

KLM Series

1 3/32" x 1-1/2" 600Vac/dc Fast-acting supplemental fuses



600Vac/dc
1 to 30A

Description

Fast-acting supplemental fuse.

For superior protection, Bussmann recommends upgrading to Low-Peak Class CC fuses. See data sheet # 1023.

For protecting DC photovoltaic systems, Bussmann recommends using PVM 10x30mm PV fuses. See data sheet # 10121.

Catalog symbol / color code

- KLM - Black (600Vac/dc maximum voltage)

Ratings

Fuse Amp Range	Interrupting Rating at Rated Voltage		Agency Information	
	600 Vac	600 Vdc	UL	CSA
1/10 to 30	100kA	50kA	X	X

Electrical characteristics

% of Amp Rating	Opening Time
110%	4 Hours minimum
135%	AC Opens within 1 hour

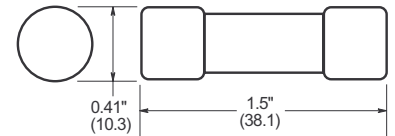
Agency information

- CE, RoHS compliant
- UL Listed: Std. 248-14, Guide JDYX, File E19180
- CSA Certified, C22.2 No. 248. 14, Class 1422-01, File 53787

Catalog numbers (amps)

KLM-1/10	KLM-1	KLM-5	KLM-15
KLM-1/8	KLM-1-1/4	KLM-6	KLM-20
KLM-2/10	KLM-1-1/2	KLM-7	KLM-25
KLM-1/4	KLM-2	KLM-8	KLM-30
KLM-3/10	KLM-2-1/2	KLM-9	
KLM-1/2	KLM-3	KLM-10	
KLM-3/4	KLM-4	KLM-12	

Dimensions - in (mm)



Carton quantity

Amps	Qty.
1/10 to 30	10

Features

- Color coded for 600Vac/dc
- A full range DC supplemental fuse
- Melamine tube construction
- Nickel-plated brass endcaps.

