



333 Pfingsten Road
Northbrook, IL 60062-2096 USA
www.ul.com
tel: 1 847 272 8800
fax: 1 847 272 8129
Customer service: 1 877 854 3577

MR. V MARTINCIC
E T I ELEKTROELEMENT D D
ODREZILJE 5
14111 IZLAKE SLOVENIA

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Subject: Procedure And/Or Report Material

The following material resulting from the investigation under the above numbers is enclosed.

Issue

Date	Vol	Sec	Pages	Revised Date
2000/10/23	1		New Appendix A2	2006/03/29
2006/03/29	1	3	Add New Proc/Report Sect.	

Inspections at your plant will be conducted under the supervision of Mr. Matjaz Lesjak, Manager of Technical Dept., UL Inspection Center Ljubljana, Inspect Ljubljana, Bureau Veritas, d.o.o., Linhartova cesta 49a, 1001 Ljubljana, SLOVENIA. PHONE: +386-1-436-3498; FAX: +386-1-436-1630; E-MAIL: matjaz.lesjak@si.bureauveritas.com.

Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

Please review this material and report any inaccuracies to our Customer Service Professional, PHONE: 1-877-ULHELPS (1-877-854-3577), FAX: 1-847-407-1395, E-MAIL: customerservice.nbk@us.ul.com, referring to the above Project and/or FD Numbers.

NBK File

UL INSPECTION CENTER 412



SPECIAL APPENDIX A

INSTRUCTIONS TO FIELD REPRESENTATIVE (FOR SPLIT INSPECTION):

FIELD REPRESENTATIVE AT ETI d.d:

Products covered in this procedure, which are received from E T I Elektroelement in Izlake, Slovenia bearing the split inspection marking noted below are authorized for use in products covered in this procedure, which bear the UL Recognition Mark.

Products not bearing the split inspection marking are not authorized for use in products at ETI d.d.

SPECIAL SPLIT INSPECTION MARKING:

Colored sticker provided on box containing plastic and metal subcomponents with model identification as follows:

Fuse holders, Models PCF 10 and PCF 10 LED

Factory Location

E T I Elektroelement D D
Obrezije 5
SI-1411 Izlake
Slovenia

ETI d.d
Bakovnik 4
SI-1240 Kamnik
Slovenia

Marking:

Box of subcomponents for fuse holders, Models PCF 10 and PCF 10-LED leaves E T I Elektroelement D D with colored sticker. Shipped to ETI d.d.

Receives box of subcomponents from E T I Elektroelement D D with colored sticker. Applies the UL Recognized Component

RI ; **RI** ; or **RI**

mark upon completion of fuse assembly at this location.

DESCRIPTION

PRODUCT COVERED:

Component - Fuseholders, Cat. Nos. PCF 10 and PCF 10 LED.

GENERAL:

These are 1, 2 and 3 pole with neutral provided as alternate construction on the 1 and 3 pole fuseholders intended for use with 10 x 38 mm supplemental fuses, rated 30 A, 600 V manufactured by ETI. They are for use on circuits with a maximum available short circuit current of 200,000 A rms symmetrical.

These fuseholders are designed such that the fuses are inserted and removed from the fuse clips by rotating a fuse carrier to the open position.

These fuseholders are intended to be mounted to a 35 mm DIN rail.

These fuseholders are not intended to make or break under load.

MARKINGS:

The following markings are required:

- A. The Applicant's name or trademark.
- B. The catalog number or designation.

The following markings are optional:

- A. The current and voltage rating.
- B. The withstand rating in rms symmetrical amperes.
- C. "Use Copper Wire Only" or "CU Only".
- D. Torque rating of 2 N m.
- E. Wire range: 20 - 10 stranded.
- F. "DO NOT OPEN UNDER LOAD".

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in products where the acceptability of the combination has been determined by Underwriters Laboratories Inc.

