

STANDARD INFORMATION

Standard: UL 67

Standard ID:

Standard for Safety Panelboards [UL 67:2018 Ed.13+R:22Aug2023]

Previous Standard ID:

Standard for Safety Panelboards [UL 67:2018 Ed.13+R:16May2023]

Standard for Safety Panelboards [UL 67:2018 Ed.13+R:31Jul2020]

Standard for Safety Panelboards [UL 67:2018 Ed.13+R:11Oct2019]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **August 22, 2025**

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 Reports not updated to this version by the effective date above will be withdrawn.

All products must be certified to the August 22, 2023 revision prior to the effective date.

Overview of Changes:

July 31, 2020:

- Addition of New Requirements in Article 705 of the 2020 NEC to UL 67

May 16, 2023:

- Inclusion of Requirements for Energy Management Systems
- Inclusion of Requirements for Short-Circuit Current Rating (SCCR) for DC Rated Panelboards
- Addition of Requirements for Interconnection Equipment
- Rating Requirements for Panelboards Marked as Suitable for Use as Service Equipment

August 22, 2023:

- Revision of Service Equipment Requirements for Panelboards
- Requirements for Field Installable Panelboard Accessories
- New Requirements for Panelboard Kits

Specific details of new/revisted requirements are found in table below.

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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 lined-out below.</i> |
| | | The following changes reflect the July 31, 2020 changes |
| | Info | CONSTRUCTION |
| 6 | Info | General |
| 6.6 | Info | Electrical connections |
| | | Panelboards intended for interconnection with one or more electric power production sources operating in parallel with a primary source(s) of electricity, in accordance with Article 705 of the National Electrical Code, NFPA 70, shall be permitted to have provisions for connection(s) as noted in (a) and (b). See 34.16 for marking requirements. |
| | | a) Supply Side Connection – Panelboards intended for use in accordance with Section 705.12(A) of Article 705 of the National Electrical Code, NFPA 70, shall be permitted to have provisions for interconnecting parallel power sources on the supply side of the service disconnecting means <u>applications where the non-primary sources are connected on the supply side of the service disconnecting means, see 6.2.1(g), shall comply with the following:</u> The sum of the ratings of all supply side overcurrent devices connected to power production sources shall not exceed the rating of the panelboard. |
| 6.6.11 | | <u>1) The sum of the continuous current output ratings of all supply side overcurrent devices connected to power production sources shall not exceed the rating of the panelboard unless protected by a Power Control System (PCS) complying with 6.6.12.</u> |
| | | <u>2) If connections are provided to interconnect power production sources, those connections shall accommodate conductors no smaller than 6 AWG copper or 4 AWG aluminum.</u> |
| | | b) Load Side Connection – Panelboards for use in accordance with Section 705.12 (D) of Article 705 of the National Electrical Code, NFPA 70, shall be permitted to have one or more load side disconnects for the interconnection of parallel power sources. The total rating of all overcurrent devices supplying the panelboard shall not exceed the rating of the panelboard <u>applications where the non-primary sources are connected on the load side of the service disconnecting means shall comply with the following:</u> |
| | | <u>1) Shall be permitted to have one or more load side disconnects for the interconnection of parallel power sources.</u> |



