



File E14721

Vol 13

Auth. Page 1

Issued: 2009-11-11

Revised: 2012-03-23

FOLLOW-UP SERVICE PROCEDURE
(TYPE R)

FUSEHOLDERS, CARTRIDGE FUSE
(IZLT)

Manufacturer: SEE ADDENDUM FOR MANUFACTURER LOCATIONS

104923 (Party Site)
Applicant: LITTELFUSE INC
(491993-001) SUITE 500
8755 W HIGGINS RD
CHICAGO IL 60631

104923 (Party Site)
Listee/Classified Co.: SAME AS APPLICANT
(491993-001)

This Follow-Up Service Procedure authorizes the above Manufacturer(s) to use the marking specified by UL LLC, or any authorized licensee of UL LLC, including the UL Contracting Party, only on products when constructed, tested and found to be in compliance with the requirements of this Follow-Up Service Procedure and in accordance with the terms of the applicable service agreement with UL Contracting Party and any applicable Service Terms. The UL Contracting Party for Follow-Up Services is listed on addendum to this Follow-Up Service Procedure ("UL Contracting Party"). UL Contracting Party and UL LLC are referred to jointly herein as "UL."

UL further defines responsibilities, duties and requirements for both Manufacturers and UL representatives in the document titled, "UL Mark Surveillance Requirements" that can be located at the following web-site: <http://www.ul.com/fus> and in the document titled "UL and Subscriber Responsibilities" that can be located at the following website: <http://www.ul.com/responsibilities>. Manufacturers without Internet access may obtain the current version of these documents from their local UL customer service representative or UL field representative. For assistance, or to obtain a paper copy of these documents or the applicable Service Terms, please contact UL's Customer Service at <http://www.ul.com/global/eng/pages/corporate/contactus>, select a location and enter your request, or call the number listed for that location.

The Applicant, the specified Manufacturer(s) and any Listee/Classified Co. in this Follow-Up Service Procedure must agree to receive Follow-Up Services from UL Contracting Party. If your applicable agreement is a Global Services Agreement ("GSA") with an effective date of January 1, 2012 or later and this Follow-Up Service Procedure is issued on or after that effective date, the Applicant, the specified Manufacturer(s) and any Listee/Classified Co. will be bound to a Service Agreement for Follow-Up Services upon the earliest by any Subscriber of use of the prescribed UL Mark, acceptance of the factory inspection, or payment of the Follow-Up Service fees which will incorporate such GSA, this Follow-Up Service Procedure and the Follow-Up Service Terms which can be accessed by clicking here: <http://www.ul.com/contracts/Terms-After-12-31-2011>. In all other events, Follow-Up Services will be governed by and incorporate the terms of your applicable service agreement and this Follow-Up Service Procedure.

It is the responsibility of the Listee/Classified Co. to make sure that only the products meeting the aforementioned requirements bear the authorized Marks of UL LLC, or any authorized licensee of UL LLC.

This Follow-Up Service Procedure contains information for the use of the above Manufacturer(s) and representatives of UL and is not to be used for any other purpose. It is provided to the Manufacturer with the understanding that it will be returned upon request and is not to be copied in whole or in part.

This Follow-Up Service Procedure, and any subsequent revisions, is the property of UL and is not transferable. This Follow-Up Service Procedure contains confidential information for use only by the above named Manufacturer(s) and representatives of UL and is not to be used for any other purpose. It is provided to the Subscribers with the understanding that it is not to be copied, either wholly or in part unless specifically allowed, and that it will be returned to UL, upon request.

Capitalized terms used but not defined herein have the meanings set forth in the GSA and the applicable Service Terms or any other applicable UL service agreement.

UL shall not incur any obligation or liability for any loss, expense or damages, including incidental, consequential or punitive damages arising out of or in connection with the use or reliance upon this Follow-Up Service Procedure to anyone other than the above Manufacturer(s) as provided in the agreement between UL LLC or an authorized licensee of UL LLC, including UL Contracting Party, and the Manufacturer(s).

