



## Quality Engineered Solutions



*" Moltec's innovative high voltage AC and DC plug and play harness assemblies have been developed to safely and effectively provide electrification in conjunction with hybrid bus propulsion systems..."*

Moltec takes pride in being the leader in engineering reliable, lightweight, and vibration-proof plug and play harness assemblies. Our strength resides in providing competitive solutions on time, with flawless fit and performance in the most extreme conditions.

It has been said that imitation is the sincerest form of flattery. However, when imitators fall short on quality and reliability it is detrimental to Moltec's reputation. For the very best always look to the Moltec brand.

Moltec's innovative high voltage AC and DC plug and play harness assemblies have been developed to safely and effectively provide electrification in conjunction with hybrid bus propulsion systems. The fully-shielded EMI interconnection system provides optical coverage of over 95% and features a 360° contact design ensuring high efficiency screening. We combine the highest-grade non-metallic conduit and back-shell system in conjunction with our specialty metal fittings and finest tinned copper braid to deliver solutions that consistently exceed customer requirements and expectations.

### Quality Conduit System

Moltec harnesses are assembled using heavy-grade polyamide 12 conduit with enhanced flexibility and mechanical strength even at low temperatures and dry air conditions. The conduit is self-extinguishing with low smoke development and exhibits excellent weathering and UV resistance. Our shock and vibration-proof fittings are made from durable polyamide 6 and feature an integrated UL Listed / CSA certified sealing system that ensures a tamper-resistant, secure connection. Ingress protection level of up to IP69K is easily achieved without added components or adhesive heat shrink tubing.



### Custom Specialty Fittings

Moltec custom adapters have been specifically designed to deliver superior performance in hybrid power harness systems. The light-weight aluminum construction reduces the overall harness weight while the electroless nickel-plating delivers excellent conductivity for electromagnetic compatibility, mechanical strength and corrosion resistance.

### Engineered for Performance

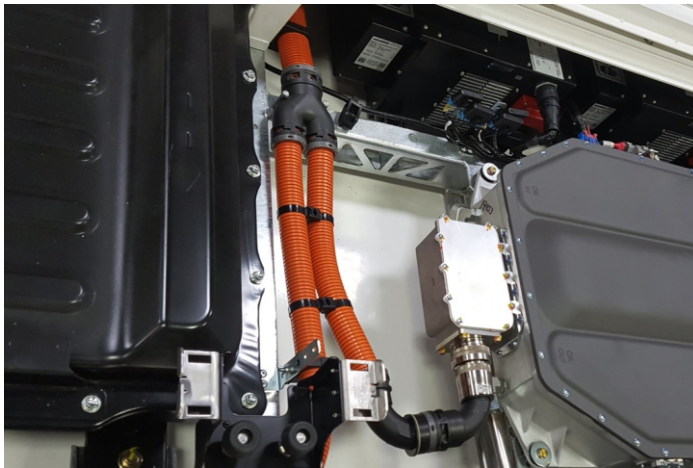
Moltec worked closely with hybrid propulsion system manufacturers to develop and perfect the first hybrid harness

system of its kind. Supplied with traceability, our harnesses are fully tested for continuity and dielectric withstand (hipot) at our ISO 9001-2015 facility with strict adherence to our Total Quality Management Certification. Made of one-piece die cast aluminum, both horn and flange end termination components feature precision machined threads. The material and minimal use of components means reduced potential for failure and reduced overall weight. Each end assembly is equipped with an integrated strain-relief grommet that effectively



delivers proper sealing without the need for unnecessary and permanent sealing methods such as epoxy. As a result, repair work is possible if necessary. The shielding braid retention system assures effective continuity and eliminates the potential for disconnection due to vibration or handling. Silicon-based gaskets ensure proper sealing at the termination points. In order to complete the systems' electromagnetic compatibility, these gaskets are designed with impregnated nickel-plated copper wire mesh.

We offer fast turn-around for bus-down repairs or replacements.



### Protection Against:

- Abrasion
- Shock
- High Impact
- High Vibration
- Dynamic Movements
- Chemical Corrosion
- Hydrolysis
- All Elements of Weather and Temperature Ranges

