

Project Number: 4789302847 File Number: DA487

Data Acceptance Program (DAP) Assessment Report for

Institute for International Product Safety GmbH

Hein-Moeller Strasse 7-11 Bonn 53115 DE

in Underwriters Laboratories

Third Party Test Data Program (TPTDP)

Assessment conducted on Q- Audit: 2020-09-22/24, T- Audit: 2020-08-27

UL Assessment Team:

Stefan Hochwart, Lead Auditor Dirk Mueller, Technical Auditor

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Assessment Summary

Thank you for your cooperation during our recent visit to your facility. This assessment was conducted on Q- Audit: 2020-09-22/24, T- Audit: 2020-08-27 by Lead Auditor Stefan Hochwart (stefan.hochwart@ul.com). This summary may include any noteworthy areas of strength, and/or areas that will require follow-up during the next visit if applicable:

(Audit Staff - Click within the text box to activate that ability to type the summary. Click outside the box to go back to Excel.)

A general reassessment of laboratory operations was conducted of the Institute for International Product Safety GmbH laboratory facility, located in Bonn, Germany, for continuation in the Data Acceptance Program (DAP) as a Third Party Test Data Program (TPTDP) laboratory under File DA487. As Institute for International Product Safety GmbH has been in the TPTDP and a CBTL since approx. 20 years and has ISO17025 accreditation by DAkks (D-PL-19125-01-00, valid until 2023-06-28) for the testing laboratory and has a ISO17025 accreditation by DAkks (D-K-19125-01-00, valid until 2023-03-22) for the calibration laboratory, the remaining clauses of ISO17025 and the relevant technical standards were assessed along with the related policies and procedures.

This facility participates in the TPTDP for UL and is CBTL for the NCB Demko, during this assessment we conducted only a TPTDP assessment since IECEE conducted the CBTL by themselves.

Due to the current Corona situation we conducted the quality part of this assessment by webcam based on the requirements described in 95-OP-S0880. But the technical audit was conducted at the facility.

Overall, the system assessed was in compliance with the requirements. Areas of strength include the staff's technical knowledge and implementation of existing QMS procedures.

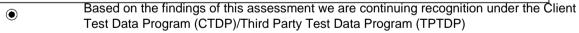
Areas of continuous improvement include development of ISO17025 policies and procedures, as well as any adaptation based on UL's DAP/CTDP requirements. UL posts DAP announcements and program tools on UL's website, and laboratory staff are encouraged to review documentation for updates. Type "ul.com/dap" into your browser or follow these links:

http://services.ul.com/service/data-acceptance-program/ http://ul.com/offerings/dap/tools/

During the assessment we added new editions of the standards UL/CSA60947-5-1, IEC61439-1 and IEC61439-2 to the TPTDP scope.

Overall, we were pleased with the results of the audit and found everyone to be well prepared. We appreciate your hospitality during our stay and your openness in sharing company policies.

The Audit Team



Based upon these findings, we are recommending inactivation. Please see Appendix A, Section II.

Nonconformities to Requirements

The following non-conformities have been noted as findings and/or observations in the table below.

Clause	100/IEC 4700E-0047 Assessment Touriset	Number of NCRs w	ritten per clause:
Clause	ISO/IEC 17025:2017 Assessment Topics*	Findings	Observations
6.2	Personnel		
6.3	Facilities and environmental conditions		
6.4	Equipment		
6.5	Metrological traceability		
6.6	Externally provided products and services		1
7.2	Selection, verification and validation of methods		
7.4	Handling of test or calibration items		
7.5	Technical Records		
7.8	Reporting of results		
7.10	Non-Conforming Work		
7.11	Control of data and information management		
8.3	Control of management system documents (Option A)		
8.4	Control of records (Option A)		
8.7	Corrective actions (Option A)		

There were 0 Finding NCR(s) and 1 observation NCR(s) noted during this assessment. Details are provided within the enclosed NCR report. Instructions for the Follow-up Process are provided in Appendix A, Section I.

Previous NCRs (1, 2, 3) were reviewed to confirm implementation and effectiveness.

See Attachment A (provided with this report) for the standards and tests that are included under the scope of DAP participation.

Data Acceptance Program (DAP) Assessment Report

Authorized Signatories

If any changes are needed to be made to this list of authorized signatories between the annual assessment cycles, please contact DAP Customer Service at DAP@ul.com.

Signatories Authorized by the Laboratory	Status
Bernhard Schneider	
Daniel Heimerl	
Florian Kopelke	
Frank Woerdehoff	
Heribert Schorn	Primary Signatory
KLAUS HEIDELBERGER	
Karin Richter	
MATTHIAS HUNZE	
PETER GROSSER	
Pietro Pelusi	
Raimund Frings	
Ralf Hartkamp	
Toni Hoffmann	

Meeting Participants

Opening	Closing	Name of Participants	Title / Position
✓	V	Mr. Friederichs	Quality Manager
V	V	Mr. Hochwart	Lead Auditor (UL)
7	7	Mr. Mueller	PDE Tech Auditor (UL)
			` <i>'</i>

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Appendix A: Instructions for Follow-up

I - Non-conformities (NCRs):

For any non-conformances that require Corrective Action, please complete the required sections of the Form and e-mail it to the Lead Auditor by the date identified within the NCR Report (typically within 20 business days of the completion of the audit). If the Anniversary Date (AVD) in within less than 20 days, please note you may need to respond sooner to remain active in the program. The DAP Lead Auditor will note this within the NCR Report (in the response due by section). If no response is received within the required timeframe, the participant may be inactivated from the program.

Corrective Action Required:

- A. Please complete the "Analysis leads to Root Cause Statement" section of the NCR Report by including a summary of the analysis performed and the final Root Cause Statement. Document the Corrective Actions(s) taken to fix the root cause identified and provide dates and related objective evidence as to how and when these Corrective Actions were completed.
- B. If a Corrective Action is planned or in-process (it cannot be completed by the requested response date), please indicate the long term Corrective Action(s) that are planned or in-process and provide the anticipated date(s) to complete all actions
- C. All NCR's that require Corrective Action will be verified for effectiveness during the next DAP Assessment.

Observations:

- A. No Root Cause Analysis is required for Observations.
- B. Identify the Corrective Actions(s) taken to fix the problem identified within the "Nonconformity (problem statement)" and provide dates and related objective evidence as to how and when these Corrective Actions were completed.
- C. If a Corrective Action is planned or in-process (it cannot be completed by the requested response date), please indicate the long term Corrective Action(s) and provide the anticipated date(s) to complete all actions.
- D. If the Objective Evidence provided is sufficient to verify the effectiveness of the Corrective Action taken (i.e. revised record or QMS Document); the Observation can be closed. If not, it will be verified during the next DAP assessment.

II - Recommendation for Data Acceptance Program (DAP) Inactivation (If indicated on page 2)

The non-conformities(s) indicated below and recorded in the NCR forms are considered of major significance, and as such indicate a breakdown in your management system.

Clause Number	r / NCR Reference:]	
Description:			

This report is being forwarded to UL for immediate review, and you will receive a notification regarding the status of your participation in the Data Acceptance Program. **Corrective Action responses will be required within 10 business days to the lead assessor of the notification date.** A special assessment may be conducted within 4 months (120 days) to re-audit the clauses/NCR(s) indicated above. If the outcome shows the corrective action was effectively implemented and the system is in compliance, then the normal annual assessment program will be resumed. Your Data Acceptance Program will be placed on inactive status should the NCR(s) not be resolved at this time.

If the system is not found to be in compliance within 120 days from the date of this report, participation in the Data Acceptance Program will be inactivated.

To appeal an assessment finding, please contract DAP@ul.com for further assistance.

Data Acceptance Program (DAP) Assessment Report

Project Number: 4789302847 Assessment conducted on Q- Audit: 2020-09-22/24, T- Audit: 2020-08-27 File Number: DA487 Standard Edition Standard Standard Title: Clause: Test method: (Amendment): Number: ATTACHMENT A - Post Audit Scope (0 Tests Total) ATTACHMENT A - Post Audit Scope (994 Tests Total) CSA-C22.2 FLAME TEST 5V (500 W) **Evaluation of Properties of Polymeric Materials** 2 4.2.1 No. 0.17 CSA-C22.2 VERTICAL BURNING TEST - V-0, V-1 AND V-2 (50 **Evaluation of Properties of Polymeric Materials** 2 422 No. 0.17 W) CSA-C22.2 Evaluation of Properties of Polymeric Materials HORIZONTAL BURNING TEST - HB 2 4.2.3 No. 0.17 CSA-C22.2 **Evaluation of Properties of Polymeric Materials** ALTERNATIVE FLAME TEST (NEEDLE FLAME) 2 9.2 No. 0.17 CSA-C22.2 **Evaluation of Properties of Polymeric Materials** GLOW-WIRE RATING FOR END PRODUCT 2 9.3 No. 0.17 CSA-C22.2 **Evaluation of Properties of Polymeric Materials** MOLD STRSS-RELIEF TEST 2 9.4 No. 0.17 CSA-C22.2 Evaluation of Properties of Polymeric Materials PHYSICAL ABUSE 2 9.5 No. 0.17 CSA-C22.2 Evaluation of Properties of Polymeric Materials 2 D1 125 MM FLAME TEST No. 0.17 CSA-C22.2 HORIZONTAL BURNING FLAME TEST (20MM) **Evaluation of Properties of Polymeric Materials** D3 2 No. 0.17 CSA-C22.2 SHORT CIRCUIT Industrial Control Equipment 12 6.11 No. 14 CSA-C22.2 MAGNETIC TRIP OUT TEST Industrial Control Equipment 12 6 11 7 No. 14 CSA-C22.2 COMBINATION SHORT CIRCUIT TEST Industrial Control Equipment 12 6.11.8 No. 14 CONTROLLERS INTENDED FOR USE ON CSA-C22.2 CIRCUITS CAPABLE OF DELIVERING HIGH Industrial Control Equipment 12 6.12 No. 14 **FAULT CURRENTS** CSA-C22.2 FLAMMABILITY OF ENCLOSURE Industrial Control Equipment 12 6.15.2 No. 14 CSA-C22.2 6.15.3 **RESISTANCE TO IMPACT - ENCLOSURES** Industrial Control Equipment 12 No. 14 CSA-C22.2 RESISTANCE TO IMPACT - OBSERVATION 6 15 4 Industrial Control Equipment 12 **OPENINGS** No. 14 CSA-C22.2 POLYMERIC ENCLOSURE MATERIALS -Industrial Control Equipment 6.15.5 12 DIELECTRIC STRENGTH No. 14 CSA-C22.2 CONDUIT CONNECTIONS Industrial Control Equipment 12 6.15.6 No. 14 CSA-C22.2 SECUREMENT OF SNAP-ON COVERS Industrial Control Equipment 6.16 12 No. 14 CSA-C22.2 Industrial Control Equipment 12 6.17 COMPRESSION No. 14 CSA-C22.2 Industrial Control Equipment DEFLECTION 12 6.18 No. 14

6.19

12

CSA-C22.2

No. 14

Industrial Control Equipment

TRANSIENT-VOLTAGE-SURGE SUPPRESSION

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Standard Number:	Standard Title:	Standard Edition (Amendment):	Clause:	Test method:
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.2	TEMPERATURE
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.20	DIELECTRIC VOLTAGE-WITHSTAND TEST IN LIEU OF MEASURING SPACINGS
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.22	VOLTAGE WITHSTAND
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.23.1	TEMPERATURE
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.23.2	OVERLOAD AND ENDURANCE
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.23.3	DIELECTRIC STRENGTH
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.23.4	SHORT CIRCUIT
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.25	STRAIN RELIEF
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.3	OVERVOLTAGE AND UNDERVOLTAGE
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.4	OVERLOAD RELAY CALIBRATION
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.5	OVERLOAD
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.6	ENDURANCE
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.7	CURRENT WITHSTAND TEST
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.8	DIELECTRIC STRENGTH
CSA-C22.2 No. 14	Industrial Control Equipment	12	6.9	BURNOUT
CSA-C22.2 No. 14	Industrial Control Equipment	13	6.11	SHORT CIRCUIT
CSA-C22.2 No. 14	Industrial Control Equipment	13	6.11.7	MAGNETIC TRIP-OUT TEST
CSA-C22.2 No. 14	Industrial Control Equipment	13	6.11.8	COMBINATION SHORT-CIRCUIT
CSA-C22.2 No. 14	Industrial Control Equipment	13	6.12	HIGH FAULT CURRENTS
CSA-C22.2 No. 14	Industrial Control Equipment	13	6.15.2	FLAMMABILITY OF ENCLOSURE
CSA-C22.2 No. 14	Industrial Control Equipment	13	6.15.3	RESISTANCE TO IMPACT - ENCLOSURES
CSA-C22.2 No. 14	Industrial Control Equipment	13	6.15.4	RESISTANCE TO IMPACT - OBSERVATION OPENINGS
CSA-C22.2 No. 14	Industrial Control Equipment	13	6.15.5	DIELECTRIC STRENGTH
CSA-C22.2 No. 14	Industrial Control Equipment	13	6.15.6	CONDUIT CONNECTION