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| | | <p><u>2) The total rating of all overcurrent devices supplying the panelboard shall not exceed the rating of the panelboard when protected by a Power Control System (PCS) complying with 6.6.12</u></p> <p>Exception: The total rating of all overcurrent devices supplying the panelboard may exceed the rating of the panelboard by up to 120% of the rating of the panelboard if the overcurrent device(s) intended for use with interconnected parallel power sources are positioned at the opposite end from the main input, or if the connections are at either end of a center-fed panelboard.</p> |
| 6.6.12 | | <p>Panelboards intended to provide uninterruptible power supply to control circuitry shall be marked in accordance with 34.17.1</p> <p><u>A Power Control System (PCS) or components of a PCS may be installed, or instructions to install a PCS may be specified, to control the output of non-primary sources to be interconnected to the panelboard. PCSs shall comply with the Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, UL 1741. Markings, as specified in 34.16.7, shall be provided when a panelboard includes a PCS, components of a PCS, or instructions to install a PCS.</u></p> |
| 6.6.13 | | <p><i>New clause added;</i></p> <p>Panelboards intended to provide uninterruptible power supply to control circuitry shall be marked in accordance with 34.17.1.</p> |
| | Info | MARKING |
| 34 | Info | Details |
| 34.16 | Info | Parallel Power Source Panelboard |
| 34.16.7 | | <p><i>New clause added;</i></p> <p>Panelboards intended to have any non-primary sources controlled by a PCS shall be provide with one of the following markings, as appropriate:</p> <p>a) Panelboards with a PCS integrated into the design shall be marked “Alternate power sources are controlled by a Power Control System (PCS). The setting of the PCS shall be considered the power source output circuit current”, or equivalent.</p> <p>b) Panelboards provided with components intended for use as part of a PCS shall be marked “This Panelboard is Intended to be Installed as Part of a System Where Alternate Power Sources are controlled by a Power Control System (PCS). Refer to Installation Instructions for additional details regarding the complete installation of the PCS. The setting of the PCS shall be considered the power source output circuit current”, or equivalent.</p> <p>c) Panelboards provided with instructions to install a PCS shall be marked “When used to interconnect parallel electric power production sources, Power Control System (PCS) Model _____, Manufactured by _____ may be used to control the output of alternate sources”, or Equivalent.</p> |



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| | | The following changes reflect the May 16, 2023 changes. |
| | Info | CONSTRUCTION |
| 6 | Info | General |
| 6.6 | Info | Electrical connections |
| | | <p>Panelboards intended for interconnection with one or more electric power production sources operating in parallel with a primary source(s) of electricity, in accordance with Article 705 of the National Electrical Code, NFPA 70, shall be permitted to have provisions for connection(s) as noted in (a) and (b). See 34.16 for marking requirements.</p> <p>a) Supply Side Connection – Panelboards intended for use in applications where the non-primary sources are connected on the supply side of the service disconnecting means, see 6.2.1(g), shall comply with the following:</p> <ol style="list-style-type: none">1) The sum of the continuous current output ratings of all supply side overcurrent devices connected to power production sources shall not exceed the rating of the panelboard unless protected by a Power Control System (PCS) complying with 6.6.12. The current rating of the panelboard or ampacity of the bus bars (see 31.1) shall not be exceeded based on the sum of sources being determined by one of the following methods:<ol style="list-style-type: none">i) <u>The sum of the continuous current output ratings of all supply side overcurrent devices connected to non-primary parallel power sources.</u>ii) <u>The sum of all connected non-primary parallel power sources is limited by the current setpoint of an EMS complying with 6.6.12.</u>2) <u>If connections are provided to interconnect power production sources, those connections shall accommodate conductors no smaller than 6 AWG copper or 4 AWG aluminum.</u> <p>b) Load Side Connection – Panelboards intended for use in applications where the non-primary sources are connected on the load side of the service disconnecting means shall <u>be permitted to have one or more load side disconnects for the interconnection of parallel power sources if the current rating of the panelboard or ampacity of the bus bars (see 31.1) is not exceeded, based on the sum of source and/or loads that can be simultaneously energized, as determined by one of the following methods:</u></p> <ol style="list-style-type: none">1) Shall be permitted to have one or more load side disconnects for the interconnection of parallel power sources. The sum of the continuous current output ratings of all overcurrent devices connected to primary and non-primary parallel power sources2) The total rating of all overcurrent devices supplying the panelboard shall not exceed the rating of the panelboard when protected by a Power Control System (PCS) The sum of all connected loads that can be simultaneously energized, or primary and non-primary parallel power sources, is limited by the current setpoint of an EMS complying with 6.6.12. |

