



UCCM100USM UHF IS CELL COUPLER NO DC

- Provides 6 KV for Isolation Between the Base Station (BS) Port and the Main Arterial (MA) Port
- 90 V Triggered Lightning Surge Arresters at Ports
- Transparent VHF and UHF Radio Frequencies

FEATURES

Becker Mining Systems smartcom® Intrinsically Safe Cell Coupler is intended to provide an isolated interface between two, separately powered, radiating coaxial cable cells within the Leaky Feeder System in a hazardous area. It's important to note that IS Cell Couplers are designed to be used within hazardous areas and can't be replaced with other barriers or coupling units.

The Cell Coupler provides a radio frequency link for the next port whilst blocking the direct current (DC) and low frequency AC (alternative current) between the two ports.

TECHNICAL DATA

PERFORMANCE SPECIFICATIONS

Frequency Band	Handheld to Base 450 MHz to 455 MHz (Uplink), Base to Handheld 475 MHz to 480 MHz (Downlink)
Port Characteristic Impedance	50Ω
Connectors	50Ω Brass Blocks
Port Output to Output Isolation	20 dB (min) 25 dB (typical)
Insertion loss	<5 dB
VSWR	1.3:1 (450 MHz to 480 MHz)
Through current capacity	3.0 A max
Power Requirement	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 5500m ASL
Operating Humidity	10% to 85% (Non Condensing)
Ingress Protection Rating	IP66 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)

MECHANICAL SPECIFICATIONS

Dimensions (H x W x L)	61 x 75 x 160 mm 2.4 x 3.0 x 6.3 in
Weight	843.6 g
Principal Materials	Enclosure: Glass Reinforced Polyester GRP Connectors: Electroplated Brass Thermoplastic polymer glass fiber

APPROVALS

Approved Explosion Protection rating (ia)	Ex GI ia
Inspection Authority Certificate (ia)	MSHA 23-A080003-0

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 C