



UBPM100USM UHF IS POWER COUPLER

- Feeds DC Power to UHF System
- LED indicators Signify Power Present
- DC Range Between 5 Vdc and 17 Vdc
- Easy to Install
- Facilitates Brass Blocks & Compression Glands for High Straight Connections

FEATURES

Becker Mining Systems smartcom® UHF Bi-Directional Power Coupler is used in radiating cable systems, like the Leaky Feeder System to inject DC power from the system power supply into the coaxial radiating cable. This injected power is then used to power up all the active devices in the immediate vicinity of the power coupler.

The DC voltage is usually sourced from an AC-DC power supply with local battery back-up. The DC voltage range is 5 Vdc to 17 Vdc at a maximum current of 2 A. The downlink & uplink radio signals already present on the radiating cable are passed transparently through the bi-directional power coupler.

Indicator LED's for power present on the Base Station and Tunnel ports are provided for in system fault finding. DC power may be directed in either direction by making connections to the screw terminals associated with the Base Station & Tunnel radiating cable connections. Alternatively, power may be directed in both directions simultaneously by installing the bridge jumper.

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. D

TECHNICAL DATA

PERFORMANCE SPECIFICATIONS

Frequency Band	200 MHz to 500 MHz
Impedance	50 Ω
Connectors	50 Ω Brass Blocks
Insertion Loss	< 2.5 dB
VSWR	1.3:1 (430 MHz to 480 MHz)
Power Requirement	None - Passive
Through current capacity	2.0 A (max)

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)
Ingress Protection Rating	IP54
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	753.60 g
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

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