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Standard

Number: CSA-C22.2

No. 14

No. 14 CSA-C22.2

No. 14

No. 14 CSA-C22.2

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No. 14

No. 14 CSA-C22.2

No. 14

No. 14 CSA-C22.2

No. 158 CSA-C22.2

No. 158

Terminal Blocks

Terminal Blocks

3

3

6.7

6.8

Data Acceptance Program (DAP) Assessment Report Assessment conducted on Q- Audit: 2020-09-22/24, T- Audit: 2020-08-27 File Number: DA487 Standard Edition Standard Title: Clause: Test method: (Amendment): Industrial Control Equipment 13 6.18 DEFLECTION Industrial Control Equipment 13 6.19 TRANSIENT-VOLTAGE-SURGE SUPPRESSION Industrial Control Equipment 13 6.2 **TEMPERATURE** DIELECTRIC VOLTAGE-WITHSTAND TEST IN Industrial Control Equipment 13 6.20 LIEU OF MEASURING SPACINGS Industrial Control Equipment 13 6.22 **VOLTAGE WITHSTAND** MANUAL CONTROLLERS INTENDED FOR USE Industrial Control Equipment 13 6.23.1 AS A MOTOR DISCONNECT - TEMPERATURE MANUAL CONTROLLERS INTENDED FOR USE Industrial Control Equipment 6.23.2 AS A MOTOR DISCONNECT - OVERLOAD AND 13 **ENDURANCE** MANUAL CONTROLLERS INTENDED FOR USE Industrial Control Equipment 6.23.3 AS A MOTOR DISCONNECT - DIELECTRIC 13 STRENGTH 6.23.4 SHORT-CIRCUIT Industrial Control Equipment 13 Industrial Control Equipment 13 6.25 STRAIN RELIEF Industrial Control Equipment OVERVOLTAGE AND UNDERVOLTAGE 13 6.3 Industrial Control Equipment 13 **OVERLOAD RELAY CALIBRATION** 6.4 Industrial Control Equipment 13 6.5 **OVERLOAD ENDURANCE** Industrial Control Equipment 13 6.6 **CURRENT WITHSTAND TEST** Industrial Control Equipment 13 6.7 DIELECTRIC STRENGTH Industrial Control Equipment 13 6.8 BURNOUT Industrial Control Equipment 13 6.9 SPRING FORCE CONNECTIONS Terminal Blocks 3 6.12 Terminal Blocks **SECURENESS** 3 6.3 Terminal Blocks STATIC HEATING 3 6.4 Terminal Blocks **PULLOUT** 3 6.5 Terminal Blocks 3 6.6 DIELECTRIC STRENGTH

ACCELERATED AGING

VERIFICATION OF THE PERFORMANCE OF THE

TERMINAL ASSEMBLIES OF A TERMINAL BLOCK

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Standard Number:	Standard Title:	Standard Edition (Amendment):	Clause:	Test method:
CSA-C22.2 No. 158	Terminal Blocks	3	6.9	MOUNTING SECURITY
CSA-C22.2 No. 235	Supplementary Protectors	2	6.2	CALIBRATION AND RECALIBRATION VERIFICATION (OVERCURRENT-TRIP AND OVERCURRENT-TYPE SHUNT-TRIP PROTECTORS)
CSA-C22.2 No. 235	Supplementary Protectors	2	6.3.1	TEMPERATURE (NORMAL)
CSA-C22.2 No. 235	Supplementary Protectors	2	6.4	OVERVOLTAGE AND UNDERVOLTAGE (OVERVOLTAGE-TRIP, UNDERVOLTAGE-TRIP, AND SHUNT-TRIP PROTECTORS)
CSA-C22.2 No. 235	Supplementary Protectors	2	6.5	OPERATION (OVERVOLTAGE-TRIP AND UNDERVOLTAGE-TRIP PROTECTORS)
CSA-C22.2 No. 235	Supplementary Protectors	2	6.6	OVERLOAD
CSA-C22.2 No. 235	Supplementary Protectors	2	6.7	ENDURANCE
CSA-C22.2 No. 235	Supplementary Protectors	2	6.8	SHORT-CIRCUIT TESTS — LIMITED, CONDITIONAL, AND INTERRUPTING (SUITABLE FOR FURTHER USE)
CSA-C22.2 No. 235	Supplementary Protectors	2	6.9.2	VOLTAGE WITHSTAND TEST
CSA-C22.2 No. 244	Switchboards	1	9.2.3.5	AFTER SHORT CIRCUIT DIELECTRIC
CSA-C22.2 No. 244	Switchboards	1	9.2.4	SHORT CIRCUIT
CSA-C22.2 No. 254	Motor Control Centres	5	8.2.29	GROUNDING AND BONDING
CSA-C22.2 No. 254	Motor Control Centres	5	9.10	SHORT-CIRCUIT TESTS - BUS STRUCTURE
CSA-C22.2 No. 254	Motor Control Centres	5	9.11	DIELECTRIC VOLTAGE-WITHSTAND TEST (AFTER SHORT-CIRCUIT TEST - BUS STRUCTURE)
CSA-C22.2 No. 254	Motor Control Centres	5	9.12	SHORT-CIRCUIT (STANDARD-LEVEL) TESTS FOR MOTOR CONTROL CENTRE UNITS
CSA-C22.2 No. 254	Motor Control Centres	5	9.15	SHORT-CIRCUIT (HIGH-LEVEL) TEST FOR MOTOR CONTROL CENTRE UNITS
CSA-C22.2 No. 254	Motor Control Centres	5	9.3	TEMPERATURE-RISE TEST
CSA-C22.2 No. 254	Motor Control Centres	5	9.9	DIELECTRIC VOLTAGE-WITHSTAND TEST (AFTER CONTACTOR OVERLOAD TEST)
CSA-C22.2 No. 27	Busways	6	8.2.1	VERIFICATION OF TEMPERATURE-RISE LIMITS
CSA-C22.2 No. 27	Busways	6	8.2.2	VERIFICATION OF DIELECTRIC VOLTAGE WITHSTAND
CSA-C22.2 No. 27	Busways	6	8.2.3	VERIFICATION OF SHORT-CIRCUIT WITHSTAND STRENGTH
CSA-C22.2 No. 27	Busways	6	8.2.4	VERIFICATION OF ELECTRICAL CONDUCTIVITY
CSA-C22.2 No. 27	Busways	6	8.2.7.1	VERIFICATION OF BENDING RESISTANCE

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CSA-C22.2 No. 27	Busways	6	8.2.7.2	VERIFICATION OF IMPACT STRENGTH
CSA-C22.2 No. 27	Busways	6	8.2.7.3	VERIFICATION OF CRUSHING RESISTANCE
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.13	BREAKDOWN OF COMPONENTS
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.14	PROTECTIVE BONDING
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.16.2	RESISTANCE TO IMPACT - ENCLOSURES
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.16.3	RESISTANCE TO IMPACT - OBSERVATION
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.16.4	DIELECTRIC STRENGTH
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.18	CONTACTOR OVERLOAD
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.19	CAPACITOR DISCHARGE TEST
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.2	TEMPERATURE
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.21	IMPULSEVOLTAGE
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.22	INTERLOCK INTEGRITY
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.24	MOLD STRESS RELIEF TEST
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.3	DIELECTRIC STRENGTH
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.4	VERIFICATION OF ELECTRONIC MOTOR OVERLOAD PROTECTION
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.5	CURRENT LIMITING CONTROL
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.6	SHORT CIRCUIT
CSA-C22.2 No. 274	Adjustable Speed Drives	1	6.7	HIGH FAULT CURRENT
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.12	BREAKDOWN OF COMPONENTS TEST
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.13	PROTECTIVE BONDING
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.15.2	RESISTANCE TO IMPACT — ENCLOSURES
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.15.3	RESISTANCE TO IMPACT — OBSERVATION OPENINGS
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.15.4	DIELECTRIC STRENGTH
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.17	CONTACTOR OVERLOAD

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Standard Number:	Standard Title:	Standard Edition (Amendment):	Clause:	Test method:
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.18	CAPACITOR DISCHARGE TEST
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.2	TEMPERATURE
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.20	IMPULSE VOLTAGE TEST
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.21	ISOLATING MEANS AND INTERLOCK INTEGRITY
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.23	MOULD STRESS RELIEF TEST
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.3	DIELECTRIC STRENGTH
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.4	VERIFICATION OF ELECTRONIC MOTOR OVERLOAD PROTECTIVE CIRCUITRY
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.5	CURRENT LIMITING CONTROL
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.6	SHORT CIRCUIT TEST
CSA-C22.2 No. 274	Adjustable Speed Drives	2	6.7	HIGH FAULT CURRENT TEST
CSA-C22.2 No. 4	Enclosed and Dead-Front Switches	7	7.2	HEATING TEST
CSA-C22.2 No. 4	Enclosed and Dead-Front Switches	7	7.3	OVERLOAD TEST
CSA-C22.2 No. 4	Enclosed and Dead-Front Switches	7	7.4	ENDURANCE TEST
CSA-C22.2 No. 4	Enclosed and Dead-Front Switches	7	7.5	DIELECTRIC VOLTAGE-WITHSTAND TEST
CSA-C22.2 No. 4	Enclosed and Dead-Front Switches	7	7.7	SHORT-CIRCUIT WITHSTAND TEST
CSA-C22.2 No. 4	Enclosed and Dead-Front Switches	7	7.9	SHORT-CIRCUIT CLOSING TEST
CSA-C22.2 No. 61010-2 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	2	4.4	TESTING IN SINGLE FAULT CONDITION
CSA-C22.2 No. 61010-2 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	2	4.4.2.101.1	OVERLOAD TEST
CSA-C22.2 No. 61010-2 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	2	4.4.2.101.2	ENDURANCE TEST
CSA-C22.2 No. 61010-2 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	2	8.2.2	IMPACT
CSA-C22.2 No. 61010-2 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	2	8.3	DROP TEST
CSA-C22.2 No. 65	Wire Connectors	5	7.3/8.3/9.3	STATIC-HEATING SEQUENCE

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Standard Standard Edition Standard Title: Clause: Test method: Number: (Amendment): CSA-C22.2 Wire Connectors 5 7.4/8.4/9.4 MECHANICAL SEQUENCE No. 65 Degrees of Protection Provided by Enclosures (IP TEST FOR PROTEC-TION AGAINST SOLID IEC 60529 1 13 Code) **OBJECTS** TESTS FOR PROTECTION AGAINST WATER Degrees of Protection Provided by Enclosures (IP INDICATED BY THE SECOND CHARACTERISTIC IFC 60529 14 Code) NUMERAL - IP20 Degrees of Protection Provided by Enclosures (IP IEC 60529 14.2.6 HOSEDOWN 1 Code) TESTS FOR PROTECTION AGAINST ACCESS TO Degrees of Protection Provided by Enclosures (IP IFC 60529 22 12 **HAZARDOUS PARTS** Code) Degrees of Protection Provided by Enclosures (IP TEST FOR PROTECTION AGAINST SOLID IEC 60529 2.2 13 OBJECT Code) Degrees of Protection Provided by Enclosures (IP IEC 60529 14 TEST FOR PROTECTION AGAINST WATER 2.2 Code) TESTS FOR PROTECTION AGAINST ACCESS TO Degrees of Protection Provided by Enclosures (IP IEC 60529 HAZARDOUS PARTS INDICATED BY THE 2.2 15 Code) ADDITIONAL LETTER IEC 60947-Low-Voltage Switchgear and Controlgear - Part 1: TEST OF RESISTANCE TO ABNORMAL HEAT 5.2 8.2.1.1 General Rules AND FIRE IEC 60947-Low-Voltage Switchgear and Controlgear - Part 1: DEGREES OF PROTECTION OF ENCLOSED 5.2 8.2.3 **EQUIPMENT** General Rules MECHANICAL AND ELECTRICAL PROPERTIES IFC 60947-Low-Voltage Switchgear and Controlgear - Part 1: 5.2 8.2.4 General Rules OF TERMINALS 1 VERIFICATION OF THE EFFECTIVENESS OF IEC 60947-Low-Voltage Switchgear and Controlgear - Part 1: INDICATION OF THE MAIN CONTACT POSITION 5.2 8.2.5 1 General Rules OF EQUIPMENT SUITABLE FOR ISOLATION CONDUIT PULL-OUT TEST, TORQUE TEST AND IEC 60947-Low-Voltage Switchgear and Controlgear - Part 1: 5.2 827 BENDING TEST WITH METALLIC CONDUITS General Rules IEC 60947-Low-Voltage Switchgear and Controlgear - Part 1: 52 8331 **OPERATION** General Rules Low-Voltage Switchgear and Controlgear - Part 1: IFC 60947-OPERATING LIMITS 5.2 8.3.3.2 General Rules IEC 60947 Low-Voltage Switchgear and Controlgear - Part 1 5.2 8.3.3.3 **TEMPERATURE-RISE** General Rules IEC 60947-Low-Voltage Switchgear and Controlgear - Part 1: DIELECTRIC PROPERTIES 8334 52 General Rules Low-Voltage Switchgear and Controlgear - Part 1: IFC 60947-MAKING AND BREAKING CAPACITIES 5.2 8.3.3.5 General Rules IEC 60947-Low-Voltage Switchgear and Controlgear - Part 1: OPERATIONAL PERFORMANCE CAPABILITY 5.2 8.3.3.6 General Rules Low-Voltage Switchgear and Controlgear - Part 1: IEC 60947-8337 **DURABILITY** 52 General Rules Low-Voltage Switchgear and Controlgear - Part 1: PERFORMANCE UNDER SHORT-CIRCUIT IEC 60947-5.2 8.3.4 CONDITIONS General Rules IEC 60947 Low-Voltage Switchgear and Controlgear - Part 1 TEST FOR EMC-IMMUNITY 5.2 8.4.1 General Rules Low-Voltage Switchgear and Controlgear - Part 1: IEC 60947-**TEST FOR EMC - EMISSION** 8.4.2 5.2 General Rules IEC 60947-Low-Voltage Switchgear and Controlgear - Part 2 TRIPPING LIMITS AND CHARACTERISTICS 4.2 8.3.3.1 Circuit-Breakers IEC 60947-Low-Voltage Switchgear and Controlgear - Part 2 4.2 8.3.3.2 **DIELECTRIC PROPERTIES** Circuit-Breakers Low-Voltage Switchgear and Controlgear - Part 2: MECHANICAL OPERATION AND OPERATIONAL IEC 60947-4.2 8.3.3.3 PERFORMANCE CAPABILITY Circuit-Breakers Low-Voltage Switchgear and Controlgear - Part 2: IEC 60947-4.2 8.3.3.4 **OVERLOAD PERFORMANCE** Circuit-Breakers IEC 60947 Low-Voltage Switchgear and Controlgear - Part 2 4.2 8.3.3.5 VERIFICATION OF DIELECTRIC WITHSTAND Circuit-Breakers IEC 60947-Low-Voltage Switchgear and Controlgear - Part 2: VERIFICATION OF TEMPERATURE-RISE 4.2 8.3.3.6 Circuit-Breakers IEC 60947-Low-Voltage Switchgear and Controlgear - Part 2: 4.2 8.3.3.7 VERIFICATION OF OVERLOAD RELEASES Circuit-Breakers IEC 60947-Low-Voltage Switchgear and Controlgear - Part 2: VERIFICATION OF UNDERVOLTAGE AND SHUNT 4.2 8.3.3.8 Circuit-Breakers RELEASES Low-Voltage Switchgear and Controlgear - Part 2 IEC 60947-VERIFICATION OF MAIN CONTACT POSITION 8.3.3.9 4.2 Circuit-Breakers RATED SERVICE SHORT-CIRCUIT BREAKING IEC 60947-Low-Voltage Switchgear and Controlgear - Part 2: 4.2 8.3.4.1 Circuit-Breakers CAPACITY IEC 60947-Low-Voltage Switchgear and Controlgear - Part 2 4.2 8.3.6.2 RATED SHORT-TIME WITHSTAND CURRENT Circuit-Breakers 2