UL LLC has signed below solely in its capacity as the accredited entity to indicate that this Follow-Up Service Procedure is in compliance with the accreditation requirements.

William R. Carney
Director
North American Certification Program

LOCATION

(479717-001) 102306 (Party Site)
ZHEJIANG MINGRONG ELECTRICAL
PROTECTION CO LTD
WEI 11TH RD
ECONOMIC DEVELOPING ZONE
YUEQING
ZHEJIANG 325600 CHINA

Factory ID:
UL Contracting Party for above site is: UL AG

Issued: 2008-04-16

ML FILE NO. E35113

MULTIPLE LISTING
of
FUSEHOLDERS, CARTRIDGE FUSE
(IZLT)
for

[504921-002] MARATHON SPECIAL PRODUCTS CORP

Basically Listed for:

[491993-001] LITTELFUSE INC (NBK)

Basically Listed products covered by Procedure and/or Reports under File No. E14721, Volume 13

Products Covered	Report Date	Basic Applicant's (Supplier's) Product Designation	Multiple Listee's Product Designations
	2007-03-27	LPSC CH LPSC-ID CH	6SC30A-B 6SC30AI-B

MARKING: Same as that described in Follow-Up Service Procedure and/or Report except for Multiple Listee's name, ML Tradename, when applicable, and product designation.

UL INSPECTION CENTER HANGZHOU - 325

Listing Mark Data Page

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

LISTING MARK

The Listing Mark consists of four elements placed in close proximity and shall appear on Listed products only. Minimum size is not specified, as long as the Listing Mark is legible. The following is suggested.



XXXX = The control number assigned by UL, 12U1.

The minimum height of the registered trademark symbol ® shall be 3/64 of an inch. When the overall diameter of the UL Mark is less than 3/8 of an inch, the trademark symbol may be omitted if it is not legible to the naked eye.

The product identity is: "FUSEHOLDER" or "CARTRIDGE FUSEHOLDER".

The product identity may appear elsewhere on the product when the other three elements are directly and permanently applied to the product by stamping, molding, ink-stamping, silk screening or similar process or part of the nameplate which includes the rating or the catalog or model designation.

Separable Listing Mark (not part of a nameplate and in the form of decals, stickers or labels) will always include the four elements.

The complete four element Listing Mark will appear on the smallest unit container in which the product is packaged.

The manufacturer may reproduce the Mark or obtain it from a UL authorized supplier. The list of UL authorized label suppliers can be found on UL's online directory at www.ul.com.

INDEX

MODELS	SECTION
Fuseholder, Class CC - Series LPSC CH, LPSC-ID CH	1
Fuseholder, Class CC - System No. LPSC000 followed by 1Z, 2Z, 3Z or 4Z, may be followed by XID.	1

File E14721
Project 07NK05043

Issued: March 27, 2007
Revised: April 20, 2007

REPORT

on

*FUSEHOLDERS, CARTRIDGE FUSE

Littelfuse Inc
Des Plaines, IL

Copyright © 2007 Underwriters Laboratories Inc.

Underwriters Laboratories Inc. authorizes the above named company to reproduce this Report provided it is in its entirety.

*

DESCRIPTION

PRODUCT COVERED:

USL - Fuseholder, Cartridge Fuse - Series LPSC CH and LPSC-ID CH. See table for part number details.

These fuseholders are offered in a 1, 2, 3, and 4 pole configuration. The Box Label Part No. is as follows based on the pole configuration:

Box Label Part No.	No. of Pole
LPSC0001Z CH	1
LPSC0001ZXID CH	1
LPSC0002Z CH	2
LPSC0002ZXID CH	2
LPSC0003Z CH	3
LPSC0003ZXID CH	3
LPSC0004Z CH	4
LPSC0004ZXID CH	4

Each individual pole of the fuseholder is marked with the base part no. LPSC CH or LPSC-ID CH. The box label indicates the number of poles of the fuseholder.