6.6.11



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| | | <i>New clause added;</i> |
| 6.6.12 | | Energy Management System or components of an EMS may be installed, or instructions to install an EMS may be specified, to control the sources or loads to be connected to the panelboard EMS that control sources shall comply with the Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, UL 1741. EMS that control loads shall comply with the Standard for Energy Management Systems, UL 916, and Supplement SA for Safety of Smart Enabled Energy Management Equipment or the requirements for Class B control functions in the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1. Markings, as specified in 34.16.7, shall be provided when a panelboard includes an EMS, components of an EMS, or instructions to install an EMS. |
| 25 | Info | Short-Circuit Current Test |
| 25.8 | Info | Short-circuit procedure |
| 25.8.4 | Info | Current |
| 25.8.4.2 | | The magnitude of the test current, <u>the power factor of an alternating current circuit, and the time constant of a direct-current circuit</u> are to be determined by the applicable method described in the Standard for Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit Breaker Enclosures, UL 489. <u>The power factor for an alternating current circuit shall be in accordance with Table 25.4. The time constant for direct-current circuit shall be in accordance with Table 25.4A.</u> |
| 28 | Info | Test Requirements for Panelboards Used as Transfer Equipment |
| | | <i>New clause added;</i> |
| 28.2 | | A panelboard that is intended for use as interconnection equipment in accordance with Article 702 of the National Electrical Code, ANSI/NFPA 70, along with its circuit breakers, switches, devices, or relays shall be tested in accordance with the Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, UL 1741. See 34.12.18 and 34.12.19 for marking requirements. |
| | Info | RATING |
| 31 | Info | Current |
| | | <i>New clause added;</i> |
| 31.7 | | Meter centers marked suitable for use as service equipment and having provisions for the connection of only a single branch circuit shall have a rating of not less than 15 amperes. |



| CLAUSE | VERDICT | COMMENT |
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| The following changes reflect the August 22, 2023 changes. | | |
| | Info | CONSTRUCTION |
| 6 | Info | General |
| 6.2 | Info | Equipment on supply side of disconnect |
| | | <i>New clause added;</i> |
| 6.2.2 | | <p>For the purpose of determining the number of disconnects as required in 6.4.2 and 6.4.2A, disconnects on the supply side of the service disconnecting means, as permitted in 6.2.1, shall not be counted as a service disconnect. Disconnects and overcurrent protection on the supply side of the service disconnecting means that comply with (a), (b), and (c) below may be located behind a deadfront or screwed-on cover, if:</p> <ul style="list-style-type: none">a) The disconnect or overcurrent protective device is installed as part of the equipment;b) The circuit being controlled is contained within the panelboard enclosure; andc) The panelboard is marked in accordance with 34.9.10. |
| 6.4 | Info | Service equipment |
| 6.4.2 | | <p><u>Panelboards other than meter centers constructed in accordance with 6.4.2A, are limited to a single service disconnect in each enclosure and shall be constructed such that, with the service disconnect in the off position, ungrounded uninsulated parts on the supply side of the service disconnect are protected against inadvertent contact by persons while servicing any field connected load terminal, including a neutral load terminal, a branch circuit equipment grounding terminal, or the neutral disconnect link. Inadvertent contact is determined by use of the probe illustrated in Figure 6.1. If restriction to the line-side of the service disconnect is dependent on the installation of field installed service conductors, conductors sized in accordance with 12.1.10 shall be installed in the terminals when determining exposure to inadvertent contact. All live parts of the line side service terminal, including the connector body and pressure screw shall be evaluated.</u></p> <p><i>New clause added;</i></p> <p>Meter centers shall be permitted to have two to six service disconnects in each enclosure, provided that each service disconnecting means:</p> <ul style="list-style-type: none">a) Is located within a separate compartment, with a separate door or cover, that complies with enclosure requirements in the Standard for Enclosures for Electrical Equipment, Non- Environmental Considerations, UL 50 andb) Complies with the accessibility requirements in 6.4.2. <p>Operating handles and/or handle escutcheons are permitted to protrude beyond compartment walls.</p> |
| 6.4.2A | | |



