

## STANDARD INFORMATION

**Standard:** UL 621

**Standard ID:** Ice Cream Makers [UL 621:2010 Ed.7+R:14Nov2024]

**Previous Standard ID:** Ice Cream Makers [UL 621:2010 Ed.7+R:16Sep2020]

## EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

**Effective Date:** **November 14, 2026**

## IMPACT, OVERVIEW, AND ACTION REQUIRED

**Impact Statement:** Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

**This standard has Functional Safety Requirements.**

### Overview of Changes:

- Addition of Requirements for Use of Flammable Refrigerants
- Maximum Operating Current and Maximum Rated Current Requirements

Specific details of new/revised requirements are found in table below

Note: If the listing references a Canadian standard, per the Canadian Electrical Code (CSA C22.2#0) Section titled Language of markings, Caution and Warning Markings shall be in English and French.

***Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.***



## STANDARD INFORMATION

| CLAUSE | VERDICT | COMMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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|        |         | <i>Additions to existing requirements are <u>underlined</u> and deletions are shown <del>lined-out</del> below.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 11     | Info    | <b>Internal Wiring And Wiring Methods</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 11.1   | Info    | <b>General</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 11.1.2 |         | <p>With reference to the Exception to 11.1.1, high-voltage circuit conductors supplying one motor shall have an ampacity not less than 125 % of the motor full load current rating or maximum operating current. Conductors supplying more than one motor <u>or a motor together with other loads shall have an ampacity not less than the higher of one of the following:</u></p> <p>a) <u>125 % of the full load or maximum operating current rating of the largest motor plus the full load or maximum operating current rating of any other motors or other loads supplied; or</u></p> <p>b) <u>125 % of the rated load or maximum rated current rating of the largest motor-compressor plus the full load or maximum operating current rating of any other motors or other loads supplied.</u></p> |
| 19     | Info    | <b>Motors</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 19.4   | Info    | <b>Protection of hermetic refrigerant motor-compressors</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 19.4.2 |         | <p>In reference to 19.4.1(a), motor protection systems and thermal protection of a motor-compressor shall not permit a continuous current in excess of 156 % of the motor-compressor rated load current (or 156 % of the branch circuit selection current if the latter is marked) <u>unless:</u></p> <p>a) <u>The ice cream maker is intended for connection to a 20 A, 120 V or a 15 A, 208 or 240 V, single-phase branch circuit; or</u></p> <p>b) <u>The motor-compressor protector or protective system is provided by an adjustable speed drive or system.</u></p>                                                                                                                                                                                                                                |
| 32     | Info    | <b>Refrigerant</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 32.2   |         | <p><b><i>New clause added;</i></b></p> <p>An ice cream maker shall not employ a refrigerant with a toxicity safety group classification exceeding Class A as described by ASHRAE 34.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |



| CLAUSE | VERDICT | COMMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| 68     | Info    | <b>Permanently Connected Ice Cream Makers</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|        |         | The electrical rating shall be indicated in:<br><br>a) Volts.<br>b) For a motor other than a hermetic motor compressor:<br>1) Full-load amperes <u>for a motor that is not controlled by an adjustable speed drive or system; or</u><br>2) <u>Maximum operating current (MOC) for a motor controlled by an adjustable speed drive or system.</u><br>c) For a hermetic motor-compressor <u>not controlled by an adjustable speed drive or system:</u><br>1) Rated-load amperes;<br>2) Locked-rotor amperes, <u>unless a single ampere rating is permitted as specified in 68.4; or</u><br>3) The branch-circuit-selection current in amperes, if required in accordance with 68.1468.11.<br>d) <u>For a hermetic refrigerant motor-compressor controlled by an adjustable speed drive or system: maximum rated current (MRC);</u><br>e) For a resistance-type heater rated 1 ampere or more: amperes, watts, or kilowatts. For a heater rated less than 1 ampere, no marking is required;.<br>f) For lighting circuits: amperes, watts or kilowatts;.<br>g) For a pilot duty load, no marking is required;. and<br>h) Frequency and number of phases. |
|        |         | The minimum ampacity required in accordance with 68.8 shall be at least equal to:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 68.9   |         | a) 125% of the greater of the following:<br>1) <u>The full-load or maximum operating current, if a motor is the largest load; or</u><br>2) <u>The rated load current, branch circuit selection current or maximum rated current, if a motor-compressor is the largest load; plus,</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        |         | <b><i>New clause added;</i></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 68.9A  |         | In reference to 68.9, the ampacity marked on the ice cream maker nameplate shall be the highest of those calculated for each concurrent load condition.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



| CLAUSE           | VERDICT | COMMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  |         | <b><i>New clause added;</i></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                  |         | A branch circuit selection current rating, in amperes, shall be marked on a permanently connected ice cream maker if:                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 68.11            |         | a) The motor-compressor protection is provided by other than an adjustable speed drive or system;<br>b) A thermal protector or protective system for a hermetic motor-compressor permits a continuous current of more than 156 % of the rated load current of the motor-compressor as marked on the ice cream maker nameplate, and<br>c) The ice cream maker is intended for use on a circuit which exceeds 20 A at 120 V or 15 A at 208 or 240 V.                                                                                                                  |
|                  |         | <b><i>New clause added;</i></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 68.11A           |         | In reference to 68.11, the marked value of the branch circuit-selection current shall not be less than 64.1 % of the maximum continuous current determined as specified in the Compressor Protective Device Test, Section 56.                                                                                                                                                                                                                                                                                                                                       |
|                  |         | <b><i>New supplement added;</i></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                  |         | <b>REQUIREMENTS FOR ICE CREAM MAKERS EMPLOYING A FLAMMABLE REFRIGERANT IN THE REFRIGERATING SYSTEM</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Supplement<br>SB |         | These requirements cover ice cream makers that employ a refrigerant that has been identified as having a flammability safety group classification that exceeds Class 1 as described by the Standard for Designation and Safety Classification of Refrigerants, ASHRAE 34.<br><br>These requirements do not apply to an ice cream maker that employs a refrigerant with a toxicity safety group classification exceeding Class A as described by the Standard for Designation and Safety Classification of Refrigerants, ASHRAE 34.<br><br>See standard for details. |