

**Aumictech**

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**Data Sheet**

August 13, 2026

LAMBDA / TDK

## Lambda / TDK / EMI TCR150

Lambda TCR150 150 V Class High Power DC Supply Family TCR150 denotes the Lambda/EMI TCR 150 V class. The catalog decoder places voltage immediately after TCR and current after the TorS construction letter (example form TCR150Txx or TCR150Sxx). TCR units are thyristor/phase-control laboratory and systems supplies with constant-voltage and constant-current operation, front-panel metering, and analog remote programming compatible with later EMS/EMHP/ESS programming practices. EMI TCR literature describes bidirectional SCRs in the transformer primary with double L/C filtered DC. Rated current and wattage are faceplate-specific; do not invent an ampere rating for an unread TCR150 string. TCR150 denotes the Lambda/EMI TCR 150 V class. The catalog decoder places voltage immediately after TCR and current after the TorS construction letter (example form TCR150Txx or TCR150Sxx). TCR units are thyristor/phase-control laboratory and systems supplies with constant-voltage and constant-current operation, front-panel metering, and analog remote programming compatible with later EMS/EMHP/ESS programming practices. EMI TCR literature describes bidirectional SCRs in the transformer primary with double L/C filtered DC. Rated current and wattage are faceplate-specific; do not invent an ampere rating for an unread TCR150 string. 150 V magnet, process, and burn-in DC; TCR analog-programmed racks; MRO o



MODEL

**Lambda / TDK  
TCR150**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**TCR150**

LISTING

<https://aumictechlabs.com/products/tcr150-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

**This unit**

The TCR150 is an SCR phase-controlled regulated DC power supply engineered for industrial and electronic applications requiring stable, precise power delivery. It operates in constant voltage or constant current mode with automatic crossover, accommodating varying load conditions from 50% to 100% of rated output. The TCR150 combines low output ripple, excellent regulation accuracy, and comprehensive control flexibility with local or remote programming capability.

**Technical Specifications**

**Electrical Performance**

Output voltage ripple: 80 mV worst-case across all resistive loads

Regulation (CV/CC):  $\pm 0.1\%$  variation (50–100% output),  $\pm 0.05\%$  variation below 50% output

Transient response: 30% load step recovers within 2% of final value in 75 ms

Long-term stability:  $\pm 0.05\%$  of set point over 8 hours after warm-up (fixed line, load, temperature)

Voltage temperature coefficient:  $0.02\%/^{\circ}\text{C}$  of maximum rated output voltage

Current temperature coefficient:  $0.03\%/^{\circ}\text{C}$  of maximum rated output current

Input Power 1800 W models: 115 VAC standard (105–130 V operating range), 47–63 Hz, 28 A maximum current draw

2800 W models: 208/220 VAC standard (190–253 V), 22 A maximum current draw

Optional inputs available: 100 V, 200 V, 208/220 VAC for 600 W, 1000 W, and 1800 W configurations

Soft-start circuit eliminates AC inrush current

EMI and Dielectric Line-conducted RFI: Complies with VDE 875 Level N and VDE 871 Level A (1000 $\times$  reduction over previous SCR designs)

Dielectric withstand: 2500 V rms primary to secondary and chassis

**Key Features**

10-turn voltage control and one-turn current control for fine output adjustment

Analog or optional digital panel meters for voltage and current indication

Local or remote programming with selectable sensitivity:

Voltage: 5000  $\Omega$ , 5 V, or 1 mA for full-scale output

Current: 100  $\Omega$ , 100 mV, or 1 mA for full-scale output

UL-rated AC input circuit breaker with manual turn-on/off

**Typical Applications**

Industrial test systems, sensitive electronic equipment powering, battery charging, and laboratory environments where precise regulation and low ripple are critical.

**Compatibility & Integration**

Remote programming interfaces support both voltage and current control via analog inputs. Dual output metering (voltage and current) enables closed-loop monitoring in automated test and production systems.