| CLAUSE | VERDICT | COMMENT |
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| | | <i>New section added;</i> |
| | | Field installable accessories and equipment |
| 6.8 | | Field Installable accessories and equipment shall comply with all applicable requirements of this standard. See standard for details. |
| | | <i>New section added;</i> |
| | | Panelboard kit |
| 6.9 | | Panelboards may be provided in the form of a field-assembled kit provided the following conditions are met: See standard for details. |
| 7 | Info | Enclosure |
| 7.1 | Info | General |
| 7.1.4 | | A meter center shall have an opening to accommodate a watt-hour meter. <u>The metal from which it is cut shall comply with the Standard for Meter Sockets, UL 414.</u> |
| 17 | Info | Wiring Space, Wiring Gutters, and Wire Bending Space |
| 17.1 | Info | General |
| | | <i>New clause added;</i> |
| | | The wiring space, wiring gutters, and wire bending space required in each section of a meter center shall be based only on the field installed conductors to be located in that section. For example, in Figure 17.1, for wire bending space: |
| 17.1.4.A | | a) Distance A shall be 8-1/2 inches (216 mm) as determined by Table 17.1 assuming the largest conductor to be located in the section will be a 250 kcmil (127 mm ²) aluminum conductor, and b) Distance B shall be 5-1/2 inches (140 mm) as determined by Table 17.1 assuming the largest conductor to be located in the section will be a 1/0 AWG (53.5 mm ²) aluminum conductor; or as another example, if Exception No. 1(a), to 17.3.1.1 was applied, Distance B would be required to be 3-1/2 inches (89 mm) for the same size and material of conductor. |
| | | Exception No. 1: The wiring space, wiring gutters, and wire bending space in the meter socket section may be in accordance with the Standard for Meter Sockets, UL 414. |
| | | Exception No. 2: If the wiring gutter complies with 17.1 and the conductor enters straight through a compartment wall and directly opposite of the conductor |



| CLAUSE | VERDICT | COMMENT |
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| | | termination, then the compartment wall perpendicular and closest to the load side terminations shall not be used in determining wire bending distance. For this construction, the distance from the edge of the load side termination to the enclosure outer wall shall be used in determining wire bending distance. Refer to Figure 17.1A. |
| | Info | MARKING |
| 34 | Info | Details |
| 34.1 | Info | General |
| | | <i>New clause added;</i> |
| 34.1.27 | | A panelboard that is capable of being used as transfer equipment in accordance with Article 702 of the National Electrical Code, ANSI/NFPA 70, and has circuit breakers, switches and interlocks assembled at the factory shall be marked "Suitable for use in accordance with Article 702 of the National Electrical Code, ANSI/NFPA 70". |
| 34.12 | Info | Field-installed accessories and equipment |
| 34.12.1 | | Other than as permitted in 34.12.1A a panelboard shall be marked with the name or trademark of the manufacturer and the catalog number or equivalent of <u>any accessories or equipment permitted for field installation</u> . <u>Other markings identified in this section shall also apply.</u> |
| | | <i>New clause added;</i> |
| | | Panelboard accessories or equipment that are specified by the panelboard manufacturer but shipped from the factory separately from the panelboard, and for which the panelboard is not marked with the name or trademark of the manufacturer and the catalog number of the accessory, shall be permitted when marked as follows: |
| 34.12.1A | | <p>a) The accessory or equipment shall be marked with its own catalogue number or the equivalent, with the name or trademark of the manufacturer, and with the electrical rating, except that when physical space does not permit permanent marking on the accessory or equipment and the accessory or equipment is marked with some identification that can be referenced, a removable tag or alternate marking means may be used.</p> <p>b) Instructions shall be furnished with the accessory or equipment indicating the panelboards with which the accessory is intended to be used.</p> <p>c) A marking label that can be attached to the panelboard to identify the field installed accessory or equipment and to confirm the panelboard manufacturers approval of field installation of the accessory or equipment in the panelboard shall be furnished with the accessory or equipment, along with instructions for attaching the label to the panelboard.</p> <p>d) Installation and wiring instructions shall be furnished with the accessory or equipment unless the construction makes the installation obvious.</p> |