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3 (2)

8351

IEC 60947

Switches, Disconnectors, Switch-Disconnectors

and Fuse-Combination Units

SHORT-TIME WITHSTAND CURRENT

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IEC 60947-	Low-Voltage Switchgear and Controlgear - Part 3: Switches, Disconnectors, Switch-Disconnectors and Fuse-Combination Units	3 (2)	8.4.2	EMC TESTS - EMISSION
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IEC 60947- 4-2	Low-Voltage Switchgear and Controlgear - Part 4- 2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters	3.0	9.3.5.1	EMC TESTS - EMISSION
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IEC 60947- 5-2	Low-Voltage Switchgear and Controlgear - Part 5- 2: Control Circuit Devices and Switching Elements - Proximity Switches	3.1	7.4.2	VIBRATION
IEC 60947- 5-2	Low-Voltage Switchgear and Controlgear - Part 5- 2: Control Circuit Devices and Switching Elements - Proximity Switches	3.1	8.3.3.2	OPERATING LIMITS
IEC 60947- 5-2	Low-Voltage Switchgear and Controlgear - Part 5- 2: Control Circuit Devices and Switching Elements - Proximity Switches	3.1	8.3.3.3	TEMPERATURE RISE
IEC 60947- 5-2	Low-Voltage Switchgear and Controlgear - Part 5- 2: Control Circuit Devices and Switching Elements - Proximity Switches	3.1	8.3.3.4	DIELECTRIC PROPERTIES
IEC 60947- 5-2	Low-Voltage Switchgear and Controlgear - Part 5- 2: Control Circuit Devices and Switching Elements - Proximity Switches	3.1	8.3.3.5	MAKING AND BREAKING CAPACITIES
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IEC 60947- 5-5	Low-voltage Switchgear and Controlgear - Part 5- 5: Control Circuit Devices and Switching Elements - Electrical Emergency Stop Device with Mechanical Latching Function	1.1	7.3.3	DURABILITY TEST
IEC 60947- 5-5	Low-voltage Switchgear and Controlgear - Part 5- 5: Control Circuit Devices and Switching Elements - Electrical Emergency Stop Device with Mechanical Latching Function	1.1	7.4	CONDITIONING
IEC 60947- 5-5	Low-voltage Switchgear and Controlgear - Part 5- 5: Control Circuit Devices and Switching Elements - Electrical Emergency Stop Device with Mechanical Latching Function	1.1	7.5	SHOCK TEST
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IEC 60947- 5-5	Low-voltage Switchgear and Controlgear - Part 5- 5: Control Circuit Devices and Switching Elements - Electrical Emergency Stop Device with Mechanical Latching Function	1.1	7.7.4	RESETTING
IEC 60947- 5-5	Low-voltage Switchgear and Controlgear - Part 5- 5: Control Circuit Devices and Switching Elements - Electrical Emergency Stop Device with Mechanical Latching Function	1.1	7.7.5	IMPACT
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IEC 60947- 5-5	Low-voltage Switchgear and Controlgear - Part 5- 5: Control Circuit Devices and Switching Elements - Electrical Emergency Stop Device with Mechanical Latching Function	1.2	7.3.2	ROBUSTNESS OF A BUTTON ACTUATOR
IEC 60947- 5-5	Low-voltage Switchgear and Controlgear - Part 5- 5: Control Circuit Devices and Switching Elements - Electrical Emergency Stop Device with Mechanical Latching Function	1.2	7.3.3	DURABILITY TEST
IEC 60947- 5-5	Low-voltage Switchgear and Controlgear - Part 5- 5: Control Circuit Devices and Switching Elements - Electrical Emergency Stop Device with Mechanical Latching Function	1.2	7.5	SHOCK TEST
IEC 60947- 5-5	Low-voltage Switchgear and Controlgear - Part 5- 5: Control Circuit Devices and Switching Elements - Electrical Emergency Stop Device with Mechanical Latching Function	1.2	7.6	VIBRATION TEST
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IEC 60947- 5-5	Low-voltage Switchgear and Controlgear - Part 5- 5: Control Circuit Devices and Switching Elements - Electrical Emergency Stop Device with Mechanical Latching Function	1.2	7.7.2	OPENING TEST
IEC 60947- 5-5	Low-voltage Switchgear and Controlgear - Part 5- 5: Control Circuit Devices and Switching Elements - Electrical Emergency Stop Device with Mechanical Latching Function	1.2	7.7.3	LATCHING TEST
IEC 60947- 5-5	Low-voltage Switchgear and Controlgear - Part 5- 5: Control Circuit Devices and Switching Elements - Electrical Emergency Stop Device with Mechanical Latching Function	1.2	7.7.4	RESETTING TEST
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2.0	10.10	VERIFICATION OF TEMPERATURE RISE

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1.0

10.10

Assemblies - Part 6: Busbar Trunking Systems

(Busways)

6

VERIFICATION OF TEMPERATURE RISE

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IEC 61439-	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.11	SHORT-CIRCUIT WITHSTAND STRENGTH
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.12	ELECTROMAGENTIC COMPATIBILITY (EMC)
IEC 61439-	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.13	MECHANICAL OPERATION
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.2.101	ABILITY TO WTIHSTAND MECHANICAL LOADS
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.2.102	THERMAL CYCLING TEST
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.2.2	RESISTANCE TO CORROSION
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.2.3.1	THERMAL STABILITY
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.2.3.2	RESISTANCE TO ABNORMAL HEAT AND FIRE DUE TO INTERNAL ELECTRIC EFFECTS
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.2.5	LIFTING
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.2.6	MECHANICAL IMPACT
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.2.7	MARKING
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.3	DEGREE OF PROTECTION OF ENCLOSURES
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.4	CLEARANCES AND CREEPAGE DISTANCES
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.5	PROTECTION AGAINST ELECTRIC SHOCK AND INTEGRITY OF PROTECTIVE CIRCUITS
IEC 61439- 6	Low-Voltage Switchgear and Controlgear Assemblies - Part 6: Busbar Trunking Systems (Busways)	1.0	10.9	DIELECTRIC PROPERTIES
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.1	VISUAL INSPECTION
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.2.1	MECHANICAL TESTS - CLEARANCE AND CREEPAGE DISTANCE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.2.2	MECHANICAL TESTS - PWB SHORT-CIRCUIT
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.2.3	MECHANICAL TESTS - NON-ACCESSIBILITY
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.2.4	MECHANICAL TESTS - ENCLOSURE INTEGRITY
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.2.5.2	MECHANICAL TESTS - DEFORMATION - DEFLECTION
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.2.5.3	MECHANICAL TESTS - DEFORMATION - IMPACT
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.3.1	ELECTRICAL TESTS - IMPULSE VOLTAGE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.3.2	ELECTRICAL TESTS - AC OR DC VOLTAGE

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IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.3.4	ELECTRICAL TESTS - PROTECTIVE IMPEDANCE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.3.5	ELECTRICAL TESTS - TOUCH CURRENT MEASUREMENT
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.3.6.3	ELECTRICAL TESTS - SHORT-CIRCUIT TEST AND BREAKDOWN OF COMPONENTS TEST - SHORT-CIRCUIT
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.3.6.4	ELECTRICAL TESTS - SHORT-CIRCUIT TEST AND BREAKDOWN OF COMPONENTS TEST - BREAKDOWN OF COMPONENTS
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.3.7	ELECTRICAL TESTS - CAPACITOR DISCHARGE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.3.8	ELECTRICAL TESTS - TEMPERATURE RISE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.3.9	ELECTRICAL TESTS - PROTECTIVE BONDING
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.4.4	ABNORMAL OPERATION TESTS - LOSS OF PHASE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.4.5.2	ABNORMAL OPERATION TESTS - COOLING FAILURE TESTS - INOPERATIVE BLOWER
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.4.5.3	ABNORMAL OPERATION TESTS - COOLING FAILURE TESTS - CLOGGED FILTER
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.5.2	MATERIAL TESTS - GLOW WIRE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.5.4	MATERIAL TESTS- FLAMMABILITY
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.6.3.1	ENVIRONMENTAL TESTS - CLIMATIC TESTS - DRY HEAT
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.6.3.2	ENVIRONMENTAL TESTS - CLIMATIC TESTS - DAMP HEAT
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.0	5.2.6.4	ENVIRONMENTAL TESTS - VIBRATION
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.1	VISUAL INSPECTION
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.2.1	MECHANICAL TESTS - CLEARANCE AND CREEPAGE DISTANCE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.2.2	MECHANICAL TESTS - PWB SHORT-CIRCUIT
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.2.3	MECHANICAL TESTS - NON-ACCESSIBILITY
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.2.4	MECHANICAL TESTS - ENCLOSURE INTEGRITY
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.2.5.2	MECHANICAL TESTS - DEFORMATION - DEFLECTION
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.2.5.3	MECHANICAL TESTS - DEFORMATION - IMPACT
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.3.1	ELECTRICAL TESTS - IMPULSE VOLTAGE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.3.2	ELECTRICAL TESTS - AC OR DC VOLTAGE

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IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.3.4	ELECTRICAL TESTS - PROTECTIVE IMPEDANCE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.3.5	ELECTRICAL TESTS - TOUCH CURRENT MEASUREMENT
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.3.6.3	ELECTRICAL TESTS - SHORT-CIRCUIT TEST AND BREAKDOWN OF COMPONENTS TEST - SHORT-CIRCUIT
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.3.6.4	ELECTRICAL TESTS - SHORT-CIRCUIT TEST AND BREAKDOWN OF COMPONENTS TEST - BREAKDOWN OF COMPONENTS
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.3.7	ELECTRICAL TESTS - CAPACITOR DISCHARGE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.3.8	ELECTRICAL TESTS - TEMPERATURE RISE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.3.9	ELECTRICAL TESTS - PROTECTIVE BONDING
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.4.4	ABNORMAL OPERATION TESTS - LOSS OF PHASE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.4.5.2	ABNORMAL OPERATION TESTS - COOLING FAILURE TESTS - INOPERATIVE BLOWER
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.4.5.3	ABNORMAL OPERATION TESTS - COOLING FAILURE TESTS - CLOGGED FILTER
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.5.2	MATERIAL TESTS - GLOW WIRE
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.5.4	MATERIAL TESTS- FLAMMABILITY
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.6.3.1	ENVIRONMENTAL TESTS - CLIMATIC TESTS - DRY HEAT
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.6.3.2	ENVIRONMENTAL TESTS - CLIMATIC TESTS - DAMP HEAT
IEC 61800- 5-1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	2.1	5.2.6.4	ENVIRONMENTAL TESTS - VIBRATION
IEC 61921	Power Capacitors - Low-Voltage Power Factor Correction Banks	1.0	7.2.1	VERIFICATION OF TEMPERATURE-RISE LIMITS
IEC 61921	Power Capacitors - Low-Voltage Power Factor Correction Banks	1.0	7.2.2	VERIFICATION OF DIELECTRIC PROPERTIES
IEC 61921	Power Capacitors - Low-Voltage Power Factor Correction Banks	1.0	7.2.3	VERIFICATION OF THE SHORT-CIRCUIT WITHSTAND STRENGTH
IEC 61921	Power Capacitors - Low-Voltage Power Factor Correction Banks	1.0	7.2.4	VERIFICATION OF THE EFFECTIVENESS OF THE PROTECTIVE CIRCUIT
IEC 61921	Power Capacitors - Low-Voltage Power Factor Correction Banks	1.0	7.2.5	VERIFICATION OF CLEARANCES AND CREEPAGE DISTANCES
IEC 61921	Power Capacitors - Low-Voltage Power Factor Correction Banks	1.0	7.2.6	VERIFICATION OF MECHANICAL OPERATION
IEC 61921	Power Capacitors - Low-Voltage Power Factor Correction Banks	1.0	7.2.7	VERIFICATION OF THE DEGREE OF PROTECTION
UL 1008	Transfer Switch Equipment	8	9.10	OVERLOAD
UL 1008	Transfer Switch Equipment	8	9.12	ENDURANCE TEST
UL 1008	Transfer Switch Equipment	8	9.13	SHORT CIRCUIT TEST
UL 1008 UL 1008	Transfer Switch Equipment Transfer Switch Equipment	8	9.8	TEMPERATURE RISE TEST DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 1059	TERMINAL BLOCKS	4	11	TEMPERATURE
UL 1059	TERMINAL BLOCKS	4	13	SOLID-WIRE TIGHTENING TEST
UL 1059	TERMINAL BLOCKS	4	14	TAB PULL
UL 1059	TERMINAL BLOCKS	4	15	VERIFICATION OF THE PERFORMANCE OF TERMINAL ASSEMBLIES
UL 1059	TERMINAL BLOCKS	4	16	MOLD STRESS RELIEF