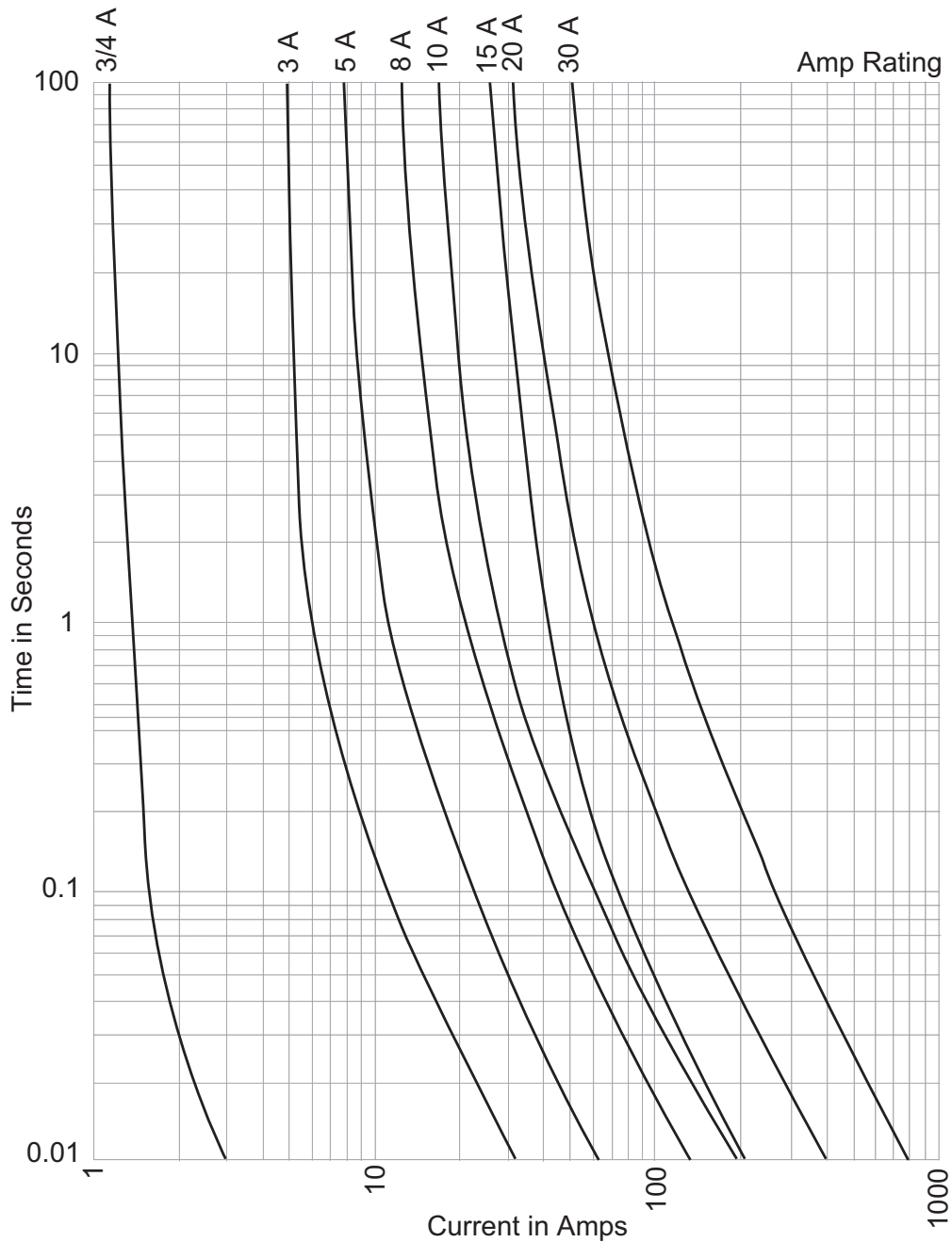
Typical applications

- DC Control circuits requiring fast-acting fuses
- PV systems up to 600Vdc

Recommended fuse blocks/fuse holders

Series	Description	Data Sheet #
Blocks		
BMM Series	1-, 2- & 3-Pole modular blocks with optional covers	10235
BM Series	1-, 2- & 3-Pole blocks	1104
DIN-Rail Holders / Switches		
CCP_-30M	1-, 2- & 3-Pole switch	1157
CHM Series	1-, 2- & 3-Pole	3185
Optima NG	3-Pole protection module	1109
Optima	3-Pole holder	1102
Optima	3-Pole holder + switch	1103
Panel Mount Holders		
HPM & HPM-D	1-Pole holder	2112
HPC-D	1-Pole holder	2109
HPS2	2-Pole holder	2140
HPF, HPF-C & HPF-WT	1-Pole holder	2114
HPS	1-Pole holder	2113
HPG & HPD	1-Pole holder	2108
In-line Holders		
HEB	1-Pole holder	2127
HEX	2-Pole holder	2126
Fuseclips		
1A3400, 5956 & 5960 Series	PCB Fuseclips	2132
Fuse Covers		
SAMI-7	Finger-safe fuse cover	1204

Time-current characteristic curves – total clearing



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Military Qualified Product Listing

