

STANDARD INFORMATION

Standard Number: UL 98 / CSA C22.2 No. 4

Standard Name: Enclosed and Dead-Front Switches

Standard Edition and Issue Date: UL 14th / CSA 8th Edition dated February 12, 2016

Date of Revision: August 30, 2019

Date of Previous Revision of Standard: February 12, 2016

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **November 27, 2021**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revised requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

Overview of Changes:

- Revisions for Field Installed Barriers
- Addition of Requirements for Class CA, CB and G Fuses

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

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

Client Action:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements do not apply to your product (s).

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.



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CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>
6	Info	Construction
6.1	Info	General
		<i>New clause added;</i>
		A DC rated multipole switch that requires poles to be wired in series and allows for different series configurations of the poles, barriers and/or jumpers may be field installed if all of the following are met:
		a) Barriers are either supplied with or made available by the manufacturer as part of a kit;
		b) Jumpers, if other than wire, are supplied with the barriers mentioned in a) or made available by the manufacturer as part of the kit;
		c) The kit complies with 6.1.3 (c), (e), and (f);
6.1.7		d) The kit contains all required hardware; and
		e) Instructions for the use of barriers and/or jumpers are permanently marked on the switch for each of the different configurations. In lieu of applying all markings to the switch, a separate document shall be included with the switch and the switch shall be marked with a permanently affixed label that reads: "For the proper configuration of connections of the terminals, refer to Publication No. _____ provided with this switch." The document shall include:
		1) The switch manufacturer's name and type designation or equivalent;
		2) Publication number and date or equivalent;
		3) Switch electrical ratings, number of poles; and
		4) A schematic of each of the intended wiring configurations for each marked rating.
		<i>New clause added;</i>
6.1.8		If the manufacturer's instructions specify the installer is to provide the wire, detailed information as to the wire size, insulation type, length, strip length, and physical configuration shall be provided. If the instructions require the wire to be bent with a radius less than the cold bend mandrel requirements of Annex A, Ref. No. 16, the jumpers shall be provided with the switch or kit as required in 6.1.7.



CLAUSE	VERDICT	COMMENT
7	Info	Test methods
7.2	Info	Heating test

Maximum acceptable temperature rises

Table 16	Material and components	°C
	A. Terminals for field-installed conductors: 4. Class <u>CA, CB, G, and T</u> fused switches rated 100 A or less for use with 60°C wire 5. Class <u>CA, CB, G, and T</u> fused switches rated 100 A or less for use with 75°C wire ^a	50 65
^a Applicable to a connector for copper wire. Also applicable to a connector for aluminum wire or an aluminum-bodied connector, if the connector has a temperature rating of 90°C.		

7.2.10 A switch employing fuse Classes as identified below shall be tested with fuses in place and when carrying 80 percent of its rated current continuously:

a) C, CA, CB, G, L, or T, and
b) Class J rated 400 or 600 A.

Peak-let-through currents and clearing I²t for fuses

Fuse rating, amperes	Between threshold and 50 kA		100 kA		200 kA		300 kA	
	I _p x 10 ³	I ² t x 10 ³	I _p x 10 ³	I ² t x 10 ³	I _p x 10 ³	I ² t x 10 ³	I _p x 10 ³	I ² t x 10 ³
Class CA Fuses								
<u>0-30</u>	-	-	-	-	<u>8</u>	<u>6</u>		
Class CB Fuses								
<u>0-30</u>	-	-	-	-	<u>10</u>	<u>10</u>		
<u>30-60</u>	-	-	-	-	<u>15</u>	<u>60</u>		
<u>31-60</u>	-	-	-	-				
Class G Fuses								
<u>0-15</u>	-	-	<u>4</u>	<u>3.8</u>				
<u>16-20</u>	-	-	<u>5</u>	<u>5</u>				
<u>21-30</u>	-	-	<u>7</u>	<u>7</u>				
<u>31-60</u>	-	-	10.5	25				

CUSTOMERS PLEASE NOTE: This Table and column “Verdict” can be used in determining how your current or future production is or will be in compliance with new/revised requirements.