



**Professional Electrical Apparatus Recyclers League
INSPECT & TEST STANDARDS
for
Electrical Apparatus and Electrical Equipment used in
Commercial and Industrial Application**

*© Copyright 2009 Professional Electrical Apparatus Recyclers League,
4255 South Buckley Road, #118, Aurora, CO 80013.
All rights reserved. Reproduction or use without permission is expressly prohibited.*

<u>Section</u>	<u>Title</u>	<u>Page</u>
1000	General Information	
	Forward	1000-1
	Important Notice	1000-2
	Credits	1000-3
	Acknowledgments	1000-5
	Standard Terms & Warranties	1000-6
1010	PEARL Calibration Standard	1010-1
1100	Low Voltage Disconnect Switches	
1110-I	Low Voltage Disconnect Switches Manually Operated Air Non-Fusible	1110-I-1
1114-I	Low Voltage Disconnect Switches Manually Operated Air Fusible	1114-I-1
1130-I	Low Voltage Disconnect Switches Manual Trip Power Non-Fusible	1130-I-1
1134-I	Low Voltage Disconnect Switches Manual Trip Power Fusible	1134-I-1
1140-I	Low Voltage Disconnect Switches Electric Trip Power Non-Fusible	1140-I-1
1144-I	Low Voltage Disconnect Switches Electric Trip Power Fusible	1144-I-1
<i>1150-I</i>	<i>Low Voltage Safety Switches Single Throw Non-Fusible - PROPOSED</i>	<i>1150-I-1</i>
<i>1154-I</i>	<i>Low Voltage Safety Switches Single Throw Fusible - PROPOSED</i>	<i>1154-I-1</i>
1170-I	Low Voltage Disconnect Switches Panelboard Non-Fusible	1170-I-1
1174-I	Low Voltage Disconnect Switches Panelboard Fusible	1174-I-1
<i>1180-I</i>	<i>Low Voltage Safety Switches Double Throw Non-Fusible - PROPOSED</i>	<i>1180-I-1</i>
<i>1184-I</i>	<i>Low Voltage Safety Switches Double Throw Fusible - PROPOSED</i>	<i>1184-I-1</i>
1200	Low Voltage Circuit Breakers	
1211-I	Low Voltage Molded Case Circuit Breaker with Thermal Magnetic Trip Unit	1211-I-1
1212-I	Low Voltage Molded Case Circuit Breaker with Solid State Trip Unit	1212-I-1
1213-I	Low Voltage Riveted Case Molded Case Circuit Breaker	1213-I-1
1214-I	Low Voltage Molded Case Switches (Non-Automatic Circuit Interrupters)	1214-I-1
1215-I	Low Voltage Molded Case Motor Circuit Protectors	1215-I-1
1221-I	Low Voltage Insulated Case Circuit Breakers with Solid State Trip Unit	1221-I-1
1231-I	Low Voltage Power Circuit Breakers with Series Trip Unit	1231-I-1
1236-I	Low Voltage Power Circuit Breakers with Solid State Trip Unit	1236-I-1
1300	Low Voltage Panelboards, Switchboards & Switchgear	
1310-I	Low Voltage Circuit Breaker Panelboards	1310-I-1
1320-I	Low Voltage Switchboards and Switchgear	1320-I-1
1330-I	Low Voltage Motor Control Centers	1330-I-1
1400	Low Voltage Transformers	
1410-I	Low Voltage Transformers Dry-Type (600V AC Max. Primary)	1410-I-1
1420-I	Low Voltage Transformers Control Power	1420-I-1
1430-I	Low Voltage Transformers Instrumentation Voltage	1430-I-1
1440-I	Low Voltage Transformers Instrumentation Current	1440-I-1
1500	Low Voltage Motor Control Center Buckets & Enclosed Assemblies	
1510-I	Low Voltage Motor Control Center Bucket	1510-I-1
1520-I	Low Voltage Magnetic Starters Enclosed	1520-I-1
1530-I	Low Voltage Magnetic Starters Combination	1530-I-1
1600	Low Voltage Motor Starters	
1620-I	Low Voltage Magnetic Starters Open	1620-I-1