RATINGS:

Series#	For Use With Fuse Size	Ampere Rating	Voltage Rating	Withstand Rating, kA
LPSC CH, LPSC-ID CH	Class CC	30 A	600 V ac 600 V dc	200 20

USL indicates investigation to UL **4248-1, 1st Edition**, dated February 28, 2007, the Standard for Fuseholders - **Part 1: General Requirements** and UL **4248-4, 1st Edition**, dated February 28, 2007, the Standard for Fuseholders - **Part 4: Class CC**.

*

GENERAL CHARACTER AND USE:

These are 1-pole fuseholders that can be ganged together and are intended for use with Listed Class CC cartridge fuses, rated a maximum of 30A, 600 V. They are for use on circuits with a maximum available short circuit current of 200,000 A rms symmetrical or 20,000 A dc.

These fuseholders are designed such that the fuses can be completely separated from the line and load fuse clips by means of a rotating fuse carrier.

These fuseholders also have optional open fuse indication.

These fuseholders are intended to be DIN rail mounted.

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

File E14721

Vol. 13

Sec. 1
and Report

Page 2

Issued: 2007-03-27

Revised: 2007-04-20

REPLACES PAGE 2

CONSTRUCTION DETAILS:

The fuseholders covered in this Report shall be constructed in accordance with the following description.

MARKINGS:

A fuseholder shall be plainly and legibly marked to indicate:

The Listee Name, trademark, or other descriptive marking by which the organization responsible for the product may be identified.

The current and voltage ratings.

The withstand rating in rms symmetrical amperes.

The catalog number or the equivalent.

"Use Class CC fuses."

"USE COPPER WIRE ONLY" or "Cu Only".

A fuseholder shall be marked in a readily visible location to indicate the required temperature rating of 75°C for all field installed conductors.

The tightening torque of **2 NM**. **The English units of 17.7 in-lb may also be marked.**

The wire range No. 8-14 stranded and No. 10-14 solid.

"DO NOT OPEN UNDER LOAD."

The withstand rating in DC amperes. (Effective November 2, 2009).

SERIES LPSC CH AND LPSC-ID CH - FIGS. 1 THROUGH 5

General - These figures show views of assembled and disassembled units. The relationship of the internal components to the overall construction are displayed. The rejection feature which prevents other than a Class CC fuse from being inserted into the holder is incorporated in the carrier/toggle and the case/cover, not the fuseclip (see Fig. 5 and ILL. 1 for more detail). These fuseholders may be provided in a 1, 2, 3, and 4 pole configuration.

Note - Case to cover securement and rejection tabs are reinforced by extending the 'weld' time during the ultrasonic weld process.

1. Assembled Units - Each individual pole measures 77 mm long, 18 mm wide, 55 mm high excluding toggle handle.
2. Case - R/C (QMFZ2) DSM Engineering Plastics B V (E47960), Material Designation K222-KGV4, 1.5 mm minimum thick.

Alternate - Same as above except, DSM Engineering Plastics B V (E47960), Material Designation TV4 260S.

Alternate - Same as above except, DSM Engineering Plastics B V, Material Designation K-FKGS6.

3. Cover - R/C (QMFZ2) DSM Engineering Plastics B V (E47960), Material Designation K222-KGV4, 1.5 mm minimum thick.

Alternate - Same as above except, DSM Engineering Plastics B V (E47960), Material Designation TV4 260S.

Alternate - Same as above except, DSM Engineering Plastics B V, Material Designation K-FKGS6.

4. Fuse Carrier/Toggle - R/C (QMFZ2) DSM Engineering Plastics B V (E47960), Material Designation K222-KGV4, approx. 46 by 34 by 17.5 mm overall, 1.5 mm thick.

