

# PHOTOVOLTAIC BALANCE OF SYSTEM APPLICATION SOLUTIONS

Solar is becoming increasingly more feasible and competitive as an alternative energy source. TE Connectivity (TE) can assist you in solving your connectivity challenges every step of the way. TE's know-how is recognized in the photovoltaic power generation and solar energy industry, in crossindustry innovation and in extensive connection solutions. Furthermore, TE is establishing smart connections between solar panel and power grid, and is driving the future development of solar energy.

TE offers innovative, abundant and high quality products to meet your individual needs, including the SOLARLOK connector system, cables and relay products. Please contact TE's field engineering team and let us help you solve your design challenges.



# SOLARLOK PV4-PM connectors 1971919-1 (male) / 1971920-1 (female)

PV4-PM is a panel mount connector ideal for photovoltaic inverters, combiner boxes, and micro inverters. It is a safe, reliable, and high-quality solar connection solution.



# **Benefits**

- Reliable connector system for solar application
- Precision contact structure for less power lost
- Excellent waterproof design IP68 (24hours/1m)
- Premium materials to ensure long term product life

## Features

- Rated current: UL15A/TUV25A-2.5MM<sup>2</sup> UL20A/TUV35A-4.0MM<sup>2</sup> UL30A/TUV40A-6.0mm<sup>2</sup>
- Rated voltage: TUV1000V / TUV1500V (pending) UL1000V / UL1500V (pending)
- Contact resistance: 0.35mΩ

# SOLARLOK PV4-S connectors 2270024-1 (male) / 2270025-1 (female)

PV4-S, an upgraded version of the PV4 connector, is mainly used in solar cell panels and field installation. It is a dual rated 1500V TUV and 1500 UL connector with IP68 protection. The PV4-S connector offers low contact resistance which reduces the power lost.

### **Benefits**

- Excellent waterproof design IP68 (24hours/1m)
- Dustproof and acid-proof
- Interference thread design preventing cable nut loosen

#### **Features**

- Rated current: UL15A/TUV30A-2.5MM<sup>2</sup> UI 20A/TUV40A-4 0MM<sup>2</sup> UL30A/TUV45A-6.0MM<sup>2</sup> Rated voltage: 1000V/1500V(UL)
  - 1000V/1500V(TUV)
- Contact resistance: 0.35mO

## Photovoltaic cables 2328394-2 (2.5mm2) / 2270245-2 (4.0mm2) / 2328400-2 (6.0mm2)

TE's photovoltaic cables can withstand the typical harsh environment of photovoltaic devices. Compared to the traditional cable, it is more flexible and Certification standards include IEC62930/EN50618/UL4703.



### **Benefits**

- Consistent long term insulation resistance under severe wet conditions
- Easy to strip and excellent wire retention

# **Features**

- Voltage up to 1500/2000VDC
- Operating temperature of -40°C to 105°C
- UV grade and flame retardant
- Global certificate coverage from TUV and UL

# Potter & Brumfield T9S series relay 2027395-1 / 2027395-3 / 2027395-5

The Potter & Brumfield T9S Power PCB relay with 1.8mm contact gap is primarily designed for solar applications. The extended contact gap of this relay provides better isolation and allows for usage in higher elevation environments.

### **Benefits**

- Provide an ideal solution for disconnect switch applications (safety)
- Enable high current switching (8kW solar inverters)
- Achieve better isolation with extended contact gap (1.8 mm)

#### **Features**

- Switching current: up to 40 A
- Rated voltage: up to 277 VAC
- Contact spacing: 1.5mm / 1.8mm
- Low temperature rise, max. operating temperature of up to 85°C
- UL/VDE lab validated

# IHV200 high voltage DC contactors 2071410-1 / 2-2071410-1

IHV200 is a high voltage DC contactor widely used in BMS, charging piles, solar inverters and energy storage systems.



# **Benefits**

- Auxiliary contact monitoring available
- Ultra-small footprint, ultra-light weight and
- ultra-high cost efficiency

#### **Features**

- Coil input is energy conservation, capable of inputting any value between 9VDC to 36VDC
- Continuous loaded current: up to 500A@85°C
- Switching voltage: up to 1800VDC

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