

Cadillac 480V HEP

Clements National's Cadillac brand of trainline jumpers and receptacles provide head end power (HEP) primarily to locomotive hauled passenger rail cars.

The power source can also be from a power car or wayside ground based source. Head end power is a convenient and flexible means by which electrical power can be generated by a central source and transmitted through each rail car via a trainline connection to operate auxiliary equipment. Typical HEP loads include HVAC, lighting battery charging/low voltage power supply, food service equipment and water heating equipment. The Cadillac brand of HEP trainline products has been time tested and provides the reliability and quality that you expect!

Design Benefits:

- Integrally molded plug (standard color – yellow) and receptacle (standard color – red) connectors. Optional colors available upon request.
- Integral molded design per Amtrak specification D77-24 provides superior environmental and shock protection.
- Qualified to APTA and Amtrak D77-24 specifications
- ASTM Class M copper wire stranded cables assure maximum flexibility under adverse temperature conditions.
- Multi-tined socket contact design for enhanced contact performance.
- Floating silver-plated copper contacts, self aligning for easy mating, resist excessive voltage drop.
- Maximum water tightness achieved with:
 - Outer peripheral O-ring seal on plug body
 - Individual contact "closed entry" sealing between plug and receptacle interface
- Receptacle skirt features a patented, integrally molded, expandable stabilizer to eliminate insertion problems often encountered in connectors with glued support rings.



*MPA Series
with female contacts*

*MRA Series
with male contacts*

*Integrally
molded
stabilizer*

RRA/RPA Series 480V Connector Kits, ideal for quick in-field installation or repair situations.

*RRA receptacle kit
with male contacts
(RPA plug kit available
but not shown)*



*Utilizes the same field-proven
contact system as the
integrally molded series*

MRA-H-V55
Improved receptacle housing with integral "O" ring latch



MRA-H
Standard receptacle housing

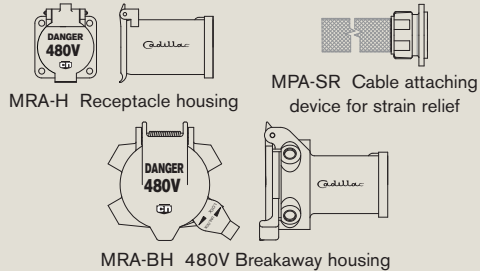


MRA-1-XXXXA
480V receptacle kit which includes housing and receptacle assembly

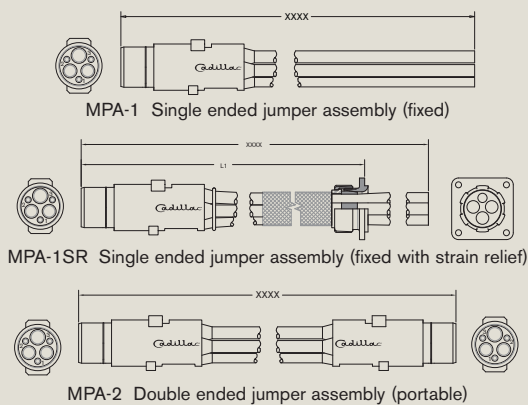


MRA-BH
Improved breakaway designed receptacle housing

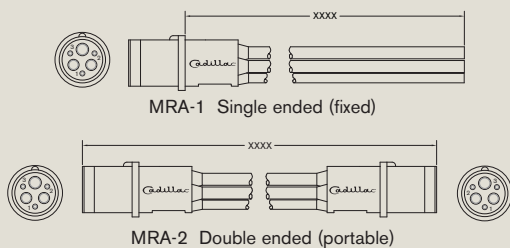
Receptacle Housings



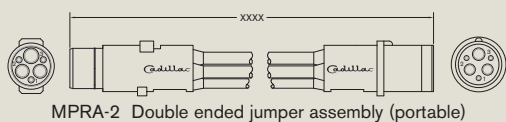
MPA Series Jumper Assembly – Plug assembly with female contacts



MRA Series – Receptacle assembly with male contacts



MPRA Series Jumper Assembly – Plug/Receptacle assembly with female/male contacts



MPA/MRA-MPRA Performance Specifications:

Amtrak D77-24 & APTA RP-E-016-99
Operating temperatures: -40°F to 140°F (-40°C to 60°C)
Electrical rating: – Power contacts: 600 VAC, 400 amperes
 – Control contacts: 600 VAC, 40 amperes
Dielectric strength: 2000 V rms
Connector body material: DuPont Hypalon® Rubber
Mating/unmating forces: 70 lbs. Maximum – 30 lbs. Minimum
Contact shock: Mated connector pairs shall withstand 6' drop onto concrete surface
Watertightness & Weather Proofness: The mating of cable assemblies should provide a connection which is weatherproof when exposed to the conditions described in APTA RP-E-016-99 Section 4.5.

Note: XXXX denotes customer specified length in inches.
 Ex: MPA-2-0060 = 60" in length.



MRRA-AMTK
Control circuit adapter – integral molded body



MRA-H-V37
Replacement cover kit – standard housing

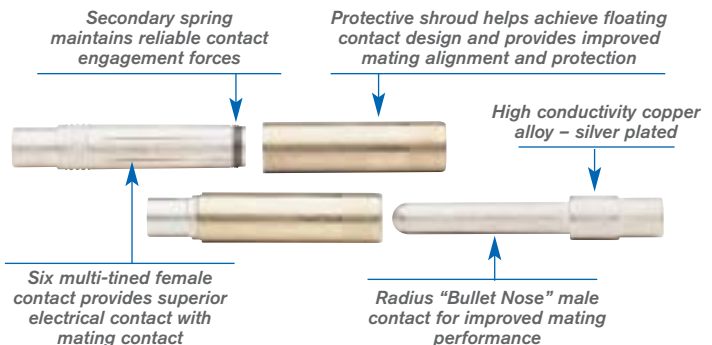


MRA-H-3L-K
Replacement cover kit – improved cover with latch



MPA-SR
Cable strain relief for fixed jumper

480V HEP Power Contact



Field-proven design ensures contact reliability.