

Non-NRTL/Modified NRTL Listed Electrical Equipment Approval Form For use at Argonne National Laboratory

Division:		Manufacturer	
Equipment Owner		Model Number	
Equipment Name		Serial Number	
Equipment Location	Building _____ Room _____	Argonne Property Number	

Label Number:

Multiple Single

Unlisted equipment that is determined to be safe to operate will have a tracking sticker attached for identification. Equipment that does not pass this evaluation will have a REJECTED sticker attached.

Enclosure	Approve	N/A	Reject
Operator not exposed to any hazard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not damaged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate materials used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protects contents from operating environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adequate shock protection (components well secured)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will contain any arcs, sparks and electrical explosions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Power source - cord and plug			
Proper voltage and ampacity rating for plug and cord	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grounding conductor included (if required)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not frayed or damaged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper wiring of plug	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strain relief on cord	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Power source - direct wired			
Proper voltage and ampacity rating for wiring method	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Installation according to the NEC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper loading and overcurrent protection in branch circuit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Foreign power supplies and equipment			
Connected to facility power with appropriate adapters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct voltage, frequency and phasing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct wire ampacity for US use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Grounding	Approve	N/A	Reject
Ground is properly terminated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All non-current carrying exposed metal is properly bonded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All non-current carrying internal subsystems are properly bonded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment ground is run with circuit conductors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Auxiliary ground is permitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internal wiring			
Polarity correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Phasing correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landing of ground correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Separate line/high voltage from low voltage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wiring terminals and leads ok (no tension on terminals)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper wire size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No loose parts (mechanical bracing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper overcurrent protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper dielectric	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clearance/creepage distances for high voltage ok	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Marking requirements			
Power requirements (voltage, current, frequency)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restrictions and limitations of use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Make, model and drawing number	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hazards, including stored energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Requirements for access (LOTO, stored energy, PPE)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Label Number

Tests performed	Approve	N/A	Reject
Ground continuity less than 1 Ohm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Polarization of cord and plug	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional tests (GFCI, Emergency Shut Off)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automatic discharge of high voltage capacitor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Issues			
Neat workmanship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper management of conductors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free from sharp edges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper cooling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Switches and controls readily accessible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintenance			
Any safety issues with access and maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Failure analysis	Approve	N/A	Reject
Effect of ground fault	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effect of short circuit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effect of interlock failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effect of overload	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effect of incorrect setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secondary hazards			
RF hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DC electric or magnetic fields	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IR, visible or UV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
X-Rays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fire or electrical explosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Documentation			
Documentation adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operating procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training and qualifications to use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTE: APPROVED EQUIPMENT SHALL BE INSPECTED AND USED IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED BY THE DESIGNER/BUILDER.

Comments: Include all designer/builder instructions, restrictions on use, drawings or information that is relevant to the safe installation and use of this equipment.

- This equipment is approved for installation or use at Argonne.
- This equipment is rejected for use at Argonne. (See comments above)
- This equipment has been removed from service at Argonne.

Operating Environment:

- Indoor/Dry Locations Outdoor/Wet Locations
- Hazardous/Classified Locations

Expiration Date:

IF THIS EQUIPMENT IS MODIFIED, DAMAGED OR UTILIZED FOR OTHER THAN THE INTENDED USE, THIS APPROVAL IS VOID, PENDING RE-EXAMINATION.

Inspection Date:	Inspector (Name):	Inspector (Signed):