Louden® Dual Conductor Bottom Entry Electrification is designed and built to meet the requirements of Louden® monorail and crane service. The 10' long conductor sections are made of two roll-formed, zinc coated steel bars held in position by five spacer insulators to form an inverted U shape with a 5/8" slot opening at the bottom to accommodate the sliding shoe current collectors. This assembly is housed in a heavy EPDM rubber or vinyl insulating jacket that covers all external surfaces. Both EPDM and vinyl are tough and durable, with excellent insulating properties and have good flame resistance.

The cover of 810.1-R is EPDM rubber and will withstand temperatures up to 200° F. However, maximum temperatures are generally limited to 125° F, due to the normal limits imposed by the use of motors, controls, wiring, and drive tires. Vinyl should not be used where temperatures rise above 140° F.

Louden® Dual Conductor Bottom Entry Electrification is available, on special-order, with stainless steel conductors for use in highly corrosive or caustic areas. Each of the two bars in Louden® Dual Conductor Bottom Entry Electrification is a separate conductor with a capacity of 100 amperes at 600 volts. This capacity can be doubled by electrically tying the two bars together.

Installation of straight sections of Louden® Dual Conductor Bottom Entry Electrification is simple and curves can be normally accomplished with the bending tools available from the factory. Straight runs require support on maximum 5' centers. Curves require a minimum of one center support but support centers should not exceed 4'.

Louden® Dual Conductor Bottom Entry Electrification is stocked and shipped in standard 10' lengths; assembled complete with the specified insulating cover and five spacer insulators. When odd lengths are required as at the end of a run, the section is easily cut to length during installation.
SUPPORT INSULATOR ASSEMBLY
810.21 (28-0432) Wt. .5 lbs. (.23 kg.)

The Support Insulator Assembly consists of three molded parts assembled with a 5/16" diameter machine screw. The lower insulator is grooved to fit snugly against the lips of the two conductors inside the electrification section. The upper insulator is cored and tapped to facilitate a tight fit with the bolt and conductor cover. The sleeve insulator is designed to push the conductor cover up into the recess of the upper insulator to retard seepage of moisture into the conductor from above.

SPlice ASSEMBLY
810.35 (28-0443) Wt. .75 lbs. (.34 kg.)

Designed to join conductor sections, the dowels provide a smooth, but rigid, mechanical joint while the splice bars maintain electrical continuity across the joint. The joint is covered by an extruded Hi-Impact P.V.C. splice cover.

POWERFEED ASSEMBLY
810.37 (28-0444) Wt. .75 lbs. (.34 kg.)

Louden® Powerfeeds provide terminal connection for both conductors in Louden® Dual Conductor Bottom Entry Electrification. Rated 100 Amp. at 600 volts the assembly includes extruded brass terminal lugs, connectors to accommodate No. 14 to No. 4 leads and a three piece molded phenolic housing.
END CLOSURE
810.26 (28-0436) Wt .5 lbs. (.23 kg.)

The End Closure is made of molded phenolic and incorporating an end plate to cover exposed conductor bars at the end of an electrification run. One is required at each dead end conductor section.

TRANSFER INSULATOR
810.22 (28-0433) Wt .06 lbs. (.03 kg.)

Transfer Insulators are used at transfer points and with monorail switches to guide the collectors through the gaps, they also serve to insulate the end of the conductors when passing conductors of opposite polarity such as when a crane passes a transfer section or a sliding switch is moved.

BENDING HICKEY
810.5 (28-0426) Wt. 13 lbs. (5.9 kg.)

Used on the job for bending curves in Louden Dual Conductor Bottom Entry Electrification. The operation is similar to using a “hickey” in forming conduit. One set required for installation of electrified monorails with curves.

CURRENT COLLECTOR
810.30 (28-0437) Wt. 5 lbs. (2.27 kg.)

