

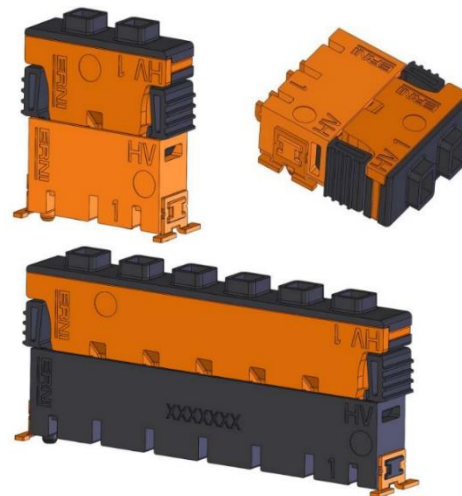
ERNI VolTron

Overview

- High voltage sensing connector designed for use in Battery Management Systems (BMS) and Battery Disconnect Units (BDU)
- Engineered for safe and reliable connections
- Combines CTI materials and contact surfaces to help maximize creep and clearance

Target Applications

- Battery Management Systems (BMS)
- Battery Disconnect Units (BDUs)
- Integrated Power Electronics
- Data Center UPS
- AC/DC Inverters
- EV Charging Equipment



Market Players

- Amphenol (Minitex Pwr)
- Molex (Megafit)
- Harting (har-flex)
- Samtec (Powermate)
- JST (BAB)

Key Product Benefits

- Up to 1000V signal measurement capability for enhanced safety and versatility of applications
- Miniaturization grade with low profile for use in compact or space constrained applications
- Gold contacts for superior conductivity and corrosion resistance
- Capability of operating in extreme temperatures with a range of -55°C up to 150°C
- Suitable for high altitude applications with a 5000M compensation
- Compliant with LV214, LV215 and USCAR Automotive standards

Market Advantages

- Color and mechanical coding simplifies identification of matching connectors
- Primary and secondary locking features reduce the risk of accidental disconnection improving safety and reliability
- Adheres to stringent automotive standards
- Accommodates high voltage levels ideal for evolving battery architectures and advancements in energy storage systems.

Resources



ERNI VolTron 1000 V Specification Overview



GENERAL FEATURES

Pin	2, 5, 6Focus on 2/5 Pin (on Ramp u)
Pitch	6,2 mm
Type	Male: angled/straight Female: Straight cable outlet

MATERIALS

Material	CTI 600 / V0-material
Contact Material	Copper Alloy
Contact Plating	Gold Surface

ELECTRICAL

Operating Voltage	Up to 1000 V (DC)
Terminal rating	up to 6A (0.35mm²)
Dielectric Strength (Bemessungstoßspannung)	Up to 2.500 V (accor. to LV215) Up to 3.700 V (accor. to USCAR 37)
Operating Current	0,5 A
Creepage distance (DP II)	> 5,0 mm
Altitude sea level	4000 m
Mating cycles	500

SPECIFICATIONS AND APPROVALS

Standards	LV214 LV215 (VW80332) USCAR 37
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MECHANICAL

Vibration severity	SG2 (LV214)
Color	Orange/Black
Locking crimp contact	yes, primary & secondary locking
Housing locking	yes

MANUFACTURING LOCATION

Country of Manufacture	Germany
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