



# HIGH VOLTAGE CABLE COUPLERS

## 15kV / 440A

### UEE High Voltage Cable Coupler System

Equipment in large mining operations often requires a high voltage power supply. When this voltage is combined with large fluctuating currents, safety, efficiency and reliability are priorities. UEE manufactures a cable coupler system, rated for 15,000 volts 440 amperes, especially designed to meet the demands of these large operations.

Safety is the highest priority when handling high voltage cable couplers, so when designing this coupler system, UEE concentrated on these aspects:

- The system's design conforms to CAN/CSA M421 standards by incorporating a pin arrangement where *"the ground pin makes first and breaks last"* and *"the pilot pin makes last and breaks first"*. This ensures the supply breaker is not operated until the coupler is grounded and phase contacts have connected. (Proper "lockout" procedures are required.)
- UEE uses a shield coating that confines the dielectric field to the insulation. Thus reducing the possibility of electric shock due to deterioration of the insulators.
- The four-point eyebolt locking system provides quick, secure and watertight coupler connection.

These features, plus others, make the UEE Couplers convenient to use by providing maximum flexibility, reducing downtime, and improving overall economics. Reliability of this system was achieved by basing design features on experience with field cable repair. Potential features and benefits were identified and incorporated into the coupler design.



### FEATURES & BENEFITS

- Rigid, sand-casted aluminum housing makes the coupler light and durable.
  - Individually replaceable parts reduce the cost of complete coupler assembly replacement.
  - Shielding of the phases reduces the possibility of damaging, high energy, phase to phase faults.
  - Use of a unique *"collet system"*\* for phase wire terminals ensures a simple and secure connection for low contact resistance and good heat transfer. (*this system replaced set screw arrangement & soldering of wire*)
  - Entrance fitting, consisting of a cable clamp and a seal arrangement, provides a watertight and secure cable grip.
  - Heavy duty pilot pin and socket ensure positive low resistance path for control signal.
  - Cable adapter provides stress control and air free seal on cable wire termination.
  - All copper parts are silver-plated to increase conductivity and prevent conductor oxidation.
  - All stainless steel hardware for long life and reliable assembly and disassembly.
  - Connector assembly is interchangeable with other North American manufactured plugs.
  - "New" 4-point configuration of the eye-bolt system uses two eye-bolts for separating coupler bodies.
  - "New" coupler body incorporate two handles that allow for easy handling when connecting/disconnecting couplers.
- \* patent issued in Canada / USA / Australia**

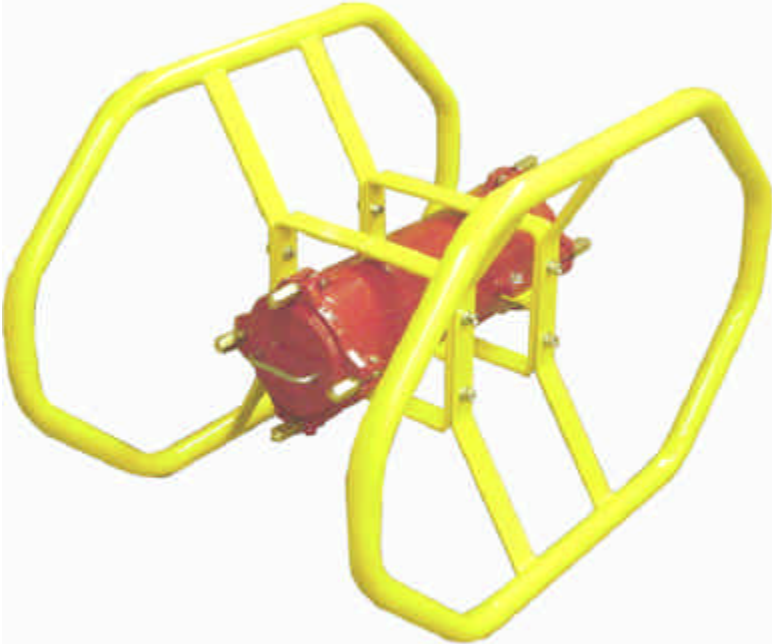
### ELECTRICAL RATING

Current: 440 Amps.  
Voltage: 15,000 Volts AC

### STANDARDS

CAN/CSA M421  
Tested to IEEE Std. 386-1995 (*Separable Insulated Connector Systems for Power Distribution Systems*)

## 15000 Volts, 440A Cable Couplers



*Unit Junction*

UEE's cable coupler systems are being used by some of the world's largest mining corporations such as:

- Teck Corporation
- Imperial Metals Corporation
- Homestake Mining Company
- Newmont Mining Corporation
- Freeport-McMoran Copper & Gold
- Viceroy Resource Corporation
- Placer Dome Incorporated
- Suncor Energy Inc.
- Compania Minera Escondida
- Compania Minera Zaldívar

### OPTIONS

- Alternate Flange Bolt Pattern
- Polyester Powder Coat Painted
- Pilot Wire Connector up to 2/O awg
- Custom Configurations for Specific Applications
- Nickel-Plated Copper Parts



*15kV Flange Mount (rear view)*

### ACCESSORIES

- Brass Cable Clamps
- Skid Assembly for Female Unit Junction
- Coupler Lever

### TO ORDER, STATE:

- Coupler type and rating
- Cable conductor size & cable outside diameter
- Options required



*Brass Cable Clamp*

for more information on these or other products, contact UEE at:

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