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UL 1059	TERMINAL BLOCKS	4	29	SECURENESS AND PULLOUT
UL 1059	TERMINAL BLOCKS	4	30	CONDITIONING-SPRING FORCE CONNECTIONS
UL 1059	TERMINAL BLOCKS	4	31	TEMPERATURE-SPRING FORCE CONNECTIONS
UL 1059	TERMINAL BLOCKS	4	32	DIELECTRIC VOLTAGE-WITHSTAND TEST - SPRING FORCE CONNECTIONS
UL 1059	TERMINAL BLOCKS	4	33	HEAT CYCLING-SPRING FORCE CONNECTION
UL 1059	TERMINAL BLOCKS	4	50	SHORT TIME CURRENT SEQUENCE
UL 1059	TERMINAL BLOCKS	4	51	SHORT TIME CURRENT SEQUENCE SHORT CIRCUIT CURRENT RATINGS FOR
UL 1059	TERMINAL BLOCKS	4	SUPPLEME NT SA	TERMINAL BLOCKS
UL 1077	Supplementary Protectors for Use in Electrical Equipment Supplementary Protectors for Use in	7	19	OVERCURRENT PROTECTORS - CALIBRATION OVERCURRENT PROTECTORS -
UL 1077	Electrical Equipment	7	20	TEMPERATURE
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	21	OVERCURRENT PROTECTORS - OVERLOAD TEST
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	22	OVERCURRENT PROTECTORS - ENDURANCE
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	23	OVERCURRENT PROTECTORS - DIELECTRIC STRENGTH AND VOLTAGE-WITHSTAND
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	24	OVERCURRENT PROTECTORS - RECALIBRATION
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	25	OVERCURRENT PROTECTORS - SHORT CIRCUIT
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	30.2	OVERVOLTAGE-TRIP APPLIANCE PROTECTORS— TEMPERATURE
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	30.3	OVERVOLTAGE-TRIP APPLIANCE PROTECTORS- OVERVOLTAGE
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	30.4	OVERVOLTAGE-TRIP APPLIANCE PROTECTORS— OPERATION
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	30.5	OVERVOLTAGE-TRIP APPLIANCE PROTECTORS- OVERLOAD
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	30.6	OVERVOLTAGE-TRIP APPLIANCE PROTECTORS- ENDURANCE
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	30.7	OVERVOLTAGE-TRIP APPLIANCE PROTECTORS- DIELECTRIC VOLTAGE- WITHSTAND
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	31.2	UNDERVOLTAGE-TRIP PROTECTORS – TEMPERATURE
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	31.3	UNDERVOLTAGE-TRIP PROTECTORS – OVERVOLTAGE
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	31.4	UNDERVOLTAGE-TRIP PROTECTORS – OPERATION
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	31.5	UNDERVOLTAGE-TRIP PROTECTORS -OVERLOAD
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	31.6	UNDERVOLTAGE-TRIP PROTECTORS – ENDURANCE
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	31.7	UNDERVOLTAGE-TRIP PROTECTORS -DIELECTRIC VOLTAGE-WITHSTAND
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	32.2	SHUNT-TRIP PROTECTORS - TEMPERATURE
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	32.3	SHUNT-TRIP PROTECTORS - OVERVOLTAGE
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	32.4	SHUNT-TRIP PROTECTORS - UNDERVOLTAGE
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	32.5	SHUNT-TRIP PROTECTORS - OVERLOAD
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	32.6	SHUNT-TRIP PROTECTORS - ENDURANCE
UL 1077	Supplementary Protectors for Use in Electrical Equipment	7	32.7	SHUNT-TRIP PROTECTORS - DIELECTRICVOLTAGE-WITHSTAND
UL 1283	Electromagnetic Interference Filters	6	29	INSULATION RESISTANCE
UL 1283	Electromagnetic Interference Filters	6	32	ABNORMAL OPERATION
UL 1283	Electromagnetic Interference Filters	6	39	WITHSTAND TEST
UL 1283	Electromagnetic Interference Filters	7	28	INSULATION RESISTANCE
UL 1283	Electromagnetic Interference Filters	7	31	ABNORMAL OPERATION
UL 1283	Electromagnetic Interference Filters	7	38	WITHSTAND
UL 1953	Outline of Investigation for Power Distribution Blocks	5	10	TEMPERATURE

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UL 1953	Outline of Investigation for Power Distribution Blocks	5	11	DIELECTRIC STRENGTH
UL 1953	Outline of Investigation for Power Distribution Blocks	5	12	STRENGTH OF INSULATING BASE AND SUPPORT TEST
UL 1953	Outline of Investigation for Power Distribution Blocks	5	13	SHORT-CIRCUIT CURRENT TEST
UL 2158	ELECTRIC CLOTHES DRYERS	2	32.16.1	HIGH CURRENT ARC IGNITION
UL 2237	Outline of Investigation for Multi-Point Interconnection Power Cable Assemblies for Industrial Machinery	4	37	SHORT-CIRCUIT WITHSTAND TEST
UL 2237	Outline of Investigation for Multi-Point Interconnection Power Cable Assemblies for Industrial Machinery	5	37	SHORT-CIRCUIT WITHSTAND TEST
UL 248- 1/CSA- C22.2 No. 248.1	Low-Voltage Fuses - Part 1: General Requirements	3	8.2	VERIFICATION OF TEMPERATURE RISE & CURRENT
UL 248- 1/CSA- C22.2 No. 248.1	Low-Voltage Fuses - Part 1: General Requirements	3	8.3	VERIFICATION OF OVERLOAD OPERATION
UL 248- 1/CSA- C22.2 No. 248.1	Low-Voltage Fuses - Part 1: General Requirements	3	8.4	VERIFICATION OF OPERATION AT RATED VOLTAGE
UL 248- 1/CSA- C22.2 No. 248.1	Low-Voltage Fuses - Part 1: General Requirements	3	8.5	VERIFICATION OF PEAK LET-THROUGH CURRENT AND CLEARING I2T CHARACTERISTICS
UL 248-13	Low-Voltage Fuses - Part 13: Semiconductor Fuses	2	8.2	VERIFICATION OF TEMPERATURE RISE AND CURRENT-CARRYING CAPACITY
UL 248-13	Low-Voltage Fuses - Part 13: Semiconductor Fuses	2	8.3	VERIFICATION OF OVERLOAD OPERATION
UL 248-13	Low-Voltage Fuses - Part 13: Semiconductor Fuses	2	8.4	VERIFICATION OF OPERATION AT RATED VOLTAGE
UL 248-13	Low-Voltage Fuses - Part 13: Semiconductor Fuses	2	8.5	VERIFICATION OF PEAK LET-THROUGH CURRENT AND CLEARING I2T CHARACTERISTICS
UL 248- 14/CSA- C22.2 No. 248.14	Low-Voltage Fuses - Part 14: Supplemental Fuses	2	8.2	VERIFICATION OF TEMPERATURE RISE AND CURRENT-CARRYING CAPACITY
UL 248- 14/CSA- C22.2 No. 248.14	Low-Voltage Fuses - Part 14: Supplemental Fuses	2	8.3	VERIFICATION OF OVERLOAD OPERATION
UL 248- 14/CSA- C22.2 No. 248.14	Low-Voltage Fuses - Part 14: Supplemental Fuses	2	8.4	VERIFICATION OF OPERATION AT RATED VOLTAGE
UL 248- 19/CSA- C22.2 No. 248.19	Low-Voltage Fuses - Part 19: Photovoltaic Fuses	1	6.2	VERIFICATION OF TEMPERATURE RISE AND CURRENT-CARRYING CAPACITY
UL 248- 19/CSA- C22.2 No. 248.19	Low-Voltage Fuses - Part 19: Photovoltaic Fuses	1	6.3	VERIFICATION OF OVERLOAD OPERATION
UL 248- 19/CSA- C22.2 No. 248.19	Low-Voltage Fuses - Part 19: Photovoltaic Fuses	1	6.4	VERIFICATION OF OPERATION AT RATED VOLTAGE
UL 248- 19/CSA- C22.2 No. 248.19	Low-Voltage Fuses - Part 19: Photovoltaic Fuses	1	6.7	CURRENT CYCLING
UL 486A- 486B	Wire Connectors	2	7.2	CURRENT-CYCLING
UL 486A- 486B	Wire Connectors	2	7.3/8.3/9.3	STATIC-HEATING SEQUENCE
UL 486A- 486B	Wire Connectors	2	7.4/8.4/9.4	MECHANICAL SEQUENCE

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5

7.4/8.4/9.4

Aluminum and/or Copper Conductors
Equipment Wiring Terminals for Use with

Aluminum and/or Copper Conductors

UL 486E

MECHANICAL SEQUENCE

Data Acceptance Program (DAP) Assessment Report Assessment conducted on Q- Audit: 2020-09-22/24, T- Audit: 2020-08-27 Proiect Number: 4789302847 File Number: DA487 Standard Standard Edition Standard Title: Clause: Test method: (Amendment): Number: UI Molded-Case Circuit Breakers, Molded-Case 489/CSA-10/1 11.1.2 TEMPERATURE TEST Switches and Circuit-Breaker Enclosures C22.2 No. 5 UL Molded-Case Circuit Breakers Molded-Case 489/CSA-10/1 11.1.3 **OVERLOAD TEST** Switches and Circuit-Breaker Enclosures C22.2 No. 5 UL Molded-Case Circuit Breakers, Molded-Case 489/CSA-10/1 **ENDURANCE TEST** 11 1 4 Switches and Circuit-Breaker Enclosures C22.2 No. 5 UI Molded-Case Circuit Breakers, Molded-Case 489/CSA-DIELECTRIC VOLTAGE-WITHSTAND TEST 10/1 11.1.5 Switches and Circuit-Breaker Enclosures C22.2 No. 5 UL Molded-Case Circuit Breakers Molded-Case 489/CSA-10/1 11.1.6.1 MECHANICAL TEST Switches and Circuit-Breaker Enclosures C22.2 No. 5 UL Molded-Case Circuit Breakers, Molded-Case 489/CSA-10/1 11.1.7.3 DIELECTRIC VOLTAGE-WITHSTAND TEST Switches and Circuit-Breaker Enclosures C22 2 No. 5 UL Molded-Case Circuit Breakers, Molded-Case 489/CSA-10/1 11.1.7.5 DIELECTRIC VOLTAGE-WITHSTAND TEST Switches and Circuit-Breaker Enclosures C22.2 No. 5 UL Molded-Case Circuit Breakers, Molded-Case 489/CSA-10/1 11.1.7.7 DIELECTRIC VOLTAGE-WITHSTAND TEST Switches and Circuit-Breaker Enclosures C22.2 No. 5 UL Molded-Case Circuit Breakers, Molded-Case SHUNT-TRIP RELEASE DEVICES -489/CSA-10/1 15.2.1 Switches and Circuit-Breaker Enclosures TEMPERATURE C22.2 No. 5 H Molded-Case Circuit Breakers, Molded-Case SHUNT-TRIP RELEASE DEVICES -489/CSA-10/1 15.2.2 Switches and Circuit-Breaker Enclosures OVERVOLTAGE TEST C22.2 No. 5 UL Molded-Case Circuit Breakers Molded-Case SHUNT-TRIP RELEASE DEVICES - OPERATION 489/CSA-10/1 15.2.3 Switches and Circuit-Breaker Enclosures **TFST** C22.2 No. 5 UL Molded-Case Circuit Breakers, Molded-Case SHUNT-TRIP RELEASE DEVICES - ENDURANCE 489/CSA-10/1 15.2.4 Switches and Circuit-Breaker Enclosures C22.2 No. 5 UL SHUNT-TRIP RELEASE DEVICES - DIELECTRIC Molded-Case Circuit Breakers, Molded-Case 489/CSA-10/1 15.2.5 Switches and Circuit-Breaker Enclosures **VOLTAGE-WITHSTAND TEST** C22.2 No. 5 UL UNDERVOLTAGE-TRIP RELEASE DEVICES -Molded-Case Circuit Breakers, Molded-Case 489/CSA-15.3.1 10/1 Switches and Circuit-Breaker Enclosures **TEMPERATURE** C22.2 No. 5 UL Molded-Case Circuit Breakers, Molded-Case UNDERVOLTAGE-TRIP RELEASE DEVICES -489/CSA-10/1 1532 Switches and Circuit-Breaker Enclosures OVERVOLTAGE TEST C22.2 No. 5 UL UNDERVOLTAGE-TRIP RELEASE DEVICES -Molded-Case Circuit Breakers, Molded-Case 489/CSA-10/1 15.3.3 Switches and Circuit-Breaker Enclosures **OPERATION TEST** C22.2 No. 5 UL UNDERVOLTAGE-TRIP RELEASE DEVICES -Molded-Case Circuit Breakers Molded-Case 489/CSA-10/1 15.3.4 Switches and Circuit-Breaker Enclosures **ENDURANCE TEST** C22.2 No. 5 UL Molded-Case Circuit Breakers, Molded-Case UNDERVOLTAGE-TRIP RELEASE DEVICES -