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| | | <i>New clause added;</i> |
| 34.12.18 | | Panelboards capable of accepting a field installed kit for transfer equipment applications shall be marked with the kit catalog number. The kit shall include a permanent marking that states "Suitable for use in accordance with Article 702 of the National Electrical Code, ANSI/NFPA 70", or equivalent, along with instructions on location and application of the marking. |
| | | <i>New clause added;</i> |
| 304.12.19 | | Field installable accessories shall be provided with markings or instructions that indicate the following provisions shall be addressed during installation: a) Panelboard accessories may not be field installed in the wiring space of the enclosure panelboard unless the conductors, splices, taps and equipment at any cross section of the wiring space does not exceed 75 percent of the cross-sectional area of that space; b) Accessories shall not block enclosure ventilation openings; and c) Accessories shall not block the breaker arc vents. |
| | | <i>New clause added;</i> |
| 34.19 | | In addition to all markings required in Details, Section 34, each component and sub-assembly of a panelboard kit shall be marked with: a) The manufacturer's name, trademark, or other descriptive marking by which the organization responsible for the component or sub-assembly can be identified. b) A unique catalog number or other designator that is identified in the installation/assembly instructions. Exception: The marking may be on or in the packaging carton for the kit, or on each component and subassembly. |
| | | <i>New section added;</i> |
| 37 | | Electronic Access to Installation Instructions Instructions shall be permitted to be made available electronically as an alternative to, or in addition to, being provided with the product. See standard for details. |



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| | | <i>New clause added;</i> |
| 31.8 | | <p>If a panelboard has provision for a watt-hour meter, the continuous duty rating but not the maximum rating of the meter position may be less than the rating of the circuit in which it is used.</p> <p>Exception: A meter position intended to be used on the secondary side of current transformers may be rated less than the circuit in which it is used.</p> |
| | Info | MARKING |
| 34 | Info | Details |
| 34.16 | Info | Parallel Power Source Panelboard |
| | | <p>Panelboards intended to be controlled by an EMS shall be provided with one of the following as appropriate:</p> <p>a) Panelboards with an EMS integrated into the design shall be marked with the following:</p> <ul style="list-style-type: none">1) <u>“Alternate power sources are controlled by an Energy Management System (EMS). The setting of the EMS shall be considered the power source output circuit current”, or equivalent.</u>2) <u>“Loads are controlled by an Energy Management System (EMS). The setting of the EMS shall be permitted to be used in load calculations in accordance with the NEC”, or equivalent.</u> <p>b) Panelboards provided with components intended for use as part of an EMS shall be marked with the following as appropriate:</p> <ul style="list-style-type: none">1) <u>“This panelboard is intended to be installed as part of a system where alternate power sources are controlled by an Energy Management System (EMS). Refer to Installation Instructions for additional details regarding the complete installation of the EMS. The setting of the EMS shall be considered the power source output circuit current”, or equivalent.</u>2) <u>“This panelboard is intended to be installed as part of a system where loads are controlled by an Energy Management System (EMS). Refer to Installation Instructions for additional details regarding the complete installation of the EMS. The setting of the EMS shall be permitted to be used in load calculations in accordance with the NEC”, or equivalent.</u> <p>c) Panelboards provided with instructions to install an EMS shall be marked with the following as appropriate:</p> <ul style="list-style-type: none">1) <u>“When used to interconnect parallel electric power sources, Energy Management System (EMS) Model _____, Manufactured by _____ may be used to control the output of alternate sources”, or equivalent.</u>2) <u>“When used to interconnect parallel electric power sources, Energy Management System (EMS) Model _____, Manufactured by _____ may be used to control the loads served by the panelboard”, or equivalent.</u> |