



**Supporting up to 100.0A per blade bay and delivering the highest current density on the market for maximum power per linear inch, the EXTreme EnergetiC™ Connector System is ideal for next-generation computing applications**

The EXTreme EnergetiC™ Connector System is capable of handling up to 60% more current per blade bay than other products on the market, giving customers more current per linear inch.

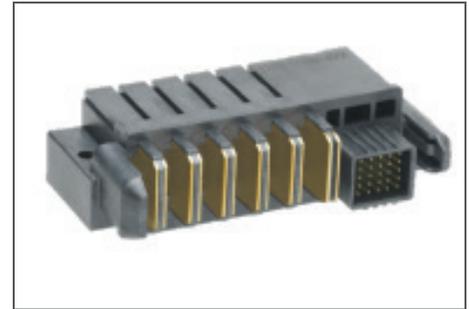
The EXTreme EnergetiC™ Connector System is available in right-angle plug and vertical receptacle configurations, with 4- and 6-blade bays and a 25-signal bay. A variety of configurations can be designed to support application needs.

### Features and Benefits

High-current contact system	Supports up to 100.0A per blade bay. Provides 60% more current per linear inch over competition
Robust, high-current blades rated up to 250V, AC or DC	Meets voltage requirements for power supply designs
Power blades rated up to 100.0A per blade bay at a 30A T-rise, or 185.0A per linear inch	Provides 185.0A per linear inch, ensuring maximum current-to-length ratio
Low-power-loss interface design	Ensures optimize power savings while preserving the power loss budget
Available in 4- and 6- blade bays with 25-circuit signal bays and end-mount guidance	Provides design flexibility to fit industry-standard mechanical form factors
2.00 by 1.65mm pitch signal spacing	Provides design flexibility for use in space-constrained applications
Multiple mating levels available on power and signal contacts	Provides grounding safety First-Mate-Last-Break (FMLB) pin configuration
Rated for resistance to arc	For hot-plug applications

## EXTreme EnergetiC™ High-Current Connector System

- 171097 Right-Angle Plug
- 171098 Vertical Receptacle



EXTreme EnergetiC™ Right-Angle Plug (Series 171097)



EXTreme EnergetiC™ Vertical Receptacle (Series 171098)

### Markets and Applications

Data and Telecommunication Applications

- 1U / 2U Servers
- Modular Power Supplies
- High-End Computer and Telecommunications Equipment
- Power Distribution Circuit Boards



High-End Servers



## Specifications

### Reference Information

Packaging: Tray  
 UL File No.: E29179  
 Designed In: Millimeters  
 Mates With:  
 Right-Angle Plug (Series: 171097)  
 mates with Vertical Receptacle  
 (Series:171098)  
 RoHS: Yes  
 Halogen Free: Yes  
 Glow Wire Compliant: No

### Electrical

Voltage (max.): 250V AC or DC  
 Current (max.): 100.0A max.  
 per circuit  
 Contact Resistance:  
 Power: 0.17 to 0.24 Ohms  
 Signal: 20 Ohms

### Mechanical

Insertion Force to Compliant Pin:  
 Power: 80.06N  
 Signal: 36.92N  
 Mating Force:  
 Power: 827g per circuit  
 Signal: 55g per circuit  
 Unmating Force:  
 Power: 383g per circuit  
 Signal: 25g per circuit  
 Durability: 200 cycles  
 (mating cycles max.)

## EXTreme EnergetiC™ High-Current Connector System

**171097** Right-Angle Plug

**171098** Vertical Receptacle

### Physical

Housing: LCP UL 94V-0  
 Contact:  
 High conductivity copper alloy  
 Plating:  
 Contact Area—30µm-in selective  
 Gold at contact area, Solder Tail  
 Area—100µin Tin on PCB tails  
 Underplating—50µm Nickel overall  
 PCB Thickness: 1.58mm min.  
 Operating Temperature:  
 -40 to +105°C

## Ordering Information

Order No.	Module	Orientation	Termination Interface Style
171097-0250	Plug	Right-Angle	Solder Tail
171097-1250			
171097-2250			
171097-3250			
171097-4250			Press-Fit
171097-5250			
171097-6250			
171097-7250			
171098-0425	Receptacle	Vertical	
171098-0625			

[www.molex.com/link/energetic.html](http://www.molex.com/link/energetic.html)