MIL-F-15160 Fuses - Instruments, Power and Telephone

<p>Military Standard MIL-F-15160/01 1/4" x 1" Fuses</p> <p>F01A125V^{1/10}A* F01A125V^{3/10}A F01A125V^{1/10}A F01A125V1A F01A125V1^{1/4}A F01A125V1^{1/2}A F01A125V1^{3/10}A* F01A125V2A F01A125V2^{1/2}A F01A125V3A F01A125V3^{1/10}A F01A125V4A F01A125V5A F01A250V^{1/2}A</p> <p>*** Commercial version is AGX Series. See Data Sheet 2041 for more information.</p>	<p>Military Standard MIL-F-15160/02 1/4" x 1 1/4" Fuses</p> <p>F02A32V15A F02A32V20A F02A32V25A F02A32V30A</p> <p>F02B32V8A F02B32V10A F02B32V12A F02B32V15A</p> <p>F02A125V8A F02A125V10A</p> <p>F02A250V^{1/2}A F02A250V^{3/10}AS** F02A250V^{3/10}A F02A250V1A F02A250V1^{1/4}A F02A250V1^{1/2}A F02A250V1^{3/10}A F02A250V2A F02A250V2^{1/2}A F02A250V3A F02A250V4A F02A250V5A F02A250V6A</p> <p>*** Commercial version is AGC Series. See Data Sheet 2001 for more information.</p>	<p>Military Standard MIL-F-15160/02 1/4" x 1 1/4" Fuses</p> <p>F02B125V4A F02B125V5A F02B125V6^{1/4}A F02B125V7A</p> <p>F02B250V^{1/100}A F02B250V^{3/100}A F02B250V^{2/100}A F02B250V^{1/100}A F02B250V^{3/100}A F02B250V^{1/100}A* F02B250V^{1/2}A F02B250V^{3/100}A F02B250V^{1/100}A F02B250V^{1/100}A F02B250V1A F02B250V1^{1/4}A F02B250V1^{1/2}A F02B250V1^{3/100}A F02B250V2A F02B250V2^{1/2}A F02B250V2^{3/100}S** F02B250V3A F02B250V3^{3/100}A*</p> <p>*** Commercial version is MDL Series. See Data Sheet 2004 for more information.</p>	<p>Military Standard MIL-F-15160/03 1/4" x 1 1/4" Fuses</p> <p>F03A125V20A F03A125V25A F03A125V30A</p> <p>F03A250V1A F03A250V1^{1/4}A F03A250V1^{1/2}A F03A250V2A F03A250V3A F03A250V4A F03A250V5A F03A250V6A F03A250V8A F03A250V10A F03A250V12A F03A250V15A</p> <p>*** Commercial version is ABC Series. See Data Sheet 2000 for more information.</p>
<p>Military Standard MIL-F-15160/03 1/4" x 1 1/4" Fuses</p> <p>F03B125V4A F03B125V5A F03B125V6^{1/4}A F03B125V7A F03B125V8A F03B125V10A F03B125V12A F03B125V15A F03B125V20A F03B125V25A F03B125V30A</p> <p>F03B250V^{1/100}A F03B250V^{1/100}A F03B250V^{1/100}A F03B250V^{3/100}A F03B250V^{1/100}A F03B250V^{3/100}A* F03B250V^{3/100}A F03B250V^{1/100}A F03B250V^{3/100}A F03B250V^{1/100}A F03B250V^{3/100}A* F03B250V1A F03B250V1^{1/4}A F03B250V1^{1/2}A F03B250V1^{3/100}A F03B250V2A F03B250V2^{1/2}A* F03B250V2^{3/100}A* F03B250V3A F03B250V3^{3/100}A</p> <p>*** Commercial version is MDA Series. See Data Sheet 2002 for more information.</p>	<p>Military Standard MIL-F-15160/09 1 3/32" x 1 1/2" Fuses</p> <p>F09A250V1A F09A250V2A F09A250V3A F09A250V3^{1/2}A F09A250V4AS** F09A250V5A F09A250V6A F09A250V6^{1/4}AS** F09A250V7A F09A250V8A F09A250V10A F09A250V15A F09A250V20A F09A250V25A F09A250V30A</p> <p>*** Commercial version is BAN Series. See Data Sheet 2046 for more information.</p>	<p>Military Standard MIL-F-15160/05</p> <p>F05A and F05B series cancelled without replacement on January 1976.</p> <p>Military Standard MIL-F-15160/06</p> <p>F06A and F06B series are inactive for new design after January 1970. Non-military equivalent is ABS Series.</p> <p>Military Standard MIL-F-15160/07</p> <p>F07A and F07B series are inactive for new design after January 1970. Non-military equivalent is AGU Series.</p>	<p>Military Standard MIL-F-15160/09 1 3/32" x 1 1/2" Fuses</p> <p>F09B32V20A* F09B32V25A F09B32V30A F09B125V15A</p> <p>F09B250V^{1/100}A** F09B250V^{1/100}A F09B250V^{3/100}A F09B250V^{1/100}A* F09B250V^{1/2}A* F09B250V^{3/100}A F09B250V1A F09B250V1^{1/4}A F09B250V1^{3/100}A F09B250V2A F09B250V2^{1/2}A F09B250V2^{3/100}S** F09B250V3^{3/100}A F09B250V3^{1/2}AS** F09B250V4A F09B250V5A F09B250V5^{3/100}A F09B250V6^{1/4}A F09B250V8A F09B250V10A</p> <p>*** Commercial version is FNM Series. See Data Sheet 2028 for more information.</p>