10/1

15.3.5

489/CSA-

C22.2 No. 5

Switches and Circuit-Breaker Enclosures

DIELECTRIC VOLTAGE-WITHSTAND TEST

Project Number: 4789302847

Assessment conducted on Q- Audit: 2020-09-22/24, T- Audit: 2020-08-27

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UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	10/1	7.1.11	HIGH AVAILABLE FAULT CURRENT TEST SEQUENCE
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	10/1	7.1.2.2	200 PERCENT CALIBRATION
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	10/1	7.1.2.3	135 PERCENT CALIBRATION
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	10/1	7.1.2.4	100 PERCENT CALIBRATION
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	10/1	7.1.2.5	ADJUSTABLE INSTANTANEOUS TRIP CALIBRATION TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	10/1	7.1.3	OVERLOAD
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	10/1	7.1.4	TEMPERATURE
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	10/1	7.1.5	ENDURANCE
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	10/1	7.1.6	CALIBRATION-REPEATED
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	10/1	7.1.7	INTERRUPTING
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	10/1	7.1.8	TRIP-OUT AT 200 PERCENT CURRENT
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	10/1	7.1.9	DIELECTRIC VOLTAGE-WITHSTAND
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	11.1.2	TEMPERATURE TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	11.1.3	OVERLOAD TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	11.1.4	ENDURANCE TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	11.1.5	DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	11.1.6.1	MECHANICAL TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	11.1.7.2	SHORT-CIRCUIT CURRENT WITHSTAND TEST

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UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	11.1.7.3	DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	11.1.7.5	DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	11.1.7.6	CONTACT OPENING TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	11.1.7.7	DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	11.2	DRAW-OUT SWITCHES
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	15.2.1	SHUNT-TRIP RELEASE DEVICE-TEMPERATURE
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	15.2.2	SHUNT-TRIP RELEASE DEVICE-OVERVOLTAGE TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	15.2.3	SHUNT-TRIP RELEASE DEVICE-OPERATION TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	15.2.4	SHUNT-TRIP RELEASE DEVICE-ENDURANCE TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	15.2.5	SHUNT-TRIP RELEASE DEVICE-DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	15.3.1	UNDERVOLTAGE-TRIP RELEASE DEVICES- TEMPERATURE
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	15.3.2	UNDERVOLTAGE-TRIP RELEASE DEVICES- OVERVOLTAGE TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	15.3.3	UNDERVOLTAGE-TRIP RELEASE DEVICES- OPERATION TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	15.3.4	UNDERVOLTAGE-TRIP RELEASE DEVICES- ENDURANCE TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	15.3.5	UNDERVOLTAGE-TRIP RELEASE DEVICES- DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	15.3.6	CONTACT CLOSING TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	7.1.11	HIGH AVAILABLE FAULT CURRENT TEST SEQUENCE
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	12/3	7.1.2.2	200 PERCENT CALIBRATION

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Switches and Circuit-Breaker Enclosures

C22.2 No. 5

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UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	15.2.1	SHUNT-TRIP RELEASE DEVICE-TEMPERATURE
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	15.2.2	SHUNT-TRIP RELEASE DEVICE-OVERVOLTAGE TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	15.2.3	SHUNT-TRIP RELEASE DEVICE-OPERATION TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	15.2.4	SHUNT-TRIP RELEASE DEVICE-ENDURANCE TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	15.2.5	SHUNT-TRIP RELEASE DEVICE-DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	15.3.1	UNDERVOLTAGE-TRIP RELEASE DEVICES- TEMPERATURE
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	15.3.2	UNDERVOLTAGE-TRIP RELEASE DEVICES- OVERVOLTAGE TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	15.3.3	UNDERVOLTAGE-TRIP RELEASE DEVICES- OPERATION TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	15.3.4	UNDERVOLTAGE-TRIP RELEASE DEVICES- ENDURANCE TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	15.3.5	UNDERVOLTAGE-TRIP RELEASE DEVICES- DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	15.3.6	UNDERVOLTAGE-TRIP RELEASE DEVICES- CONTACT CLOSING TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.1.11	HIGH AVAILABLE FAULT CURRENT TEST SEQUENCE
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.1.2.2	200 PERCENT CALIBRATION
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.1.2.3	135 PERCENT CALIBRATION
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.1.2.4	100 PERCENT CALIBRATION
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.1.2.5	ADJUSTABLE INSTANTANEOUS TRIP CALIBRATION TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.1.3	OVERLOAD
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.1.4	TEMPERATURE

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UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.1.5	ENDURANCE
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.1.6	CALIBRATION
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.1.7	INTERRUPTING TEST
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.1.8	TRIP-OUT AT 200 PERCENT CURRENT
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.1.9	DIELECTRIC VOLTAGE-WITHSTAND
UL 489/CSA- C22.2 No. 5	Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures	13/4	7.3.1.5	CALIBRATION TEST
UL 489A	Circuit Breakers for Use in Communications Equipment	1	09	CALIBRATION TEST
UL 489A	Circuit Breakers for Use in Communications Equipment	1	10	OVERLOAD TEST
UL 489A	Circuit Breakers for Use in Communications Equipment	1	11	TEMPERATURE
UL 489A	Circuit Breakers for Use in Communications Equipment	1	12	ENDURANCE TEST
UL 489A	Circuit Breakers for Use in Communications Equipment	1	13	INTERRUPTING TEST
UL 489A	Circuit Breakers for Use in Communications Equipment	1	14	HIGH AMBIENT CONDITIONING TEST
UL 489B	Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures for Use with Photovoltaic (PV) Systems	1	10	ENDURANCE TEST
UL 489B	Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures for Use with Photovoltaic (PV) Systems	1	11	TEMPERATURE TEST
UL 489B	Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures for Use with Photovoltaic (PV) Systems	1	12	100 PERCENT CALIBRATOIN AT 50°C
UL 489B	Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures for Use with Photovoltaic (PV) Systems	1	13	LIMITED FAULT INTERRUPTING TEST
UL 489B	Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures for Use with Photovoltaic (PV) Systems	1	14	STANDARD FAULT INTERRUPTING TEST
UL 489B	Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures for Use with Photovoltaic (PV) Systems	1	15	DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 489B	Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures for Use with Photovoltaic (PV) Systems	1	20	ABNORMAL CURRENT OPENING TEST
UL 489B	Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures for Use with Photovoltaic (PV) Systems	1	21	SHORT CIRCUIT CURRENT WITHSTAND TEST
UL 489B	Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures for Use with Photovoltaic (PV) Systems	1	22	DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 489B	Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures for Use with Photovoltaic (PV) Systems	1	27	SHORT CIRCUIT CURRENT
UL 489B	Outline of Investigaton for Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit- Breaker Enclosures for Use with Photovoltaic (PV) Systems	4	10	ENDURANCE

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UL 489B	Outline of Investigaton for Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit- Breaker Enclosures for Use with Photovoltaic (PV) Systems	4	11	TEMPERATURE
UL 489B	Outline of Investigaton for Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit- Breaker Enclosures for Use with Photovoltaic (PV) Systems	4	12	100 PERCENT CALIBRATION AT 50C
UL 489B	Outline of Investigaton for Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit- Breaker Enclosures for Use with Photovoltaic (PV) Systems	4	13	LIMITED FAULT INTERRUPTING
UL 489B	Outline of Investigaton for Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit- Breaker Enclosures for Use with Photovoltaic (PV) Systems	4	14	STANDARD FAULT INTERRUPTING
UL 489B	Outline of Investigaton for Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit- Breaker Enclosures for Use with Photovoltaic (PV) Systems	4	15	DIELECTRIC VOLTAGE-WITHSTAND
UL 489B	Outline of Investigaton for Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit- Breaker Enclosures for Use with Photovoltaic (PV) Systems	4	20	ABNORMAL CURRENT OPENING
UL 489B	Outline of Investigaton for Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit- Breaker Enclosures for Use with Photovoltaic (PV) Systems	4	21	SHORT CIRCUIT CURRENT WITHSTAND
UL 489B	Outline of Investigaton for Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit- Breaker Enclosures for Use with Photovoltaic (PV) Systems	4	22	DIELECTRIC VOLTAGE-WITHSTAND
UL 489B	Outline of Investigaton for Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit- Breaker Enclosures for Use with Photovoltaic (PV) Systems	4	27	SHORT CIRCUIT CURRENT TEST
UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.1	COMPARATIVE DEFLECTION (ENCLOSURE)
UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.10	CRUSHING RESISTANCE
UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.11	MOLD STRESS RELIEF
UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.2	DEFLECTION (DOORS AND COVERS)
UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.4	MULTIPLE KNOCKOUTS TEST
UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.6.2	POLYMERIC ENCLOSURES - RIGID METALLIC CONDUIT CONNECTIONS - PULLOUT
UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.6.3	POLYMERIC ENCLOSURES - RIGID METALLIC CONDUIT CONNECTIONS - TORQUE
UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.6.4	POLYMERIC ENCLOSURES - RIGID METALLIC CONDUIT CONNECTIONS - BENDING
UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.6.5	BREAKOUTS

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UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.7.2	TORQUE
UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.7.3	BENDING MOMENT
UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.8	METALLIC ENCLOSURE CONDUIT HUB TEST
UL 50/CSA- C22.2 No. 94.1	Enclosures for Electrical Equipment, Non- Environmental Considerations	13/2	8.9	ROD ENTRY TEST
UL 506	SPECIALTY TRANSFORMERS	12	28	HEATING
UL 506	SPECIALTY TRANSFORMERS	12	30	OVERLOAD
UL 506	SPECIALTY TRANSFORMERS	12	32	LIFTING OR MOUNTING MEANS
UL 506	Specialty Transformers	13	29	HEATING
UL 506	Specialty Transformers	14	34.2	OVERLOAD TEST
UL 506	Specialty Transformers	14	29	HEATING TEST
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	113	HUB AND NIPPLE TESTS
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	114	FLOAT SWITCH TESTS
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	137	AUXILIARY DEVICES - OVERLOAD
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	138	AUXILIARY DEVICES - ENDURANCE
UL 508 UL 508	INDUSTRIAL CONTROL EQUIPMENT INDUSTRIAL CONTROL EQUIPMENT	17 17	160 161	LOCKED ROTOR ENDURANCE TEST PART WINDING ENDURANCE TEST
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	173B	INPUT TEST
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	173B	NORMAL OPERATION TEST
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	174A	ABNORMAL OPERATION PAR. 174B
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	174C	BURNOUT TEST
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	174D	INOPERATIVE BLOWER MOTOR TEST
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	190	IMPEDANCE TEST
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	206.2	PROXIMITY SWITCHES - POWER SUPPLY CORD - TENSILE STRENGTH AND ELONGATION
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	206.3	PROXIMITY SWITCHES - POWER SUPPLY CORD - OVEN CONDITIONING
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	207.2	PROXIMITY SWITCHES - CABLE GLAND CONNECTOR - OVEN CONDITIONING (RUBBER COMPOSITION)
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	207.3	PROXIMITY SWITCHES - CABLE GLAND CONNECTOR - OVEN CONDITIONING (THERMOPLASTIC COMPOSITION)
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	207.5	STRAIN RELIEF
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	209	TESTS FOR ENVIROMENTAL ENCLOSURES
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	43	TEMPERATURE
UL 508	INDUSTRIAL CONTROL EQUIPMENT INDUSTRIAL CONTROL EQUIPMENT	17	44	OVERVOLTAGE AND UNDERVOLTAGE TEST
UL 508 UL 508	INDUSTRIAL CONTROL EQUIPMENT	17 17	45 46	OVERLOAD ENDURANCE
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	48	CALIBRATION
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	49	DIELECTRIC VOLTAGE WITHSTAND TEST
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	50	SHORT CIRCUIT
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	52	HIGH AVAILABLE FAULT CURRENT CIRCUITS
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	55	TRANSIENT-VOLTAGE-SURGE SUPPRESSION
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	56	ACCELERATED AGING
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	57	BREAKDOWN OF COMPONENTS
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	57B	PUSH-BACK RELIEF
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	58	WIRE FLEXING
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	6.6.4	BOND WIRE
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	6.7	RESISTANCE MEASUREMENT
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	60	PRINTED WIRING BOARD ABNORMAL OPERATION
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	61	SECONDARY CIRCUITS TEST
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	73F	MAGNETIC TRIP OUT TEST
UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	79	CURRENT WITHSTAND TEST