1. These fuseholders are intended for use with 10 x 38 mm supplemental fuses. A temperature test shall be conducted in the end-use application.
2. These fuseholders have been investigated for use with 20-10 stranded copper conductors, at a torque of 1.2 Nm.
3. Consideration should be given to requiring the "optional" markings on the end-use product if they are not provided on the fuseholder.
4. These fuseholders are designed with a rotating fuse carrier. It is not intended to make and/or break under load.
5. The DSM Engineering Plastics Inc., Type K222-KGM V14 material used to mold the body has a thermal rating of 65°C. This rating should not be exceeded in the end use product.
6. These fuseholders have been tested on circuits capable of delivering 200,000 rms symmetrical amperes at 600 V ac, using limiters that have the following let-through values:

$I_p = 13.3 \text{ ka}$, $I^2t = 40.5 \text{ KA}^2\text{s}$.

CAT. NO. PCF 10 - FIG. 1

General - Fig. 1 shows the overall assembled view of the fuseholder and the internal assembly of the fuse carrier. The overall dimensions are for a single pole unit is 83.5 mm tall x 64.5 mm deep (not including DIN portion) x 17.5 mm wide. Vent openings are included on the top and bottom at the terminal screw. Refer to Figs. 2, 3 and 4 for overview of 1 to 3 pole configurations.

1. Body - R/C (QMP22), DSM Engineering Plastics Inc., Type K222-KGM V14. Minimum thickness of 1.1 mm overall.
2. Fuse Carrier - DSM Engineering Plastics Inc., Type Stanyl TE250 F6. Minimum thickness 0.9 mm.
3. Fuse Clips (fixed contact) - Silver plated copper, 1.0 mm thick, 29 mm tall overall. Includes integrated spring with isolated top. Spring with isolated top may be described as an u-shaped with width of 5.0 mm and thickness of 0.5 mm.
4. Moving Contact - Silver plated copper, 0.69 mm thick, approx. 20 mm long with widths of 6 and 10 mm, where 10 mm is the end-portion of the contact.
5. Collar - Copper alloy, 1.2 mm thick. One piece formed and wrapped to make a rectangle with internal dimensions of 4.8 x 9.2 mm. Provided with threaded hole.
6. Screw - Phillips head, steel, 13 mm long, with 6.5 mm diameter head and 7 mm threaded shaft.

CAT. NO. PCF 10 LED - FIG. 5

General - Fig. 5 shows the internal assembly of the PCF 10 LED fuseholder. This fuseholder PCF 10 LED is identical to fuseholder PCF 10 except LED is provided.

1. Printed Wiring Board - Ceramic PLT, Type P1T-EH2-14784 by HYB. See ILL. 1 for details.
2. Resistor - 6 mega Ohms, +/- 15%, 100mW by HYB. See ILL. 1 for details.

TEST RECORD NO. 1

SAMPLES:

Samples of the fuseholders, Cat. Nos. PCF 10 and PCF 10 LED as indicated below and constructed as described herein, were submitted by the manufacturer for examination and test.

These fuseholders are 1, 2 and 3 pole with optional neutral intended for use with 10 X 38 mm supplementary fuses, rated 30A, 600 V. They are for use on circuits with a maximum available short circuit current of 200,000 a rms symmetrical.

The Model PCF 10 and PCF 10 LED was used for test purposes and considered representative of the entire series.

GENERAL:

Test results relate only to the items tested.

The following tests were conducted.

Current Withstand Test	Clause 9
Dielectric Voltage-Withstand Test:	Clause 10
Mold Stress Relief Distortion Test:	UL 746C
Temperature Test:	Clause 8
Mechanical Sequence Test:	UL486E

The test methods and results of the above tests have been reviewed and found in accordance with the requirements in UL 512.

CONCLUSION

Samples of the components covered by this Report have been found to comply with the requirements covering the category and the components are judged to be eligible for Component Recognition and Follow-Up Service. Under the Service, the manufacturer is authorized to use the Recognized Marking described in the Follow-Up Service Procedure on such products which comply with said Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those products which properly bear the Recognized Markings are considered as Recognized Components by Underwriters Laboratories Inc.

Report by:

Reviewed by:

Jerry K. Chow
Sr. Project Engineer

Bob Stramaglia
Sr. Project Engineer