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Project 08NK11923

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REPORT

on

COMPONENT - FUSEHOLDERS, CARTRIDGE FUSE

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DESCRIPTION

PRODUCT COVERED:

Component - Fuseholders, Cat. Nos. PCF CC and PCF CC 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 Class CC 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.
C. "DO NOT OPERATE UNDER LOAD"
D. "Use Class CC Fuses"

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. "line" and "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 Class CC. 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. Representative 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: Ip = 13.3 ka, I^2t = 40.5 KA^2s.

CAT. NO. PCF CC

Fig 1 - Outer View
Fig 2 - Open Carrier
Fig 3 - Fuse Clip / Terminals
Fig 4 - Carrier Detail

General - Fig. 1 shows the overall assembled view of the fuseholder. 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 (QMFZ2), DSM Engineering Plastics Inc., Type K222-KGM V14. Minimum thickness of 1.1 mm overall.

   Alternate - Same as above except, R/C (QMFZ2) DSM Engineering Plastics Inc. Type K222-KMV5.

2. Fuse Carrier - DSM Engineering Plastics Inc., Type Stanyl TE250 F6. Minimum thickness 0.9 mm.

3. Fuse Clips (fixed contact) - Silver plated copper, 0.7 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 CC LED - FIG. 5

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

1. Printed Wiring Board - Ceramic PLT, Type PLT-EHZ-14784 by HYB. See ILL. 1 for details.

2. Resistor - 6 mega Ohms, +/- 15%, 100mW by HYB. See ILL. 1 for details.