# molex

## Renewable Energy Product Reference Guide >

Molex offers a wide range of connectivity solutions for renewable energy applications including terminals, terminal blocks and connectors designed for long-term reliability with high-voltage applications in harsh environments.

| Sealed Industrial Connectors                              | CONFIGURATION                                  | MAX.<br>VOLTAGE* | MAX.<br>CURRENT* | WIRE<br>SIZE  | VALIDATION   | FEATURES   |
|---|--|------------------|------------------|---|--|--|
| MX150L<br>Connectors                                      | Wire-to-Board<br>Wire-to-Wire<br>Wire-to-Panel | 600V             | 40.0A            | 22 to 8 AWG,<br>0.34 to<br>10.00mm <sup>2</sup>           | IP67   | <ul> <li>2 to 16 circuits</li> <li>Pre-assembled<br/>connector housing</li> <li>Integral terminal<br/>position assurance<br/>(TPA)</li> </ul>  |
| Solderless Terminals                                      |  |                  |                  |   |  |  |
| Ring and Spade<br>Quick Disconnects<br>Perma-Seal Splices | Wire Terminals                                 | 600V             | 50.0A            | 26 to 8 AWG,<br>0.14 to<br>10.00mm²                       | UL- or CSA-<br>approved<br>depending<br>on product | <ul> <li>Various crimp styles</li> <li>Insulated, partially<br/>insulated or<br/>uninsulated</li> <li>High-temperature<br/>terminals available</li> <li>Metric and Imperial<br/>sizes</li> <li>Positive locking<br/>terminals available</li> <li>PCB tabs, wire<br/>pins and snap plugs<br/>available</li> </ul> |
| Battery Cable Lugs  |  |                  |                  |   |  |  |
| Battery<br>Cable Lugs                                     | Wire Terminals                                 | 600V             | 50.0A            | 8 AWG to<br>250 MCM,<br>10.00 to<br>120.00mm <sup>2</sup> | UL- and<br>CSA-<br>approved                        | <ul> <li>Seamless barrel<br/>design</li> <li>AWG and stud size<br/>identification on<br/>barrel</li> <li>Rated up to +650°C</li> </ul>   |
| Eurostyle Terminal Blocks                                 |  |                  |                  |   |  |  |
| Eurostyle<br>Terminal Blocks                              | Wire-to-Wire<br>Terminal Blocks                | 300V             | 10.0A            | 26 to 14 AWG,<br>0.14 to<br>2.50mm²                       | UL-<br>approved<br>Glow Wire<br>capable            | <ul> <li>2 to 24 circuits</li> <li>2.50 to 10.00mm<br/>pitch</li> <li>Push-button<br/>operation</li> <li>Gas-tight and<br/>vibration-proof</li> </ul>  |

\*Depending on wire size



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|--|----------------------|---------------------------------|------------------|------------------|---|---------------------------------------|---|
| High-Current<br>Universal Clamp<br>Terminal Blocks |                      | Wire-to-Wire<br>Terminal Blocks | 1,000V           | 380.0A           | 6 AWG to<br>500 MCM,<br>16.00 to<br>240.00mm <sup>2</sup> | UL 1059<br>IEC EN<br>61238-<br>1:2003 | <ul> <li>Single-pole, single<br/>pole/4-connection,<br/>or 3-pole<br/>configurations</li> <li>Ideal for Copper<br/>or Aluminum wires</li> </ul> |

\*Depending on wire size

### **CHALLENGES AND SOLUTIONS**

#### **Efficiency in Connectivity**

Molex connector systems, terminal blocks and solderless terminals are designed to optimize connectivity, ensuring efficient and reliable energy transfer.

#### **Seamless Integration**

Our products provide robust and dependable capabilities for seamlessly connecting various components to support smooth operation of energy infrastructure.

#### **Enhanced Safety Standards**

Our connector systems adhere to the highest industry standards. Robust materials and precise engineering minimize risks associated with electrical connections and contribute to overall safety.

#### Adaptable to Diverse Environments

With a focus on versatility, Molex designs products to thrive in demanding environmental conditions, ensuring consistent performance across solar, wind and other renewable energy installations.

#### Reliability for Long-Term Performance

Our terminal blocks and solderless terminals are built to withstand the test of time. Dependable connections translate to increased system reliability and reduced maintenance costs.

#### **Ease of Installation**

User-friendly connector systems simplify installation, reducing downtime and labor costs for system setup.

#### **Optimal Power Transmission**

Our solutions are engineered to minimize energy loss and optimize power transmission, enhancing overall system efficiency and performance.

#### Compatibility with Evolving Technologies

Future-proof your systems with connector solutions that are compatible with evolving technologies. Stay ahead in the dynamic renewable energy landscape with products designed to accommodate advancements in the industry.

### MARKETS AND APPLICATIONS

#### **Electrical and Power**

Renewable energy systems Solar inverters

#### Automotive

Electric vehicle charging stations Electric vehicle infrastructure

**Energy Storage** Battery storage systems Solar storage systems



Renewable Energy Systems



Electric Vehicle Charging Stations



Battery Storage Systems

#### www.molex.com