The 810.30 Current Collector is composed of three identical sections joined by a linkage which permits free articulation of the individual sections. This assures smooth operation on curves or through gaps at transfer points. This design reduces the possibility of single phasing since one or more of the sliding shoes will remain in contact with the conductors. Each section of the collector is made up of a molded phenolic main body, two cast metal sliding shoes, and two terminal covers. Power is transmitted to the equipment by a wire harness that connects the sliding shoes on each side. The appropriate mounting bracket is included with the Current Collector when furnished with new equipment. This current collector is rated 30 Amp./600 volt.
CURRENT COLLECTOR, Spring Loaded  
810.101 (28-0438) Wt. 5.5 lbs. (2.5 kg.)

This Current Collector is identical to the 810.30 Current Collector but includes a spring from each of the three sections to the mounting bracket to provide increased sliding shoe contact with the conductor bar. This provides enhanced reliability of the conductor in dirty or caustic atmospheres. Rated at 30 Amp./600 volt. Mounting bracket provided for new equipment.

CONTROL COLLECTOR  
810.32 (28-0439) Wt. 5.5 lbs. (2.5 kg.)

This Current Collector is used in conjunction with Control Collector in Louden Selectomatic dispatch systems as a power source and for control circuits. The design and construction is similar to the 810.30 collector with the addition of an additional contact shoe built into the top of the two end sections and two additional terminal wires. Rated at 30 Amp./600 volt. Mounting bracket provided with new equipment.

CONTROL COLLECTOR, Spring Loaded  
810.102 (28-0440) Wt. 6.0 lbs. (2.75 kg.)

This Spring Loaded Control Collector is identical to the 810.32 Control Collector but includes a spring from each of the three sections to the mounting bracket to provide increased sliding shoe contact with the conductor bar. This provides enhanced reliability of the collector in dirty or caustic atmospheres. Mounting bracket provided for new equipment. Rated at 30 Amp./600 volt.
CURRENT COLLECTOR, Single Pole
810.100 (28-0627) Wt. 1.33 lbs. (.62 kg.)

This two section, single pole, sliding shoe collector is used when 90 Amp. capacity is required and both sides of the conductor bar carry a single phase of a 3-phase power supply and the system does not have control sections. Rated at 90 Amp./600 volt. Mounting bracket provided for new equipment.

CONTROL COLLECTOR, Single Pole
810.103 (28-0657) Wt. 1.11 lbs. (.57 kg.)

This collector is identical to the 810.100 collector except that it has contact insulating covers mounted on top of each section to help prevent shorting of the conductor bars to the control section through the sliding shoes. Rated at 90 Amp./600 volt. Mounting bracket provided for new equipment.

CLEANING SHOE
810.40 (28-0446) Wt. 1.5 lbs. (.68 kg.)

The Cleaning Shoe is used when manufacturing processes may cause dust, moisture and foreign matter to accumulate on the metal conductors in Louden Dual Conductor Bottom Entry Electrification. The Cleaning Shoe is moulded polyurethane with multiple blades that are long wearing and provide cleaning action. Mounting bracket provided for new equipment.
CONTROL SECTION, Double Contact
810.33 (28-0441) Wt. 2.0 lbs. (.9 kg.)

Inserted into the top of Louden Dual Conductor Bottom Entry Electrification, the 810.33 Control Section can be used in conjunction with Control Collectors (810.32) to provide two control signals to monorail carriers or cranes in Louden Selectomatic Systems.

CONTROL SECTION, Single Contact
810.38 (28-0445) Wt. 2.0 lbs. (.9 kg.)

Inserted into the top of the conductor, this Control Section can be used in conjunction with Control Collectors to pass a single control signal to monorail carriers or cranes in Louden Selectomatic Systems or to bridge two contacts on Control Collector 810.32.

CONTROL SECTION, Short
810.41 (28-0612) Wt. 2.0 lbs. (.9 kg.)

This short Control Section is used in conjunction with a Control Collector (810.32) to pass a single control signal to or from a monorail carrier, and is usually required when control Section must be located in a curve section of conductor.