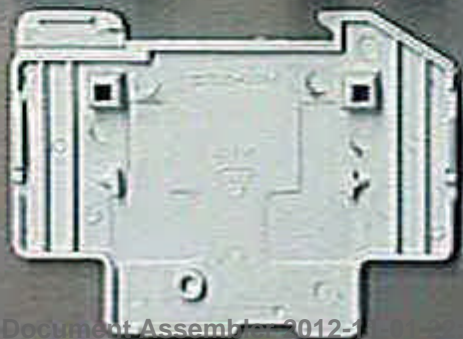
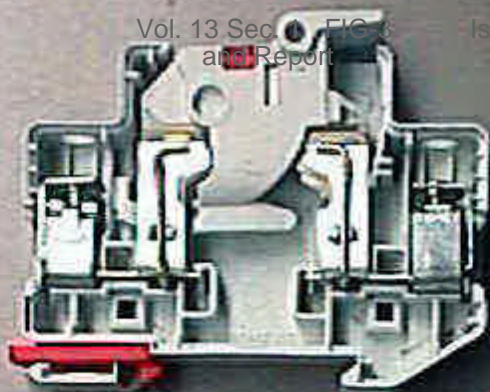
Alternate - Same as above except, DSM Engineering Plastics B V, Material Designation K-FKGS6.

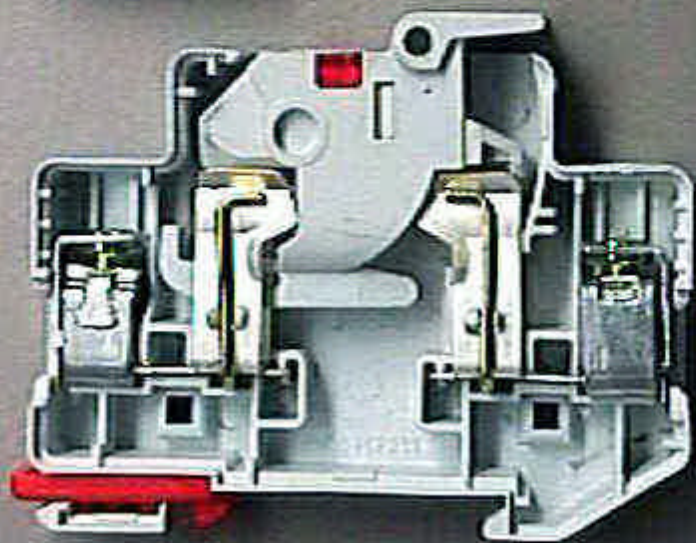
5. Fuseclip/Terminal Bus - Plated copper alloy, 0.6 mm thick, approx. 29.3 by 23.3 by 11.4 mm overall. Terminal end is 6.6 mm wide with integral tabs in middle and 90 degree bend at end to position and secure wire terminal. Fuseclip is formed to accommodate 10 mm dia fuse ferrule. Fuseclip is provided with "U" shaped spring steel clip, 1.6 mm dia, to reinforce contact with fuse ferrule.
6. Unlisted Component equipment wiring terminal, Cat. No. 03DP178, see File E14721, Vol. 21, Sec. 1, Report dated 2009-09-25.

7. Din Rail Lock - Captive plastic snap lock, with integral molded "spring", for mechanical securement to DIN rail.
8. Indicator Assembly - Consists of:
 - a). Housing of R/C(QMFZ2), polyamide (PA66), A9705, by Nanjing Lihan Chemical Co Ltd (E182725).
 - b). Spring steel contacts and terminals 2.6 mm wide, 0.15 mm thick.
 - c). LED across the terminals. Assembly is secured in toggle by plastic "plug" that is snap-fit into slots in side of toggle.

