; magnet and plating cabinets.
Key Features	- 50 V class EMHP listing (confirm faceplate; table neighbors are 40 V and 60 V)
Technical Specifications	Model: EMHP50
Notes	Do not invent a 50 V ampere rating. Confirm faceplate voltage (50 vs 40/60) and current.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 50 C
Operating Temperature	0 to 50 C
Cooling	forced air
Protection	OVP, OTP, OCP
Remote Program	resistance, voltage, current
Digital Optional	RS-232 / IEEE-488
Rated Power	20 to 90 kW cabinet class
Table Note	live TDK EMHP grid has 40 V and 60 V, not a 50 V row
Interlock	contactor on/off
RFI	built-in
Mechanical	Size 1/2/3 per kW Notes Do not invent a 50 V ampere rating. Confirm faceplate voltage (50 vs 40/60) and current.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	EMHP50
Manufacturer	Lambda EMI / TDK-Lambda
Instrument Type	High Power SCR DC Power Supply
Specifications	
PARAMETER	VALUE
Series	EMHP
Alias	EMHP50; EMHP 50; Lambda EMI EMHP 50 V class
Rated Output Voltage	50 V class listing; confirm 0 to 50 Vdc vs 40/60 V neighbors on the nameplate
Specifications	
PARAMETER	VALUE
Neighbor 40 V 20 kW	EMHP 40-450, 0-450 A, 80 mVrms
Neighbor 60 V 20 kW	EMHP 60-330, 0-330 A, 100 mVrms
Output Mode	CV/CC automatic crossover
Specifications	
PARAMETER	VALUE
Regulation	0.1%
Stability	0.05%
AC Input Standard	440/480 Vac three phase 60 Hz
Specifications	
PARAMETER	VALUE
Operating Temperature	0 to 50 C
Cooling	forced air
Protection	OVP, OTP, OCP

Specifications

PARAMETER	VALUE
Remote Program	resistance, voltage, current
Digital Optional	RS-232 / IEEE-488
Rated Power	20 to 90 kW cabinet class

Specifications

PARAMETER	VALUE
Table Note	live TDK EMHP grid has 40 V and 60 V, not a 50 V row
Interlock	contactor on/off
RFI	built-in

Mechanical: Size 1/2/3 per kW

Notes

Do not invent a 50 V ampere rating. Confirm faceplate voltage (50 vs 40/60) and current.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.