<u>Section</u>	<u>Title</u>	<u>Page</u>
1700	Protection Relays	
	<i>1710-I Instantaneous Overcurrent Relay Electromagnetic Attraction - PROPOSED</i>	<i>1710-I-1</i>
	<i>1715-I Instantaneous Overcurrent Relay Solid State - PROPOSED</i>	<i>1715-I-1</i>
	<i>1720-I Time Overcurrent Relay Electromagnetic Induction Disk - PROPOSED</i>	<i>1720-I-1</i>
	<i>1730-I Instantaneous Voltage Electromagnetic Attraction - PROPOSED</i>	<i>1730-I-1</i>
	<i>1735-I Instantaneous Voltage Solid State - PROPOSED</i>	<i>1735-I-1</i>
	<i>1740-I Overvoltage Electromagnetic Relay - PROPOSED</i>	<i>1740-I-1</i>
	1750-I Low Voltage Thermal Overload Relay	1750-I-1
	1760-I Low Voltage Solid State Overload Relay	1760-I-1
	1765-I Low Voltage Solid State Overload Relay Multi Function	1765-I-1
1800	Low Voltage Contactors and Relays	
	<i>1810-I Low Voltage AC Contactor - PROPOSED</i>	<i>1810-I-1</i>
	<i>1820-I Low Voltage AC Control Relay No Time Delay - PROPOSED</i>	<i>1820-I-1</i>
	<i>1825-I Low Voltage AC Control Relay Time Delay - PROPOSED</i>	<i>1825-I-1</i>
	<i>1830-I Low Voltage DC Contactor - PROPOSED</i>	<i>1830-I-1</i>
	<i>1840-I Low Voltage DC Control Relay No Time Delay - PROPOSED</i>	<i>1840-I-1</i>
	<i>1845-I Low Voltage DC Control Relay Time Delay - PROPOSED</i>	<i>1845-I-1</i>
1900	Apparatus Accessories	
	<i>1930-I Low Voltage Surge Arrestors - PROPOSED</i>	<i>1930-I-1</i>
2000	Low Voltage Bus Duct	
	2010-I Low Voltage Bus Duct Plug-In Type	2010-I-1
	2020-I Low Voltage Bus Duct Feeder Type	2020-I-1
	2030-I Low Voltage Disconnect Switches Bus Duct Plug-in Non-Fusible	2030-I-1
	2035-I Low Voltage Disconnect Switches Bus Duct Plug-in Fusible	2035-I-1
	2040-I Low Voltage Molded Case Circuit Breaker Bus Duct Plug-in	2040-I-1
	<i>2050-I Low Voltage Molded Case Switch Bus Duct Plug-In - PROPOSED</i>	<i>2050-I-1</i>
2100	Medium Voltage Disconnect Switches	
	2110-I Medium Voltage Air Disconnect Switches Enclosed Manually Operated Non-Fusible	2110-I-1
	2111-I Medium Voltage Air Disconnect Switches Enclosed Manually Operated Fusible	2111-I-1
	2120-I Medium Voltage Air Disconnect Switches Enclosed Electrically Operated Non-Fusible	2120-I-1
	2121-I Medium Voltage Air Disconnect Switches Enclosed Electrically Operated Fusible	2121-I-1
	<i>2130-I Medium Voltage Vacuum Disconnect Switches Manually Operated Non-Fusible - PROPOSED</i>	<i>2130-I-1</i>
	<i>2131-I Medium Voltage Vacuum Disconnect Switches Manually Operated Fusible - PROPOSED</i>	<i>2131-I-1</i>
	<i>2140-I Medium Voltage Vacuum Disconnect Switches Electrically Operated Non-Fusible - PROPOSED</i>	<i>2140-I-1</i>
	<i>2141-I Medium Voltage Vacuum Disconnect Switches Electrically Operated Fusible - PROPOSED</i>	<i>2141-I-1</i>
2200	Medium Voltage Circuit Breakers & Starters	
	2210-I Medium Voltage Circuit Breakers Air	2210-I-1
	2220-I Medium Voltage Circuit Breakers Vacuum	2220-I-1
	<i>2230-I SF6 Circuit Breaker – Stored Energy-Spring - PROPOSED</i>	<i>2230-I-1</i>
	2250-I Medium Voltage Contactors Air	2250-I-1
	2260-I Medium Voltage Contactors Vacuum	2260-I-1
2400	Medium Voltage Transformers	
	2410-I Medium Voltage Transformers Dry Type	2410-I-1
	2420-I Medium Voltage Transformers Pad Mount Oil-Filled	2420-I-1
	2430-I Medium Voltage Transformers Pad Mount Gas-Filled	2430-I-1
	2440-I Medium Voltage Transformers Power Oil-Filled	2440-I-1

<u>Section</u>	<u>Title</u>	<u>Page</u>
3100	Low Voltage & Medium Voltage Fuses	
3110-I	Low Voltage & Medium Voltage Fuses – Non-Refill Style	3110-I-1
3120-I	Low Voltage & Medium Voltage Fuses – Refill Style	3120-I-1
4100	Low Voltage Wire & Cable	
4110-I	Low Voltage Wire and Cable Unshielded – Single Conductor	4110-I-1
4115-I	Low Voltage Wire and Cable Unshielded – Multiple Conductors	4115-I-1
4120-I	Low Voltage Wire and Cable Shielded – Single Conductor	4120-I-1
4125-I	Low Voltage Wire and Cable Shielded – Multiple Conductors	4125-I-1
4200	Medium Voltage Wire & Cable	
4210-I	Medium Voltage Wire and Cable Unshielded – Single Conductor	4210-I-1
4215-I	Medium Voltage Wire and Cable Unshielded – Multiple Conductors	4215-I-1
4220-I	Medium Voltage Wire and Cable Shielded – Single Conductor	4220-I-1
4225-I	Medium Voltage Wire and Cable Shielded – Multiple Conductors	4225-I-1
6000	Tables	
6001	Table 1 U.S. Standard Bus Connection Bolt Torque Values	6001-1
6002	Table 2 Insulation Resistance Test Values for Electrical Apparatus	6002-1
6003	Table 3 Molded Case Circuit Breaker Inverse Time Trip Test Values	6003-1
6004	Table 4 Adjustable Trip Circuit Breaker Instantaneous Trip Setting Tolerances	6004-1
6005	Table 5 Overpotential Test Voltages for Non-Inductive Electrical Apparatus	6005-1
6006	Table 6 Transformer Insulation Resistance Test Values	6006-1
6007	Table 7 Power Factor/Dissipation Factor Recommended Test Voltage Values	6007-1
6008	Table 8 Maximum Allowable Vibration Amplitude Test Values	6008-1
6009	Table 9 Wire and Cable Insulation Resistance Test Values	6009-1
6010	Table 10 Medium Voltage Wire and Cable Maximum Test Voltage Values	6010-1
6011	Table 11 Insulation Resistance Test Temperature Conversion to 20° C Values	6011-1