

PEARL Reconditioning Standards			
LOW VOLTAGE AND MEDIUM VOLTAGE FUSES NON REFILL STYLE	Revision		
	Standard	Number	Date
	3110	5	11-2008

This standard is designed to verify that a low voltage fuse or a medium voltage fuse is in a safe and reliable operating condition. ***In the event that the fuse is not in this condition then it must be discarded.*** The term "reconditioning" is defined for Section 3100 only as "the process of enhancing the physical attributes of a fuse that already has the proper electrical properties."

The purpose of this enhancement is twofold;

- a) Better identification of the fuse and its electrical properties.
- b) Return the electrical contact points of the fuse to the original manufactured state for better corrosion inhibition and better electrical conductivity.

I TEST EQUIPMENT

One of the following pieces of test equipment is required to perform the fuse linkage resistance testing requirements of this standard:

1. Digital Low Resistance Ohmmeter (DLRO - 10 amp unit is sufficient.)
2. DC Current Source and a Millivoltmeter

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II RECONDITION EVALUATION

These steps are used to determine what will be required to recondition this product under this standard.

1 INSPECTION

1.1 Barrel

- 1.1.1** Ensure that the labels and/or stampings are legible
- 1.1.2** Ensure that the third party listing service label is legible if applicable
- 1.1.3** Inspect for dents and subsurface scarring
- 1.1.4** Inspect for signs of overheating, swelling and deterioration
- 1.1.5** Inspect for rust and corrosion
- 1.1.6** Inspect for discoloration, cracking or brittleness
- 1.1.7** Inspect for proper seals between the barrel and conductive ends
- 1.1.8** Record results on an approved PEARL Evaluation Form.

1.2 Conductive Ends

- 1.2.1** Inspect for missing screws, bolts and/or nuts
- 1.2.2** Inspect for dents and subsurface scarring
- 1.2.3** Inspect for signs of corrosion, discoloration and oxidation.
- 1.2.4** Inspect for cracking from mishandling and/or improper crimping
- 1.2.5** Inspect for a damaged indicator and/or actuator where applicable
- 1.2.6** Record Results on an approved PEARL Evaluation Form.

2 TESTING

2.1 Fuse Link Resistance

- 2.1.1** Perform a contact resistance, millivolt drop test or watt-loss test between conductive ends
- 2.1.2** Record results on an approved PEARL Evaluation Form.
- 2.1.3** As PEARL we recognized the ANSI standard of acceptance. Each fuse should test within 15% of each other in a single or a three phase switch.

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III RECONDITIONING PROCEDURES

The following procedures are in a recommended order and are required to recondition this product. PEARL recognizes that, based on actual product design and as found condition, some of these procedures may not be applicable. The testing requirement must be completed before the product can be labeled as a PEARL reconditioned product.

1 RECONDITIONING

1.1 Barrel

- 1.1.1 Sandblasting/sanding off dirt and/or surface scratches
- 1.1.2 Repainting

1.2 Conductive Ends

- 1.2.1 Sandblasting/sanding away dirt, grease, surface scratching and/or corrosion
- 1.2.2 Replace missing screws bolts and/or nuts as required.
- 1.2.3 Silver plating contact areas using an electrochemical process.

2 TESTING

2.1 Fuse Link Resistance

- 2.1.1 Perform a contact resistance, millivolt drop test or watt-loss test between conductive ends
- 2.1.2 Record results on an approved PEARL Evaluation Form.
- 2.1.3 As PEARL we recognized the ANSI standard of acceptance. Each fuse should test within 15% of each other in a single or a three phase switch.

IV PEARL CERTIFICATION

This product has now been reconditioned under the PEARL Reconditioning Standard. The blue PEARL Reconditioning Quality Seal may now be placed on the device.