

Twin junction box

HFO / HF1



«Designed for thin film and low power crystalline PV modules»

- HUBER+SUHNER is offering complete connectivity solutions for photovoltaic installation. With the Solarboxsystem HFO/HF1 the proven RADOX® quality is extended to the complete interconnection between the modules and the inverters.
- The Solarboxsystem, consisting of HFO and HF1, is designed as two individual boxes, with one cable/connector outlet each.
- Thanks to the compact and solid state design it is uniquely small and at the same time fulfilling the heat dissipation requirements in the bypass mode in accordance to IEC 61646.
- For easy handling the junction box is delivered as a complete set according to the defined requirements. The Solarboxsystem HFO/HF1 can easily be connected to the back of the module either manually or in a fully automated process.

Twin junction box for thin film and low power crystalline PV modules

Features

- Easy handling/quick assembly
- Reliable, flat solid state design
- Easy access for efficient welding/soldering
- Lead free, RoHS-REACH compliant
- Schottky diodes with low leakage current

Benefits

- Low forward voltage drop through
 - Optimised contacting / Connectors with lamella spring contact / Balance of system
- Outstanding moisture barrier due to potting
- Quick, clean potting by direct injection
- Ready for automation
- Minimised handling and assembly time
- Increased life time due to complete sealing and outstanding heat dissipation
- Unique twin design for sophisticated module architecture
- RADOX® - for highest quality

Approval

- Comply with: IEC 61730, IEC 61646
- Designed according to: DIN V VDE V 0126-5/05.08

Electrical data	Item no. 12720104	Item no. 12720121
Rated voltage	1000 V DC	1000 V DC
Bypass voltage (typical)	< 150 V DC	< 1000 V DC
Blocking voltage (typical)	< 150 V DC	< 1000 V DC
Rated current (typical)	6.0 A	4.5 A
Test current	8.5 A	5.0 A
Diode HFO	no	no
Diode HF1	yes	yes
Use of diode	Bypass or blocking mode*	Bypass or blocking mode*

* Please note: The design configurations between bypass and blocking mode are different

Physical / Mechanical data	
Overall dimensions (box only)	68 x 54 x 11 mm (length x width x height)
Number of terminals	2 each box
Contact principle for copper ribbons	Soldering or welding
Cable	2 x RADOX® SOLAR cable, 2.5 mm ² , 300 mm length each
Connectors	RADOX® SOLAR connectors 2.5 mm ² push-pull

Environmental data	
Temperature range	-40 °C to +85 °C
Chemical resistance	UV- and ozone resistant
Protection mode	IP 67

HUBER+SUHNER is certified according to ISO 9001, ISO 14001, ISO/TS 16949 and IRIS.

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It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.

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