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U. 508	Standard Number:	Standard Title:	Standard Edition (Amendment):	Clause:	Test method:
UL 508	UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	79	CONTACTOR OVERLOAD TEST
U. 508 NOUSTRIAL CONTROL EQUIPMENT 17 82 COMBINATION CIRCUIT TEST	UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	80	VOLTAGE WITHSTAND TEST
UL 508	UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	81	MAGNETIC TRIP OUT TEST
U. 508	UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	82	COMBINATION CIRCUIT TEST
UL 508 NOLUSTRIAL CONTROL EQUIPMENT 17 9 SECUREMENT OF SMAP-ON COVER UL 508 Industrial Control Equipment 18 10 SECUREMENT OF SMAP-ON COVER TEST UL 508 Industrial Control Equipment 18 10 SECUREMENT OF SMAP-ON COVER TEST UL 508 Industrial Control Equipment 18 10 SECUREMENT OF SMAP-ON COVER TEST UL 508 Industrial Control Equipment 18 10 COMBINATION (MOTOR CONTROLLERS - WOLLAGE-WITHSTAND LERS - WOLLAGE-WITHSTAND LERS - WOLLAGE-WITHSTAND LERS - WOLLAGE-WITHSTAND LERS - COMBINATION MOTOR CONTROLLERS - COMBINATION SHORT CIRCUIT UL 508 Industrial Control Equipment 18 107 C. COMBINATION SHORT CIRCUIT CURRENT UL 508 Industrial Control Equipment 18 111 OPERATION UL 508 Industrial Control Equipment 18 135 HUB AND NIPLE UL 508 Industrial Control Equipment 18 136 FLOAT SWITCH UL 508 Industrial Control Equipment 18 150 OVERLOAD TEST (PILOT DUTY) UL 508 Industrial Control Equipment 18 150 OVERLOAD TEST (PILOT DUTY) UL 508 Industrial Control Equipment 18 180 OVERLOAD TEST (PILOT DUTY) UL 508 Industrial Control Equipment 18 180 ENDURANCE FIEST UL 508 Industrial Control Equipment 18 180 OVERLOAD TEST (PILOT DUTY) UL 508 Industrial Control Equipment 18 180 OVERLOAD TEST (PILOT DUTY) UL 508 Industrial Control Equipment 18 190 NORMAL OPERATION UL 508 Industrial Control Equipment 18 201 ABNORMAL OPERATION UL 508 Industrial Control Equipment 18 202 BURNOUT TEST UL 508 Industrial Control Equipment 18 202 BURNOUT TEST UL 508 Industrial Control Equipment 18 202 BURNOUT TEST UL 508 Industrial Control Equipment 18 202 PROXIMITY SWITCHES - POWER SUPPLY CORD - TENSIL STRENGTH AND ELONGATION UL 508 Industrial Control Equipment 18 227 PROXIMITY SWITCHES - POWER SUPPLY CORD	UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	85	
UL 508	UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	86	COORDINATION TEST
UL 508	UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	9	SECUREMENT OF SNAP-ON COVER
UL 508	UL 508	INDUSTRIAL CONTROL EQUIPMENT	17	90	OPERATION TEST
U. 508	UL 508	Industrial Control Equipment	18	10	SECUREMENT OF SNAP-ON COVER TEST
UL 508	UL 508	Industrial Control Equipment	18	100	
UL 508	UL 508	Industrial Control Equipment	18	101	
UL 508	UL 508	Industrial Control Equipment	18	102	
UL 508	UL 508	Industrial Control Equipment	18	106	HIGH AVAILABLE SHORT CIRCUIT CURRENT
UL 508	UL 508	Industrial Control Equipment	18	107	COORDINATION
UL 508		Industrial Control Equipment	18	111	OPERATION
UL 508			-		
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UL 508		• •	-		· · · · · · · · · · · · · · · · · · ·
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UL 508		• • •		-	PROXIMITY SWITCHES - POWER SUPPLY CORD
UL 508	UL 508	Industrial Control Equipment	18	227.3	
UL 508	UL 508	Industrial Control Equipment	18	228	CABLE GLAND CONNECTOR TEST
UL 508	UL 508	Industrial Control Equipment	18	229	PROXIMITY SWITCHES - STRAIN RELIEF
UL 508	UL 508	Industrial Control Equipment	18	230	
UL 508	UL 508	Industrial Control Equipment	18	45	TEMPERATURE TEST
UL 508	UL 508	Industrial Control Equipment	18	46	OVERVOLTAGE AND UNDERVOLTAGE
UL 508	UL 508	Industrial Control Equipment	18	47	OVERLOAD TEST
UL 508	UL 508	Industrial Control Equipment	18	49	ENDURANCE
UL 508 Industrial Control Equipment 18 52 SHORT CIRCUIT - GENERAL UL 508 Industrial Control Equipment 18 54 HIGH-AVAILABLE FAULT CURRENT CIRCUITS (OPTIONAL) UL 508 Industrial Control Equipment 18 58 TRANSIENT-VOLTAGE-SURGE SUPPRESSION UL 508 Industrial Control Equipment 18 59 ACCELERATED AGING UL 508 Industrial Control Equipment 18 60 BREAKDOWN OF COMPONENTS TEST UL 508 Industrial Control Equipment 18 62 PUSH-BACK RELIEF UL 508 Industrial Control Equipment 18 63 WIRE FLEXING UL 508 Industrial Control Equipment 18 64 PRINTED WIRING BOARD ABNORMAL OPERATION TEST UL 508 Industrial Control Equipment 18 65 SECONDARY CIRCUITS TEST UL 508 Industrial Control Equipment 18 7.6 BONDING UL 508 Industrial Control Equipment 18 7.7 RESISTANCE MEASUREMENT UL 508 Industrial Control Equipment 18 7.7 RESISTANCE MEASUREMENT UL 508 Industrial Control Equipment 18 99 COMBINATION MOTOR CONTROLLERS - CURRENT WITHSTAND UL 508 Industrial Control Equipment 18 99 COMBINATION MOTOR CONTROLLERS - CONTACTOR OVERLOAD UL 508 Industrial Control Equipment 18 99 COMBINATION MOTOR CONTROLLERS - CONTACTOR OVERLOAD UL 508 POWER CONVERSION EQUIPMENT 3 40 TEMPERATURE	UL 508	Industrial Control Equipment	18	50	CALIBRATION
UL 508 Industrial Control Equipment 18 54 HIGH-AVAILABLE FAULT CURRENT CIRCUITS (OPTIONAL) UL 508 Industrial Control Equipment 18 58 TRANSIENT-VOLTAGE-SURGE SUPPRESSION UL 508 Industrial Control Equipment 18 59 ACCELERATED AGING UL 508 Industrial Control Equipment 18 60 BREAKDOWN OF COMPONENTS TEST UL 508 Industrial Control Equipment 18 62 PUSH-BACK RELIEF UL 508 Industrial Control Equipment 18 63 WIRE FLEXING UL 508 Industrial Control Equipment 18 64 PRINTED WIRING BOARD ABNORMAL OPERATION TEST UL 508 Industrial Control Equipment 18 65 SECONDARY CIRCUITS TEST UL 508 Industrial Control Equipment 18 7.6 BONDING UL 508 Industrial Control Equipment 18 7.7 RESISTANCE MEASUREMENT UL 508 Industrial Control Equipment 18 7.7 RESISTANCE MEASUREMENT UL 508 Industrial Control Equipment 18 7.7 COMBINATION MOTOR CONTROLLERS - MAGNETIC TRIP OUT TEST UL 508 Industrial Control Equipment 18 98 COMBINATION MOTOR CONTROLLERS - CURRENT WITHISTAND UL 508 Industrial Control Equipment 18 99 COMBINATION MOTOR CONTROLLERS - CONTACTOR OVERLOAD UL 508 POWER CONVERSION EQUIPMENT 3 40 TEMPERATURE		• • • • • • • • • • • • • • • • • • • •	18	51.2	
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UL 508 Industrial Control Equipment 18 7.6 BONDING UL 508 Industrial Control Equipment 18 7.7 RESISTANCE MEASUREMENT UL 508 Industrial Control Equipment 18 89 MANUAL MOTOR CONTROLLERS - MAGNETIC TRIP OUT TEST UL 508 Industrial Control Equipment 18 98 COMBINATION MOTOR CONTROLLERS - CURRENT WITHSTAND UL 508 Industrial Control Equipment 18 99 COMBINATION MOTOR CONTROLLERS - CONTACTOR OVERLOAD UL 508C POWER CONVERSION EQUIPMENT 3 40 TEMPERATURE		· ·			*
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UL 508C POWER CONVERSION EQUIPMENT 3 40 TEMPERATURE	UL 508	Industrial Control Equipment	18	99	COMBINATION MOTOR CONTROLLERS -
	UL 508C	POWER CONVERSION EQUIPMENT	3	40	
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UL 508C	POWER CONVERSION EQUIPMENT	3	41.3	SINGLE PHASING
UL 508C	POWER CONVERSION EQUIPMENT	3	41.4	INOPERATIVE BLOWER MOTOR
UL 508C	POWER CONVERSION EQUIPMENT	3	41.5	CLOGGED FILTER
UL 508C	POWER CONVERSION EQUIPMENT	3	41.6	CURRENT LIMITING CONTROL
UL 508C	POWER CONVERSION EQUIPMENT	3	43	SOLID STATE MOTOR OVERLOAD PROTECTION
UL 508C	POWER CONVERSION EQUIPMENT	3	44	DIELECTRIC VOLTAGE-WITHSTAND
UL 508C	POWER CONVERSION EQUIPMENT	3	45	SHORT CIRCUIT - STANDARD FAULT CURRENTS
UL 508C	POWER CONVERSION EQUIPMENT	3	46	CALIBRATION OF SHORT CIRCUIT TEST CIRCUITS
UL 508C	POWER CONVERSION EQUIPMENT	3	47	SHORT CIRCUIT - HIGH FAULT CURRENTS
UL 508C	POWER CONVERSION EQUIPMENT	3	48	TRANSIENT-VOLTAGE-SURGE SUPPRESSION
UL 508C	POWER CONVERSION EQUIPMENT	3	49	ACCELERATED AGING
UL 508C	POWER CONVERSION EQUIPMENT	3	50	BREAKDOWN OF COMPONENTS
UL 508C	POWER CONVERSION EQUIPMENT	3	52	PRINTED WIRING BOARD ABNORMAL OPERATION
UL 508C	POWER CONVERSION EQUIPMENT	3	6.6.4	BONDING - BOND WIRE
UL 508C	POWER CONVERSION EQUIPMENT	3	6.7	RESISTANCE MEASUREMENT
UL 508C	Power Conversion Equipment	4	40	TEMPERATURE
UL 508C	Power Conversion Equipment	4	41.2	CONTACTOR OVERLOAD
UL 508C	Power Conversion Equipment	4	41.3	SINGLE PHASING
UL 508C	Power Conversion Equipment	4	41.4	INOPERATIVE BLOWER MOTOR
UL 508C	Power Conversion Equipment	4	41.5	CLOGGED FILTER
UL 508C	Power Conversion Equipment	4	41.6	CURRENT LIMITING CONTROL
UL 508C	Power Conversion Equipment	4	43	SOLID STATE MOTOR OVERLOAD PROTECTION
UL 508C	Power Conversion Equipment	4	44	DIELECTRIC VOLTAGE-WITHSTAND
UL 508C	Power Conversion Equipment	4	45	SHORT CIRCUIT - STANDARD FAULT CURRENTS
UL 508C	Power Conversion Equipment	4	47	CALIBRATION OF SHORT CIRCUIT TEST CIRCUITS
UL 508C	Power Conversion Equipment	4	48	SHORT CIRCUIT - HIGH FAULT CURRENTS
UL 508C	Power Conversion Equipment	4	49	TRANSIENT-VOLTAGE-SURGE SUPPRESSION
UL 508C	Power Conversion Equipment	4	50	ACCELERATED AGING TEST
UL 508C	Power Conversion Equipment	4	51	BREAKDOWN OF COMPONENTS
UL 508C	Power Conversion Equipment	4	54	PRINTED WIRING BOARD ABNORMAL OPERATION
UL 508C	Power Conversion Equipment	4	6.6.4	BONDING - BOND WIRE
UL 508C	Power Conversion Equipment	4	6.7	RESISTANCE MEASUREMENT
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.10	SUBMERSION
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.11	SUBMERSION TEST
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.12	OIL EXCLUSION
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.13	GASKET TESTS
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.14	ROD ENTRY TEST
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.15	MISALIGNMENT
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.16/ ANNEX D	WATER EXPOSURE AND IMMERSION

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UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.2	DRIP
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.3	RAIN
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.4	ATOMIZED WATER (DUST ALTERNATIVE TEST)
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.5	EXTERNAL ICING TEST
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.6	HOSEDOWN
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.7	INDOOR CORROSION PROTECTION
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.8	OUTDOOR CORROSION PROTECTION
UL 50E/CSA- C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations	2	8.9	ADDITIONAL CORROSION FOR TYPE 4X AND 6P
UL 60947- 1/CSA- C22.2 No. 60947-1	Low-Voltage Switchgear and Controlgear - Part 1: General Rules	5/2	8.3.3.4	DIELECTRIC PROPERTIES
UL 60947- 1/CSA- C22.2 No. 60947-1	Low-Voltage Switchgear and Controlgear - Part 1: General Rules	5/2	8.3.5DV.1	WIRE FLEXING TEST
UL 60947- 1/CSA- C22.2 No. 60947-1	Low-Voltage Switchgear and Controlgear - Part 1: General Rules	5/2	8.3.6DV.1	BREAKDOWN OF COMPONENTS TEST
UL 60947- 1/CSA- C22.2 No. 60947-1	Low-Voltage Switchgear and Controlgear - Part 1: General Rules	5/2	DVC.2 (Annex DVC)	SECONDARY CIRCUITS TEST
UL 60947-4- 1/CSA- C22.2 No. 60947-4-1	Low-Voltage Switchgear and Controlgear - Part 4- 1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters	3/2	8.2.1.2	LIMITS OF OPERATION OF CONTACTORS AND POWER-OPERATED STARTERS
UL 60947-4- 1/CSA- C22.2 No. 60947-4-1	Low-Voltage Switchgear and Controlgear - Part 4- 1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters	3/2	8.2.1.5	LIMITS OF OPERATION OF CURRENT OPERATED RELAYS AND RELEASES
UL 60947-4- 1/CSA- C22.2 No. 60947-4-1	Low-Voltage Switchgear and Controlgear - Part 4- 1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters	3/2	9.3.3.3 AND 8.2.2DV	TEMPERATURE TEST
UL 60947-4- 1/CSA- C22.2 No. 60947-4-1	Low-Voltage Switchgear and Controlgear - Part 4- 1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters	3/2	9.3.3.4DV	DIELECTRIC VOLTAGE WITHSTAND
UL 60947-4- 1/CSA- C22.2 No. 60947-4-1	Low-Voltage Switchgear and Controlgear - Part 4- 1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters	3/2	9.3.3.5.5DV	OVERLOAD TEST
UL 60947-4- 1/CSA- C22.2 No. 60947-4-1	Low-Voltage Switchgear and Controlgear - Part 4- 1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters	3/2	9.3.3.6DV.1	ENDURANCE TEST (MANUAL MOTOR CONTROLLER FOR USE AS STARTER

