



UIBX100AUI UHF IS BARRIER NO DC

- Provides 6KV for Isolation Between the Base station Port and the Main Arterial Port
- 90V Triggered Lightning Surge Arresters at Ports
- Transparent VHF and UHF RF Throughput
- Mechanically Sound Brass Block Connectors

FEATURES

Becker Mining Systems smartcom® Intrinsically Safe Isolation Barrier is used to provide an isolated interface between the base station and a “Radiating Leaky Cable System”. The IS Barrier is located in a non-hazardous area and provides no dc power connectivity however it connects to equipment which is in the hazardous area, and which is also covered by the same certificate.

The equipment is comprised of a single PCB which is encapsulated inside a certified glass fibre reinforced polyester enclosure. The IS Barrier has two RF connections for simple installation of coaxial radiating cables.

The primary purpose of the IS Isolation Barrier is to isolate the hazardous-area equipment from the safe area equipment. The safe area terminals are for connection to non-intrinsically safe Leaky Feeder equipment and the hazardous area terminals are for connection to intrinsically safe Leaky Feeder equipment. This leaky feeder unit is NOT to be used in hazardous areas for example to replace a Cell Coupler.

TECHNICAL DATA

| PERFORMANCE SPECIFICATIONS | |
|-------------------------------|----------------------------|
| Frequency Band | 200 MHz - 500 MHz |
| Port Characteristic Impedance | 50 Ω |
| Connectors | 50 Ω Brass Block |
| Insertion Loss | <5 dB |
| VSWR | 1.3:1 (445 MHz to 480 MHz) |
| Supply Voltage | None - Passive |

| ENVIRONMENTAL SPECIFICATIONS | |
|------------------------------------|---|
| Operating Temperature | -20 °C to +40 °C. Derate 0.5 °C per 500m ASL |
| Storage Temperature | -40 °C to +65 °C |
| Operating Altitude | Up to 5500 m ASL |
| Operating Humidity | 10% to 85% (Non Condensing) |
| Protection Class | IP68 according to EN60529 |
| Impact Resistance | 7Nm - Body Only - Not indicator lights |
| Flammability | UL94 V-0 |
| Toxicity | Halogen and Cadmium Free |
| Electromagnetic Interference (EMI) | FCC Emissions Class A (Industrial) CE Emissions Class A (Industrial) |

| APPROVALS | |
|---|---|
| Approved Explosion Protection Rating (ia) | [Ex ia Ma] I |
| Inspection Authority Certificate (ia) | Sira: IECEX SIR 10.0036X ITACS: IECEX ITA 11.0009X |

| MECHANICAL SPECIFICATIONS | |
|---------------------------|---|
| Dimensions (L x W x H) | 160 x 75 x 61 mm (6.3 x 3 x 2.4 in) |
| Weight (nominal) | 0.776 kg |
| Principal Materials | Enclosure: Glass Reinforced Polyester (GRP) Connectors: Electroplated Brass Thermoplastic polymer glass fiber |
| Enclosure | Kestrel 'KE' glass reinforced polyester type |
| Finish | Black |

Technical data are limit values.

If the product is integrated into systems or operated in combination with other devices, its permissible operating values can deviate from these limit values. Subject to technical modifications without prior notice.

Rev. D

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