## TCR150 Characteristics / Specifications

| PARAMETER                      | VALUE                                                                                                  |
|--------------------------------|--------------------------------------------------------------------------------------------------------|
| Model                          | TCR150                                                                                                 |
| Manufacturer                   | Lambda Electronics (TDK-Lambda / EMI successor path)                                                   |
| Instrument Type                | High Power DC Power Supply                                                                             |
| Series                         | TCR                                                                                                    |
| Alias                          | TCR150; TCR 150; Lambda TCR150; EMI TCR150                                                             |
| Rated Output Voltage           | 0 to 150 Vdc (family)                                                                                  |
| Rated Output Current           | encoded after theTorSletter on the nameplate                                                           |
| Rated Power Class              | 150 V times nameplate amperes                                                                          |
| Output Mode                    | constant voltage / constant current automatic crossover                                                |
| Topology                       | phase-controlled / thyristor TCR family                                                                |
| SCR Arrangement                | bidirectional SCRs in the transformer primary (EMI TCR literature)                                     |
| Output Filter                  | secondary rectified and double L/C filtered DC                                                         |
| Metering                       | front-panel voltage and current meters                                                                 |
| Remote Program                 | analog resistance, voltage, or current (TCR/EMS/EMHP common program class)                             |
| Protection                     | overcurrent and overvoltage provisions per TCR manual for the frame                                    |
| Cooling                        | forced air                                                                                             |
| Form                           | rack or cabinet TCR high-power frame (size is current-dependent)                                       |
| Programming Compatibility Note | EMS/EMHP/ESS literature cites common analog programming with TCR                                       |
| AC Input                       | high-current TCR frames typically three-phase; confirm 208/230/460 Vac on the nameplate                |
| Regulation                     | published on the specific TCR instruction sheet; do not assume EMHP 0.1% unless that sheet is attached |
| Family Decoder                 | TCR plus 150 plus letter plus current                                                                  |
| Letter Code                    | T andSare TCR construction/cooling codes; confirm on the nameplate                                     |
| Duty                           | continuous laboratory/systems DC source                                                                |
| Connections                    | high-voltage DC output terminals per frame                                                             |

| PARAMETER         | VALUE                                                                                                                                                                                                             |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sense Compare     | outputVandlsensed against internal or external control levels                                                                                                                                                     |
| Documentation     | TDK-Lambda legacy TCR PDF / EMI TCR instruction sheet                                                                                                                                                             |
| Identity Rule     | do not copy a 10 V TCR10T250 current onto this 150 V family listing                                                                                                                                               |
| Related EMS 150 V | EMS150-xx is a switch-mode family, not TCR Notes TCR150 is a 150 V family listing. Current and wattage are faceplate-specific. Do not invent an ampere rating. Confirm Tvs Sletter and AC input on the nameplate. |

# 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                | TCR150                                                                     |
| Manufacturer         | Lambda Electronics (TDK-Lambda / EMI successor path)                       |
| Instrument Type      | High Power DC Power Supply                                                 |
| Specifications       |                                                                            |
| PARAMETER            | VALUE                                                                      |
| Series               | TCR                                                                        |
| Alias                | TCR150; TCR 150; Lambda TCR150; EMI TCR150                                 |
| Rated Output Voltage | 0 to 150 Vdc (family)                                                      |
| Specifications       |                                                                            |
| PARAMETER            | VALUE                                                                      |
| Rated Output Current | encoded after theTorSletter on the nameplate                               |
| Rated Power Class    | 150 V times nameplate amperes                                              |
| Output Mode          | constant voltage / constant current automatic crossover                    |
| Specifications       |                                                                            |
| PARAMETER            | VALUE                                                                      |
| Topology             | phase-controlled / thyristor TCR family                                    |
| SCR Arrangement      | bidirectional SCRs in the transformer primary (EMI TCR literature)         |
| Output Filter        | secondary rectified and double L/C filtered DC                             |
| Specifications       |                                                                            |
| PARAMETER            | VALUE                                                                      |
| Metering             | front-panel voltage and current meters                                     |
| Remote Program       | analog resistance, voltage, or current (TCR/EMS/EMHP common program class) |
| Protection           | overcurrent and overvoltage provisions per TCR manual for the frame        |

### Specifications

| PARAMETER                      | VALUE                                                            |
|--------------------------------|------------------------------------------------------------------|
| Cooling                        | forced air                                                       |
| Form                           | rack or cabinet TCR high-power frame (size is current-dependent) |
| Programming Compatibility Note | EMS/EMHP/ESS literature cites common analog programming with TCR |

### Specifications

| PARAMETER      | VALUE                                                                                                  |
|----------------|--------------------------------------------------------------------------------------------------------|
| AC Input       | high-current TCR frames typically three-phase; confirm 208/230/460 Vac on the nameplate                |
| Regulation     | published on the specific TCR instruction sheet; do not assume EMHP 0.1% unless that sheet is attached |
| Family Decoder | TCR plus 150 plus letter plus current                                                                  |

### Specifications

| PARAMETER   | VALUE                                                                |
|-------------|----------------------------------------------------------------------|
| Letter Code | T and S are TCR construction/cooling codes; confirm on the nameplate |
| Duty        | continuous laboratory/systems DC source                              |
| Connections | high-voltage DC output terminals per frame                           |

### Specifications

| PARAMETER     | VALUE                                                               |
|---------------|---------------------------------------------------------------------|
| Sense Compare | output and is sensed against internal or external control levels    |
| Documentation | TDK-Lambda legacy TCR PDF / EMI TCR instruction sheet               |
| Identity Rule | do not copy a 10 V TCR10T250 current onto this 150 V family listing |

Related EMS 150 V: EMS150-xx is a switch-mode family, not TCR

#### Notes

TCR150 is a 150 V family listing. Current and wattage are faceplate-specific. Do not invent an ampere rating. Confirm TCR letter and AC input on the nameplate.

### Available from Aumictech

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

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

#### Aumictech

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NIST-traceable calibration · SAM registered ·  
30-day returns  
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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.