



USIX100AUI UHF IS SPLICE WITH DC

- Minimum RF Loss Through the Splice Point
- DC Current up to 3A is Transferred Through the Unit
- Brass Block Custom Connection System Specifically for Radiating Cable System

FEATURES

Becker Mining Systems smartcom® radiating “leaky” cable systems, in which radio signals are transmitted from a cable rather than from an aerial, can provide two-way radio services in situations where conventional VHF and UHF communications from central areas are not practical. The radiating cable Splice Box is typically used in Mining, Shipping, Tunneling, Motorway and In-Building radiating cable systems. This unit is used to connect two sections of cable during installation, extensions or repairs to Leaky Feeder systems. The unit couples both the RF and DC signals seamlessly between the two joined sections.

ENVIRONMENTAL SPECIFICATIONS

| | |
|------------------------------------|--|
| Operating Temperature | -20 °C to +40 °C |
| Storage Temperature | -40 °C to +65 °C |
| Operating Altitude | Up to 5500m 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) |

TECHNICAL DATA

PERFORMANCE SPECIFICATIONS

| | |
|--------------------------|----------------------------|
| Frequency Band | 200 MHz to 500 MHz |
| Impedance | 50 Ohm |
| Connectors | 50 Ohm - Brass Block |
| Insertion Loss | <1.7dB |
| VSWR | 1.4:1 (400 MHz to 500 MHz) |
| Through current capacity | 3.0A maximum |
| Power Requirement | None – Passive |

MECHANICAL SPECIFICATIONS

| | |
|------------------------|---|
| Dimensions (H x W x L) | 61 x 75 x 110 mm 2.4 x 3.0 x 4.3 in |
| Weight | 0.970kg |
| Principal Materials | Enclosure: Glass Reinforced Polyester GRP Connectors: Electroplated Brass Thermoplastic polymer glass fiber |
| Enclosure | Kestrel ‘KE’ & ‘POK’ glass reinforced polyester type |
| Finish | Black |
| Gasket | Silicon rubber |
| Mounting Options | 4 Holes M6 directly |

APPROVALS

| | |
|---|--|
| Approved Explosion Protection rating (ia) | Ex ia I Ma |
| Inspection Authority Certificate (ia) | Sira: IECEx SIR 10.0036X and ITACS: IECEx ITA 11.0009X |

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