

STANDARD INFORMATION

Standard Number: UL 1277

Standard Name: Electrical Power and Control Tray Cables with Optional Optical-Fiber Members

Standard Edition and Issue Date: 6th Edition Dated September 12, 2018

Date of Revision: September 12, 2018

Date of Previous Revision of Standard: December 20, 2017

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **November 2, 2020**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revise 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revise requirements.

Overview of Changes:

- Addition of ST1 Limited Smoke Surface Marking
- Aging Time and Temperature for 60°C Oil Rating
- Durability of Ink Printing Test

Specific details of new/revise 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/revise paragraphs noted in the attached or explain why these new/revise 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
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Additions to existing requirements are underlined and deletions are shown ~~lined out~~ below.

12	Info	Overall Jacket
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Oil resistance of jackets

Table 12.2

Condition of specimens at time of measurement	Minimum ultimate elongation (1-inch or 25-mm bench marks)	Minimum tensile strength
Unaged	In accordance with requirements in UL 1581 from Table 12.1	
Specimens of 75°C (167°F) oil-resistant jacket from cable marked "oil resistant II" [see 30.1(i)]:		
<u>In addition to complying with 60°C oil requirements, specimens shall be aged in IRM 902 oil for 60 d at 75.0 ±1.0°C (167.0 ±1.8°F).</u>	65 percent of the result with unaged specimens	65 percent of the result with unaged specimens
Specimens of 60°C (140°F) oil-resistant jacket from cable marked "oil-resistant I" [see 30.1(j)]:		
Aged in IRM 902 oil for 96 h at 100.0 ±1.0°C (212.0 ±1.8°F).	50 percent of the result with unaged specimens	50 percent of the result with unaged specimens
<u>or</u>		
<u>Aged in IRM 902 oil for 60 d at 60.0 ±1.0°C (140.0 ±1.8°F).</u>	<u>65 percent of the result with unaged specimens.</u>	<u>65 percent of the result with unaged specimens.</u>

16	Info	Limited Smoke
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16.1

Finished cables are eligible to be marked [see 30.1(r)] to indicate limited smoke (~~ST1 LS~~) after sets of specimens as described in 16.2 are tested in accordance with the Standard for Vertical-Tray Fire-Propagation and Smoke-Release Test for Electrical and Optical-Fiber Cables, UL 1685, and comply with the smoke release and cable damage requirements therein.

16.2

Specimens for Flame Propagation and Smoke-Release (~~ST1 LS~~) testing shall consist of the smallest, largest, and an intermediate size of each construction plus any other size(s) in each construction that is appropriate because of the cable geometry and/or materials. Only finished cable is to be tested.



CLAUSE	VERDICT	COMMENT
25	Info	<p>Test for Durability of Ink Printing</p> <p>Printing of the identification of the responsible organization required in 30.1(g) and the identification of the factory required in 30.3 on the outside surface of the overall cable jacket qualifies where the ink printing on each of two specimens of the printed area of the finished cable remains legible after being rubbed repeatedly with felt as described in the test Durability of ink printing, UL 2556. The test time and temperature is to be the same temperature as that used for the Properties, Overall Jacket (see 12.2.1). Round cable is to be tested complete. The printed portions of flat cable are to be separated from the rest of the cable and tested alone. One specimen shall be aged at the same time and temperature as is required for the Physical Properties testing, and the other specimen shall be tested after resting at room temperature.</p>
25.1		
30	Info	<p>Information on the Cable</p> <p>The following information (the sequence of the items is not specified) shall appear at the intervals specified in 30.2 on the outer surface of all cable that is made. Other information, where added, shall not confuse or mislead and shall not conflict with these requirements. See 32.1 for date marking. See also 34.1 – 39.3.1.</p> <p>i) The designation "oil res II" or "oil resistant II" for cable that has an overall jacket complying with the <u>60°C (140°F) and 75°C (167°F)</u> oil-resistance requirements in Table 12.2.</p> <p>p) The supplementary letters "-ER" shall be added after the type letters for cable that complies with the test requirements in Sections 23 and 24 and with the grounding-conductor requirements in 8.7. The "-ER" designation shall follow "-OF" or "<u>-ST1 LS</u>" where either or both of these are used or shall follow the type letters "TC" where "-OF" and "<u>-ST1 LS</u>" are not used.</p> <p>q) Where the vertical-tray flame test with which the cable complies (see 15.1) consists of the FT4/IEEE 1202 Type of Flame Exposure, the cable may be marked "FT4/IEEE 1202" or "FT4". Where used, this marking is to be spaced from the other cable markings required in this paragraph.</p> <p>r) Finished cables that comply with the flame-propagation and smoke-release requirements indicated in 16.1 and 16.2 are eligible to be marked on the outer surface with the designation "<u>-ST1 LS</u>". Where used on cables which include one or more optical-fiber member(s) the "<u>-ST1 LS</u>" designation shall be added as a suffix immediately following the "-OF" designation. Where used on cables which do not include optical-fiber members, the "<u>-ST1 LS</u>" designation shall be added as a suffix immediately following the type letters ("Type TC" or "TC").</p>
30.1		
<p>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.</p>		