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UL 60947-4- 1/CSA- C22.2 No. 60947-4-1	Low-Voltage Switchgear and Controlgear - Part 4- 1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters	3/2	9.3.3.6DV.6. 1	OPERATION TEST (REDUCED VOLTAGE STARTER)
UL 60947-4- 1/CSA- C22.2 No. 60947-4-1	Low-Voltage Switchgear and Controlgear - Part 4- 1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters	3/2	9.3.4	PERFORMANCE UNDER SHORT-CIRCUIT CONDITIONS
UL 60947-4- 1/CSA- C22.2 No. 60947-4-1	Low-Voltage Switchgear and Controlgear - Part 4- 1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters	3/2	DVC.5.1.13	MAGNETIC TRIP OUT TEST (MMC / SPCMC)
UL 60947-4- 1/CSA- C22.2 No. 60947-4-1	Low-Voltage Switchgear and Controlgear - Part 4- 1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters	3/2	DVC.5.1.2	CONTACTOR OVERLOAD TEST (CMC)
UL 60947-4- 1/CSA- C22.2 No. 60947-4-1	Low-Voltage Switchgear and Controlgear - Part 4- 1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters	3/2	DVC.5.1.5	CURRENT WITHSTAND TEST
UL 60947-4- 1/CSA- C22.2 No. 60947-4-1	Low-Voltage Switchgear and Controlgear - Part 4- 1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters	3/2	DVC.5.1.6	OVERLOAD AND SHORT CIRCUIT COORDINATION
UL 60947-4- 2/CSA- C22.2 No. 60947-4-2	Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters	1	9.3.3.3	TEMPERATURE
UL 60947-4- 2/CSA- C22.2 No. 60947-4-2	Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters	1	9.3.3.3	OVERVOLTAGE AND UNDERVOLTAGE
UL 60947-4- 2/CSA- C22.2 No. 60947-4-2	Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters	1	9.3.3.4	DIELECTRIC
UL 60947-4- 2/CSA- C22.2 No. 60947-4-2	Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters	1	9.3.3.5DV	OVERLOAD/ENDURANCE
UL 60947-4- 2/CSA- C22.2 No. 60947-4-2	Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters	1	9.3.4DV	SHORT CIRCUIT
UL 60947-4- 2/CSA- C22.2 No. 60947-4-2	Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters	1	ANNEX DVB	BREAKDOWN OF COMPONENTS
UL 60947-4- 2/CSA- C22.2 No. 60947-4-2	Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters	1	ANNEX DVE.2	CONTROLLER OVERLOAD
UL 60947-4- 2/CSA- C22.2 No. 60947-4-2	Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters	1	ANNEX DVE.3	SINGLE PHASING
UL 60947-4- 2/CSA- C22.2 No. 60947-4-2	Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters	1	ANNEX DVE.4	INOPERATIVE BLOWER MOTOR
UL 60947-4- 2/CSA- C22.2 No. 60947-4-2	Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters	1	ANNEX DVE.5	CLOGGED FILTER
UL 60947-4- 2/CSA- C22.2 No. 60947-4-2	Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters	1	ANNEX DVE.6	CURRENT LIMITING CONTROL

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UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	10.5.1	INTEGRITY OF CLEARANCES AND CREEPAGE DISTANCES
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	10.5.2	NONMETALLIC ENCLOSURE
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	11.2	CLEANING TEST
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	11.3	SPILLAGE
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	11.4	OVERFLOW
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	13.2.2	BATTERY ABNORMAL
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	14.3	OVER TEMPERATURE PROTECTIVE DEVICES
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	14.8	CIRCUITS AND COMPONENTS USED AS TRANSIENT OVERVOLTAGE LIMITING DEVICES
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	15.2	PREVENTION OF REACTIVATING
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	15.3	INTERLOCK RELIABILITY
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.1	COMPONENT ABNORMAL TEST
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.10	COOLING ABNORMAL
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.11	HEATING DEVICE ABNORMAL

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UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.12	INSULATION BETWEEN CIRCUITS AND PARTS ABNORMAL
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.13	INTERLOCK ABNORMAL
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.14	SUPPLY VOLTAGE SELECTOR
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.2	PROTECTIVE IMPEDANCE
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.3	PROTECTIVE CONDUCTOR ABNORMAL TEST
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.4	SHORT TERM / INTERMITTENT DUTY ABNORMAL
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.5	MOTOR ABNORMAL TEST
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.6	CAPACITOR SHORT ABNORMAL TEST
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.7.2	MAINS TRANSFORMER SHORT CIRCUIT ABNORMAL TEST
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.7.3	MAINS TRANSFORMER OVERLOAD ABNORMAL TEST
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.8	OUTPUT ABNORMAL TEST
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	4.4.2.9	MULTI-SUPPLY ABNORMAL
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	5.1.3	MAINS SUPPLY
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	5.3	DURABILITY OF MARKING TEST

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and Laboratory - Part 1: General Requirements

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7.3.4

LIMITATION OF FORCE AND PRESSURE

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UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	7.3.5.2	GAP LIMITATIONS BETWEEN MOVING PARTS - ACCESS NORMALLY PREVENTED
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	7.4	STABILITY 10 DEGREE
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	7.4	STABILITY 1 METER
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	7.5.2	HANDLES AND GRIPS
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	7.5.3	LIFTING DEVICES AND SUPPORTING PARTS
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	7.6	WALL MOUNTING
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	8.2.1	STATIC TEST
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	8.2.2	IMPACT
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	8.3.1	DROP TEST OTHER THAN HAND-HELD AND DIRECT PLUG-IN
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	8.3.2	DROP TEST HAND-HELD AND DIRECT PLUG-IN
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	9.4	LIMITED ENERGY CIRCUIT DETERMINATION TEST
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	ANNEX H	QUALIFICATION OF CONFORMAL COATINGS FOR PROTECTION AGAINST POLLUTION
UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	DVD.4.1	CONDUIT PULL OUT TEST

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UL 61010-1/ CSA-C22.2 No. 61010-1	Electrical Equipment for Measurement, Control, and Laboratory - Part 1: General Requirements	3	DVD.4.3	BENDING TEST
UL 61010-2- 030/CSA- C22.2 No. 61010-2- 030	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-030: Particular Requirements for Testing and Measuring Circuits	1	10.1-10.4	TEMPERATURE TEST
UL 61010-2- 030/CSA- C22.2 No. 61010-2- 030	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-030: Particular Requirements for Testing and Measuring Circuits	1	4.4	SINGLE FAULT CONDITION
UL 61010-2- 030/CSA- C22.2 No. 61010-2- 030	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-030: Particular Requirements for Testing and Measuring Circuits	1	4.4.1.101.1, 4.4.1.101.2	OVERLOAD AND ENDURANCE TEST - PILOT DUTY LOADS
UL 61010-2- 030/CSA- C22.2 No. 61010-2- 030	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-030: Particular Requirements for Testing and Measuring Circuits	1	4.4.1.101.1, 4.4.1.101.2	OVERLOAD AND ENDURANCE TEST - GENERAL USE AND RESISTIVE LOADS
UL 61010-2- 030/CSA- C22.2 No. 61010-2- 030	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-030: Particular Requirements for Testing and Measuring Circuits	1	6.2	DETERMINATION OF ACCESSIBLE PARTS
UL 61010-2- 030/CSA- C22.2 No. 61010-2- 030	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-030: Particular Requirements for Testing and Measuring Circuits	1	6.5.2.4, 6.5.2.5	GROUNDING CONTINUITY TEST
UL 61010-2- 030/CSA- C22.2 No. 61010-2- 030	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-030: Particular Requirements for Testing and Measuring Circuits	1	6.5.2.6	TRANSFORMER PROTECTIVE BONDING SCREEN TEST
UL 61010-2- 030/CSA- C22.2 No. 61010-2- 030	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-030: Particular Requirements for Testing and Measuring Circuits	1	6.7, ANNEX K	INSULATION REQUIREMENTS
UL 61010-2- 030/CSA- C22.2 No. 61010-2- 030	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-030: Particular Requirements for Testing and Measuring Circuits	1	6.8	DIELECTRIC VOLTAGE WITHSTAND
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UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	1	10.1 - 10.4	TEMPERATURE TEST
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	1	4.4	TESTING IN SINGLE FAULT CONDITION
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	1	4.4.1.101.1	OVERLOAD TEST
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	1	4.4.1.101.2	ENDURANCE TEST
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	1	6.2	DETERMINATION OF ACCESSIBLE PARTS
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	1	6.5.2.4 AND 6.5.2.5	GROUNDING CONTINUITY TEST
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	1	6.5.2.6	TRANSFORMER PROTECTIVE BONDING SCREEN
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	1	6.7, ANNEX K	INSULATION REQUIREMENTS
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	1	6.8	PROCEDURE FOR VOLTAGE TESTS
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	1	8.2.2	IMPACT
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	1	8.3.1	DROP TEST OTHER THAN HAND-HELD EQUIPMENT AND DIRECT PLUG-IN EQUIPMENT
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	2	4.4.2.101.1	OVERLOAD TEST
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	2	4.4.2.101.2	ENDURANCE TEST
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	2	8.2.2	IMPACT
UL 61010-2- 201	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201: Particular Requirements for Control Equipment	2	8.3	DROP TEST
UL 61800-5-	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.1	VISUAL INSPECTION
UL 61800-5- 1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.13DV	CLAMPED JOINT TEST

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UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.2.1	CLEARANCES AND CREEPAGE DISTANCES
UL 61800-5- 1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.2.2	PWB SHORT-CIRCUIT
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.2.3	NON-ACCESSIBILITY
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.2.4	ENCLOSURE INTEGRITY
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.2.5	DEFORMATION TESTS
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.2.5.2	DEFLECTION
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.2.5.3	IMPACT
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.3.1	IMPULSE VOLTAGE
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.3.2	A.C. OR D.C. VOLTAGE
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.3.4	PROTECTIVE IMPEDANCE
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.3.5	TOUCH CURRENT MEASUREMENT
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.3.6.2.1D V.5	SHORT CIRCUIT TEST - HIGH FAULT CURRENT
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.3.6.3	SHORT CIRCUIT TEST - STANDARD FAULT CURRENT
UL 61800-5- 1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.3.6.4	BREAKDOWN OF COMPONENTS
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.3.6DV.1. 5	BREAKDOWN OF COMPONENTS TEST – GROUP INSTALLATION FOR STANDARD FAULT CURRENT
UL 61800-5- 1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.3.6DV.1. 6	BREAKDOWN OF COMPONENTS TEST – GROUP INSTALLATION FOR HIGH FAULT CURRENT
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.3.7	CAPACITOR DISCHARGE TEST
UL 61800-5 1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.3.8	TEMPERATURE RISE
UL 61800-5- 1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.3.9	PROTECTIVE BONDING
UL 61800-5- 1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.4.4	LOSS OF PHASE
UL 61800-5- 1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.4.5.2	INOPERATIVE BLOWER
UL 61800-5- 1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.4.5.3	CLOGGED FILTER
UL 61800-5- 1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.4.5.4	LOSS OF COOLANT
UL 61800-5	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.4.5.5DV	CONTACTOR OVERLOAD