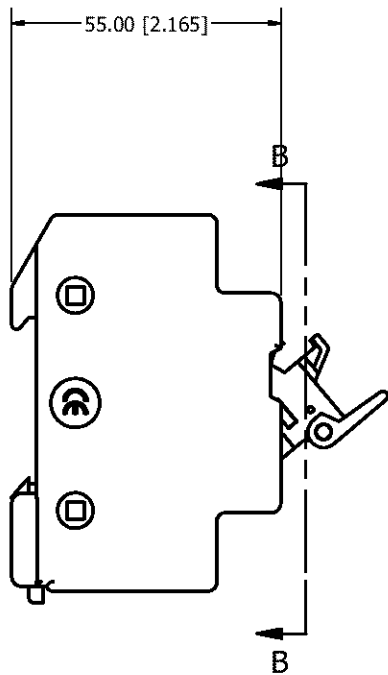
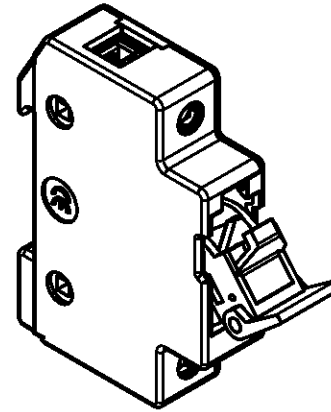
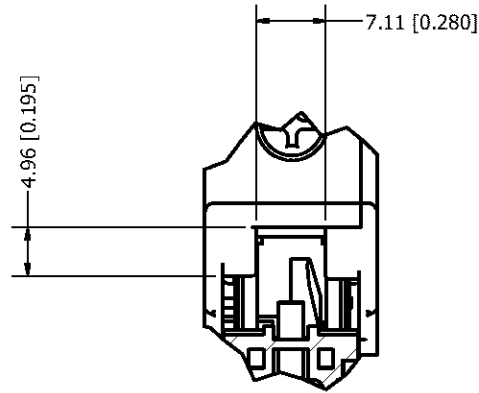




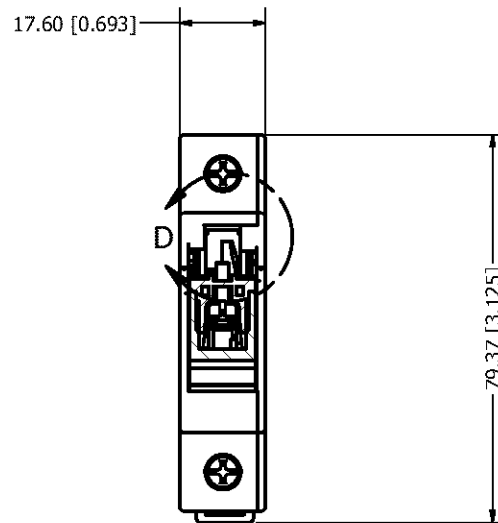








DETAIL D
SCALE 2 : 1



SECTION B-B
SCALE 1 : 1

REVISION			
REV	DESCRIPTION	CHK	APD
A	Value	Value	Value

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. DIMENSIONS IN BRACKETS () ARE INCHES.			
UNLESS OTHERWISE SPECIFIED, DIMENSIONS DO NOT INCLUDE PLATING.			
●	DENOTES CRITICAL CHARACTERISTICS.		
CPK	DENOTES CPK DIMENSIONS, -MINIMUM CPK VALUE		
ST	DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE. PROCEDURE FOR MEASUREMENT AND TRACKING TO BE DEFINED IN LITTELFUSE INSPECTION INSTRUCTIONS.		
CP	DENOTES CP DIMENSIONS, -MINIMUM CP VALUE MUST BE WITHIN THE DIMENSIONAL LIMITATIONS SHOWN ON DRAWING AND INITIALLY LOCATED TO ALLOW FOR MAXIMUM TOOL LIFE.		
COPIES TO	MATL SPEC		
1 9 18	FINISH		
2 10 19			
3 12 20			
4 13 21	DRW	DATE	WT
5 14 23	jrednour	2/9/2007	
6 15 33	CHK	DATE	SUPER DR
7 16 43			
8 17 53	APPD	DATE	RAW STK WT
			LBS/M

TOLERANCE UNLESS OTHERWISE SPECIFIED			
TWO PLACE DEC ± .25 [.01]		FRACTION ±	
THREE PLACE DEC ± .100 [.004]		ANGULAR ± 1°	
SRD ANGLE PROJECTION	TITLE		
Littelfuse DES PLAINES, ILLINOIS 60016		REVISION	DRWG NO.
			LPSC 2-D Top Assembly
SIZE	SCALE		SHEET 1 OF 1
B			