Note: When silver-plated fuse caps are required, simply suffix the letter "S" to the Type Designation Number; i.e., "F02A250V^{1/2}AS."

*Indicates a product not available with silver-plated caps.

**Indicates a product available only with silver-plated caps.

*** Commercial equivalent part number is for basic design reference only. Not intended to be used as a substitute for the military part number.

Military Qualified Product Listing

MIL-F-15160 Fuses - Instruments, Power and Telephone

<p>Military Standard MIL-F-15160/10 1³/₃₂" x 1¹/₂" Fuses</p> <p>F10A250V1A F10A250V2A F10A250V3A F10A250V4AS** F10A250V5A F10A250V6AS** F10A250V8AS** F10A250V10A F10A250V15A F10A125V20AS** F10A125V30A*</p> <p>*** Commercial version is MIN Series. See Data Sheet 2047 for more information.</p>	<p>Military Standard MIL-F-15160/15 9¹/₁₆" x 2" Fuses</p> <p>F15A250V1A F15A250V3A F15A250V6A F15A250V10A F15A250V15A F15A250V20A F15A250V25A F15A250V30A</p>	<p>Military Standard MIL-F-15160/15 9¹/₁₆" x 2" Fuses</p> <p>F15BR250V1A F15BR250V1⁵/₁₆A F15BR250V2A F15BR250V2¹/₂A F15BR250V3³/₁₆AS** F15BR250V4AS** F15BR250V5A F15BR250V6¹/₄A* F15BR250V8A F15BR250V10A F15BR250V12A F15BR250V20A F15BR250V25A F15BR250V30A</p> <p>F15BR replaced F15B in October 1990.</p> <p>*** Commercial version is FRN-R Series. See Data Sheet 1019 for more information.</p>	<p>Military Standard MIL-F-15160/16 1³/₁₆" x 3" Fuses</p> <p>F16A250V35A F16A250V40A F16A250V45A* F16A250V50A F16A250V60A</p>
<p>Military Standard MIL-F-15160/16 1³/₁₆" x 3" Fuses</p> <p>F16BR250V35A F16BR250V40A F16BR250V45A F16BR250V50A F16BR250V60A</p> <p>F16BR replaced F16B in October 1990.</p> <p>*** Commercial version is FRN-R Series. See Data Sheet 1019 for more information.</p>	<p>Military Standard MIL-F-15160/19 1" x 5¹/₈" Fuses</p> <p>F19BR250V70A F19BR250V80A F19BR250V90A F19BR250V100A</p> <p>F19BR replaced F19B in October 1990.</p> <p>*** Commercial version is FRN-R Series. See Data Sheet 1020 for more information.</p>	<p>Military Standard MIL-F-15160/20 1¹/₂" x 7¹/₈" Fuses</p> <p>F20BR250V110A F20BR250V125A F20BR250V150A F20BR250V175A F20BR250V200A</p> <p>F20BR replaced F20B in October 1990.</p> <p>*** Commercial version is FRN-R Series. See Data Sheet 1020 for more information.</p>	<p>Military Standard MIL-F-15160/27</p> <p>F27A Series is inactive for new design after December 1990.</p> <p>Military Standard MIL-F-15160/28</p> <p>F28A Series is inactive for new design after December 1990.</p> <p>Military Standard MIL-F-15160/29</p> <p>F29A Series is inactive for new design after December 1990.</p> <p>Military Standard MIL-F-15160/30</p> <p>F30A Series is inactive for new design after December 1990.</p> <p>Military Standard MIL-F-15160/36</p> <p>F36A and F36B Series are inactive for new design after December 1990.</p> <p>Military Standard MIL-F-15160/37</p> <p>F37A and F37B Series are inactive for new design after December 1990.</p> <p>Military Standard MIL-F-15160/38</p> <p>F38A and F38B Series are inactive for new design after December 1990.</p>