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UL 61800-5- 1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.4.5.6DV	CURRENT LIMITING CONTROL
UL 61800-5- 1	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.5.1	HIGH CURRENT ARCING IGNITION
UL 61800-5-	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.5.2	GLOW-WIRE
UL 61800-5-	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.5.4	MATERIAL TEST - FLAMMABILITY
UL 61800-5-	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.6.3.1	ENVIRONMENTAL TESTS - DRY HEAT
UL 61800-5-	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.6.3.2	ENVIRONMENTAL TESTS - DAMP HEAT
UL 61800-5-	Adjustable Speed Electrical Power Drive Systems Part 5-1: Safety Requirements - Electrical, Thermal and Energy	1	5.2.6.4	ENVIRONMENTAL TESTS - VIBRATION
UL 67	Panelboards	12	19	TEMPERATURE TEST
UL 67	Panelboards	12	20	RAIN TEST
UL 67	Panelboards	12	21	STRENGTH OF INSULATING BASE AND SUPPORT TEST
UL 67	Panelboards	12	22	MOLD STRESS RELIEF TEST
UL 67	Panelboards	12	23	SHORT-CIRCUIT CURRENT TEST
UL 67	Panelboards	12	24	DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 67	Panelboards	12	25	BONDING RESTISTANCE TEST
UL 67	Panelboards	13	21	TEMPERATURE
UL 67	Panelboards	13	22	RAIN
UL 67	Panelboards	13	23	STRENGTH OF INSULATING BASE AND SUPPORT
UL 67	Panelboards	13	24	MOLD STRESS RELIEF
UL 67	Panelboards	13	25	SHORT-CIRCUIT CURRENT
UL 67	Panelboards	13	26	DIELECTRIC VOLTAGE-WITHSTAND
UL 746C	Polymeric Materials - Use in Electrical Equipment Evaluations	7	15, 50	FLAMMABILITY - 12 MM FLAME
UL 746C	Polymeric Materials - Use in Electrical Equipment Evaluations Polymeric Materials - Use in Electrical Equipment	7	16, 51	FLAMMABILITY - 20 MM (3/4 INCH) FLAME
UL 746C	Evaluations Polymeric Materials - Use in Electrical Equipment	7	17, 52	FLAMMABILITY - 127 MM (5 INCH) FLAME
UL 746C	Evaluations	7	21, 55	CRUSHING RESISTANCE
UL 746C	Polymeric Materials - Use in Electrical Equipment Evaluations	7	22, 56	RESISTANCE TO IMPACT
UL 746C	Polymeric Materials - Use in Electrical Equipment Evaluations	7	29, 61	MOLD STRESS-RELIEF DISTORTION
UL 746C	Polymeric Materials - Use in Electrical Equipment Evaluations Polymeric Materials - Use in Electrical Equipment	7	31	STRAIN-RELIEF TEST AFTER MOLD STRESS- RELIEF DISTORTION
UL 746C	Evaluations POLYMERIC MATERIALS-USE IN ELECTRICAL	7	73	GLOW-WIRE END-PRODUCT TEST
UL 746C	EQUIPMENT EVALUATIONS POLYMERIC MATERIALS-USE IN ELECTRICAL	6	15,50	FLAMMABILITY - 12 MM FLAME
UL 746C	EQUIPMENT EVALUATIONS POLYMERIC MATERIALS-USE IN ELECTRICAL	6	16,51	FLAMMABILITY - 20 MM (3/4-INCH) FLAME FLAMMABILITY - 127 MM (5 INCH) FLAME
UL 746C	EQUIPMENT EVALUATIONS POLYMERIC MATERIALS-USE IN ELECTRICAL	6	21,55	CRUSHING RESISTANCE
UL 746C	EQUIPMENT EVALUATIONS POLYMERIC MATERIALS-USE IN ELECTRICAL	6	22,56	RESISTANCE TO IMPACT TEST
UL 746C	EQUIPMENT EVALUATIONS POLYMERIC MATERIALS-USE IN ELECTRICAL EQUIPMENT EVALUATIONS	6	29,61	MOLD STRESS-RELIEF DISTORTION
UL 746C	POLYMERIC MATERIALS-USE IN ELECTRICAL EQUIPMENT EVALUATIONS	6	31	STRAIN-RELIEF TEST AFTER MOLD STRESS- RELIEF DISTORTION
UL 746C	POLYMERIC MATERIALS-USE IN ELECTRICAL EQUIPMENT EVALUATIONS	6	73	GLOW-WIRE END-PRODUCT

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UL 840	INSULATION COORDINATION INCLUDING CLEARANCES AND CREEPAGE DISTANCES FOR ELECTRICAL EQUIPMENT	3	14	DIELECTRIC VOLTAGE-WITHSTAND
UL 845/CSA- C22.2 No. 254	Motor Control Centers	5/1	9.3	TEMPERATURE-RISE TESTS
UL 845/CSA- C22.2 No. 254	Motor Control Centers	5/1	9.4	OVERVOLTAGE AND UNDERVOLTAGE
UL 845/CSA- C22.2 No. 254	Motor Control Centers	5/1	9.5	DIELECTRIC VOLTAGE-WITHSTAND TESTS (AFTER TEMPERATURE-RISE TEST OR OVERVOLTAGE/UNDERVOLTAGE)
UL 857	Busways	13	8.2.1	VERIFICATION OF TEMPERATURE-RISE LIMITS
UL 857	Busways	13	8.2.2	VERIFICATION OF DIELECTRIC VOLTAGE WITHSTAND
UL 857	Busways	13	8.2.3	VERIFICATION OF SHORT-CIRCUIT WITHSTAND STRENGTH
UL 857	Busways	13	8.2.4	VERIFICATION OF ELECTRICAL CONDUCTIVITY
UL 857	Busways	13	8.2.7.1	VERIFICATION OF BENDING RESISTANCE
UL 857	Busways	13	8.2.7.2	VERIFICATION OF IMPACT STRENGTH
UL 857 UL 891	Busways	13	8.2.7.3 9.2.3.5	VERIFICATION OF CRUSHING RESISTANCE
	DEAD-FRONT SWITCHBOARDS	11		AFTER SHORT CIRCUIT DIELECTRIC
UL 891	DEAD-FRONT SWITCHBOARDS	11	9.2.4	SHORT CIRCUIT
UL 935 UL 94	FLUORESCENT-LAMP BALLASTS Tests for Flammability of Plastic Materials for Parts in Devices and Appliances	10 6	7	LIMITED SHORT-CIRCUIT HORIZONTAL BURNING: HB
UL 94	Tests for Flammability of Plastic Materials for Parts in Devices and Appliances	6	8	50 W (20 MM) VERTICAL BURNING: V-0, V-1, V-2
UL 94	Tests for Flammability of Plastic Materials for Parts in Devices and Appliances	6	9	500 W (125 MM) VERTICAL BURNING: 5VA OR 5VB
UL 98	ENCLOSED AND DEAD-FRONT SWITCHES	13	7.2	HEATING TEST
UL 98	ENCLOSED AND DEAD-FRONT SWITCHES	13	7.3	OVERLOAD TEST
UL 98	ENCLOSED AND DEAD-FRONT SWITCHES	13	7.4	ENDURANCE TEST
UL 98	ENCLOSED AND DEAD-FRONT SWITCHES	13	7.5	DIELECTRIC VOLTAGE-WITHSTAND TEST
UL 98	ENCLOSED AND DEAD-FRONT SWITCHES	13	7.7	SHORT-CICUIT WITHSTAND TEST
UL 98	ENCLOSED AND DEAD-FRONT SWITCHES	13	7.9	SHORT-CIRCUIT CLOSING TEST
UL 98/CSA- C22.2 No. 4	Enclosed and Dead-Front Switches	14/8	7.2	HEATING
UL 98/CSA- C22.2 No. 4	Enclosed and Dead-Front Switches	14/8	7.3	OVERLOAD
UL 98/CSA- C22.2 No. 4	Enclosed and Dead-Front Switches	14/8	7.4	ENDURANCE
UL 98/CSA- C22.2 No. 4	Enclosed and Dead-Front Switches	14/8	7.5	DIELECTRIC VOLTAGE WITHSTAND
322.2110.4				
UL 98/CSA- C22.2 No. 4	Enclosed and Dead-Front Switches	14/8	7.7	CLOSE-OPEN
UL 98/CSA-	Enclosed and Dead-Front Switches	14/8	7.7	CLOSE-OPEN LOW LEVEL DIELECTRIC VOLTAGE WITHSTAND
UL 98/CSA- C22.2 No. 4 UL 98/CSA-	Enclosed and Dead-Front Switches			
UL 98/CSA- C22.2 No. 4 UL 98/CSA- C22.2 No. 4	Enclosed and Dead-Front Switches Enclosed and Dead-Front Switches Power Capacitors - Low-Voltage Power Factor	14/8	7.9	LOW LEVEL DIELECTRIC VOLTAGE WITHSTAND VERIFICATION OF SHORT-CIRCUIT WITHSTAND

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IEC 61921	Power Capacitors - Low-Voltage Power Factor Correction Banks	2	7.4	VERIFICATION OF CLEARANCES AND CREEPAGE DISTANCES
IEC 61921	Power Capacitors - Low-Voltage Power Factor Correction Banks	2	7.5	PROTECTION AGAINST ELECTRIC SHOCK AND INTEGRITY OF PROTECTIVE CIRCUITS
IEC 61921	Power Capacitors - Low-Voltage Power Factor Correction Banks	2	7.13	VERIFICATION OF MECHANICAL OPERATION
IEC 61921	Power Capacitors - Low-Voltage Power Factor Correction Banks	2	7.1	VERIFICATION OF TEMPERATURE-RISE LIMITS
UL Subject 508I	Outline of Investigation for Manual Disconnect Switches for Use in Photovoltaic Systems		10	VOLTAGE WITHSTAND TEST
UL Subject 508I	Outline of Investigation for Manual Disconnect Switches for Use in Photovoltaic Systems		5	TEMPERATURE TEST
UL Subject 508I	Outline of Investigation for Manual Disconnect Switches for Use in Photovoltaic Systems		6	OVERLOAD TEST
UL Subject 508I	Outline of Investigation for Manual Disconnect Switches for Use in Photovoltaic Systems		7	ENDURANCE TEST
UL Subject 508I	Outline of Investigation for Manual Disconnect Switches for Use in Photovoltaic Systems		8	DIELECTRIC VOLTAGE WITHSTAND TEST
UL Subject 508l	Outline of Investigation for Manual Disconnect Switches for Use in Photovoltaic Systems		9	SHORT CIRCUIT TEST
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.1	VERIFICATION OF TEMPERATURE RISE
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.11	SHORT-CIRCUIT WITHSTAND STRENGTH
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.12	ELECTROMAGNETIC COMPATIBILITY (EMC)
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.13	MECHANICAL OPERATION
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.2.2	RESISTANCE TO CORROSION
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.2.3.1	THERMAL STABILITY
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.2.3.2	RESISTANCE TO ABNORMAL HEAT AND FIRE DUE TO INTERNAL ELECTRIC EFFECTS
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.2.5	LIFTING
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.2.6	MECHANICAL IMPACT
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.2.7	MARKING
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.3	DEGREE OF PROTECTION OF ENCLOSURES
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.4	CLEARANCES AND CREEPAGE DISTANCES
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.5	PROTECTION AGAINST ELECTRIC SHOCK AND INTEGRITY OF PROTECTIVE CIRCUITS
IEC 61439- 1	Low-Voltage Switchgear and Controlgear Assemblies - Part 1: General Rules	2020	10.9	DIELECTRIC PROPERTIES
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.1	VERIFICATION OF TEMPERATURE RISE
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.11	SHORT-CIRCUIT WITHSTAND STRENGTH
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.12	ELECTROMAGNETIC COMPATIBILITY (EMC)
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.13	MECHANICAL OPERATION
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.2.2	RESISTANCE TO CORROSION
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.2.3.1	THERMAL STABILITY
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.2.3.2	RESISTANCE TO ABNORMAL HEAT AND FIRE DUE TO INTERNAL ELECTRIC EFFECTS

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IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.2.5	LIFTING
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.2.6	MECHANICAL IMPACT
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.2.7	MARKING
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.3	DEGREE OF PROTECTION OF ENCLOSURES
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.4	CLEARANCES AND CREEPAGE DISTANCES
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.5	PROTECTION AGAINST ELECTRIC SHOCK AND INTEGRITY OF PROTECTIVE CIRCUITS
IEC 61439- 2	Low-Voltage Switchgear and Controlgear Assemblies - Part 2: Power Switchgear and Controlgear Assemblies	2020	10.9	DIELECTRIC PROPERTIES
UL 60947-5- 1/CSA- C22.2 No. 60947-5-1	Low-Voltage Switchgear and Controlgear - Part 5- 1: Control Circuit Devices and Switching Elements - Electromechanical Control Circuit Devices	3/1	7.1.3	CLEARANCES AND CREEPAGE DISTANCES
UL 60947-5- 1/CSA- C22.2 No. 60947-5-1	Low-Voltage Switchgear and Controlgear - Part 5- 1: Control Circuit Devices and Switching Elements - Electromechanical Control Circuit Devices	3/1	8.2.5	VERIFICATION OF ACTUATING FORCE (OR MOMENT)
UL 60947-5- 1/CSA- C22.2 No. 60947-5-1	Low-Voltage Switchgear and Controlgear - Part 5- 1: Control Circuit Devices and Switching Elements - Electromechanical Control Circuit Devices	3/1	8.2.6	VERIFICATION OF LIMITATION OF ROTATION (OF A ROTARY SWITCH)
UL 60947-5- 1/CSA- C22.2 No. 60947-5-1	Low-Voltage Switchgear and Controlgear - Part 5- 1: Control Circuit Devices and Switching Elements - Electromechanical Control Circuit Devices	3/1	8.3.3.2	OPERATING LIMITS OF CONTACTOR RELAYS
UL 60947-5- 1/CSA- C22.2 No. 60947-5-1	Low-Voltage Switchgear and Controlgear - Part 5- 1: Control Circuit Devices and Switching Elements - Electromechanical Control Circuit Devices	3/1	8.3.3.3	TEMPERATURE RISE
UL 60947-5- 1/CSA- C22.2 No. 60947-5-1	Low-Voltage Switchgear and Controlgear - Part 5- 1: Control Circuit Devices and Switching Elements - Electromechanical Control Circuit Devices	3/1	8.3.3.4	DIELECTRIC PROPERTIES TEST
UL 60947-5- 1/CSA- C22.2 No. 60947-5-1	Low-Voltage Switchgear and Controlgear - Part 5- 1: Control Circuit Devices and Switching Elements - Electromechanical Control Circuit Devices	3/1	8.3.3.5	MAKING AND BREAKING CAPACITIES
UL 60947-5- 1/CSA- C22.2 No. 60947-5-1	Low-Voltage Switchgear and Controlgear - Part 5- 1: Control Circuit Devices and Switching Elements - Electromechanical Control Circuit Devices	3/1	8.3.4	PERFORMANCE UNDER CONDITIONAL SHORT- CIRCUIT CURRENT