Note: When silver-plated fuse caps are required, simply suffix the letter "S" to the Type Designation Number; i.e., "F02A250V¹/₂AS."

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Military Qualified Product Listing

MIL-F-15160 Fuses - Instruments, Power and Telephone

Military Standard MIL-F-15160/39

F39A and F39B Series are inactive for new design after December 1990.

Military Standard MIL-F-15160/40

F40A and F40B Series are inactive for new design after December 1990.

Military Standard MIL-F-15160/50

F50A Series was cancelled without replacement on June 2000.

Military Standard MIL-F-15160/52

F52A Series was cancelled without replacement on January 1990.

Military Standard MIL-F-15160/60 1³/₃₂" x 1¹/₂" Fuses

F60C500V¹/₈A
F60C500V¹/₄A
F60C500V³/₈A
F60C500V¹/₂A
F60C500V³/₄A
F60C500V1A
F60C500V2A
F60C500V3A
F60C500V5A
F60C500V6A
F60C500V8A
F60C500V10A
F60C500V15A
F60C500V20A
F60C500V25A
F60C500V30A

*** Commercial version is KLM Series. See Data Sheet 2020 for more information.

Military Standard MIL-F-15160/61 9/₁₆" x 2" Fuses

F61C500V1A
F61C500V2A
F61C500V3A
F61C500V5A
F61C500V6A
F61C500V8A
F61C500V10A
F61C500V15A
F61C500V20A
F61C500V25A
F61C500V30A

*** Commercial version is KLC Series.

Military Standard MIL-F-15160/62 13/16" x 3" Fuses

F62C500V35A
F62C500V40A
F62C500V45A
F62C500V50A
F62C500V60A

*** Commercial version is KLC Series.

Military Standard MIL-F-15160/63 1" x 5⁷/₈" Fuses

F63C500V70A
F63C500V80A
F63C500V90A
F63C500V100A

Military Standard MIL-F-15160/64 1¹/₂" x 7⁷/₈" Fuses

F64C500V110A
F64C500V125A
F64C500V150A
F64C500V175A
F64C500V200A

Military Standard MIL-F-15160/65 2" x 8⁵/₈" Fuses

F65C500V225A
F65C500V250A
F65C500V300A
F65C500V350A
F65C500V400A

Military Standard MIL-F-15160/66 2¹/₂" x 11⁵/₈" Fuses

F66C500V450A
F66C500V500A
F66C500V600A

Military Standard MIL-F-15160/67

F67A Series was cancelled without replacement on October 1986.

Military Standard MIL-F-15160/70

F70A Series was cancelled without replacement on October 1990.

Military Standard MIL-F-15160/71

F71A Series was cancelled without replacement on October 1990.

Military Standard MIL-F-15160/72

F72A Series was cancelled without replacement on January 1990.

Military Standard MIL-F-15160/73

F73A Series was cancelled without replacement on January 1990.

Military Standard MIL-F-15160/74

F74A Series was cancelled without replacement on January 1990.

Military Standard MIL-F-15160/76

F76A Series was cancelled without replacement on January 1990.

Military Standard MIL-F-15160/77

F77A Series was cancelled without replacement on June 2000.

Note: When silver-plated fuse caps are required, simply suffix the letter "S" to the Type Designation Number; i.e., "F02A250V¹/₈AS."

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